Exhibit 5 – Objections to Finding of Effects Letter and Responses

From:	ATMPTeam
To:	Pinu"u Stout
Cc:	Ricardo Ortiz; Civitello, Jamie; Pipkin, Ashley R; Walker, Judith <FAA>; Papazian, Jennifer (Volpe); Lignell, Brent (Volpe); Haas, Shauna (Volpe); FireCloud, Dorothy M; [redacted]; Castiano, Melissa S; Phoebe Suina; Info
Subject:	RE: Section 106 Continuing Consultation – Air Tours at Bandelier National Monument - Pueblo of San Felipe
Date:	Friday, August 4, 2023 3:01:59 PM
Attachments:	ATMP_FAA follow up_Pueblo of San Felipe.pdf image001.png

Dear Pinu'u Stout,

The Federal Aviation Administration (FAA) and National Park Service (NPS) appreciate your participation in ongoing consultation under Section 106 of the National Historic Preservation Act for the Air Tour Management Plans (ATMPs) at Bandelier National Monument. The FAA, as lead federal agency for Section 106, is following up on the May 24, 2023 government-to-government meeting, which was held by the NPS to discuss the Pueblo of San Felipe's concerns regarding the ATMP process. In the attached letter, the FAA is providing confirmation of the resolution of the Pueblo of San Felipe's objections.

If you have any questions or concerns regarding this correspondence, please do not hesitate to contact me at (202) 267–4185 or Judith.Walker@faa.gov, copying ATMPTeam@dot.gov.

Best regards,
Judith Walker

From: Pinu'u Stout <pstout@sfpueblo.com>
Sent: Thursday, April 20, 2023 2:36 PM
To: ATMPTeam <ATMPTeam@dot.gov>; Info <info@sfpueblo.com>; Walker, Judith <FAA> <judith.walker@faa.gov>
Cc: Ricardo Ortiz <ROrtiz@sfpueblo.com>; [redacted] Walker, Judith <FAA> <judith.walker@faa.gov>; Papazian, Jennifer (Volpe) <Jennifer.Papazian@dot.gov>; Lignell, Brent (Volpe) <Brent.Lignell@dot.gov>; Haas, Shauna (Volpe) <shauna.haas@dot.gov>; [redacted] Phoebe Suina <phoebe@high-watermark.com>
Subject: RE: Section 106 Continuing Consultation – Air Tours at Bandelier National Monument - Pueblo of San Felipe

Good Afternoon,
The Pueblo of San Felipe previously commented on this matter and requested Government to Government consultation, with no response from the federal entities involved.

In the strongest terms we disagree with a finding of no adverse effects to Pueblo cultural properties by this proposed undertaking.
We renew our demand for Government to Government consultation in line with federal law and policy.

Sincerely,
Pinu'u Stout

Pinu'u Stout

Pueblo of San Felipe
Interim Tribal Administrator
Department of Natural Resources Director
127 Hagen Road
San Felipe Pueblo, NM 87001
Office: (505) 771-6628

From: ATMPTeam <ATMPTeam@dot.gov>
Sent: Thursday, April 20, 2023 10:55 AM
To: Info <info@sfpueblo.com>
Cc: Ricardo Ortiz <ROrtiz@sfpueblo.com>; Pinu'u Stout <pstout@sfpueblo.com>; [redacted] Walker, Judith <FAA> <judith.walker@faa.gov>; Papazian, Jennifer (Volpe) <Jennifer.Papazian@dot.gov>; Lignell, Brent (Volpe) <Brent.Lignell@dot.gov>; Haas, Shauna (Volpe) <shauna.haas@dot.gov>; [redacted]
Subject: Section 106 Continuing Consultation – Air Tours at Bandelier National Monument - Pueblo of San Felipe

Dear Governor Ortiz:

The Federal Aviation Administration (FAA) and the National Park Service (NPS) are continuing Section 106 consultation with your office for the development of an Air Tour Management Plan (ATMP) for Bandelier National Monument. FAA is the lead federal agency for compliance with the Section 106 consultation for this undertaking.

The attached letter describes the proposed undertaking (which is the preferred alternative under the National Environmental Policy Act); the Area of Potential Effects (APE); a description of steps taken to identify historic properties; a description of historic properties in the APE and the characteristics that qualify them for listing in the National Register of Historic Places; and proposes a finding of no adverse effects to historic properties in accordance with 36 CFR 800.5(c). The FAA and NPS respectfully request your concurrence with the proposed finding within thirty days.

Should you seek additional information about any of the above, please contact me at (202) 267–4185 or Judith.Walker@faa.gov, copying ATMPTeam@dot.gov.

Thank you for your time and consideration.

Best Regards,
Judith Walker

From: Pipkin, Ashley R
To: Haas, Shauna (Volpe); Giraldo, Kathering (Volpe)
Subject: Fw: Consultation on BAND ATMP
Date: Thursday, May 25, 2023 1:11:33 PM

Ashley Pipkin
Outdoor Recreation Planner
Natural Sounds and Night Skies Division
Boulder City, NV 89005
cell: [redacted]

From: Suddath, Patrick W <[redacted]>
Sent: Wednesday, May 24, 2023 4:00 PM
To: Ricardo Ortiz <ROrtiz@sfpueblo.com>; rduran@sfpueblo.com <rduran@sfpueblo.com>; nsanchez@sfpueblo.com <nsanchez@sfpueblo.com>; pstout@sfpueblo.com <pstout@sfpueblo.com>; gov.cvalencia@sfpueblo.com <gov.cvalencia@sfpueblo.com>
Cc: [redacted]
Walker, Judith (FAA) <judith.walker@faa.gov>; [redacted]
Subject: Consultation on BAND ATMP

Dear Mr. Ortiz,

Thank you and Mr. Duran and Mr. Sanchez for meeting with us today. I very much appreciate your time and willingness to share the Pueblo's perspective with me. I wanted to capture our discussion concerning the Air Tour Management Plan, so I can share our discussion with our partners at the FAA.

It is my understanding that the Pueblo supports the new, revised preferred alternative that will be in the upcoming EA, that calls for no air tour operations over Bandelier. You shared with me that the Pueblo of San Felipe holds many sites within the park as sacred and that air tours interfere with traditional religious practices of the pueblo. You also expressed concern that air surveillance or digital photography from the air could expose the locations of ancestral or sacred sites to potential looters or vandals. You also shared with me that any requirement that would disclose the time, location, or identity of a tribal member utilizing sites within the

park would violate your right to freely practice your religion in private.

I conveyed to you on behalf of the FAA that the FAA is fully willing and ready to engage in any additional consultation that the Pueblo would like on this issue. Please let me know if the Pueblo would like additional conversations with the FAA.

Again, once the EA is issued, we invite and welcome your comments, and we look forward to further discussions.

Please let me know if I have misunderstood or mischaracterized our discussion.

Thank you also for your advice and feedback on the many other issues we discussed. I am grateful for your time and your candor in your comments. I regret that I was not able to greet the Governor or Ms. Stout in person today. I would welcome a follow up meeting soon so I could properly convey my appreciation for the advice of the Pueblo. I am looking forward to many further discussions with San Felipe Pueblo in the coming years.

Warmest regards,
Patrick

Patrick Suddath (he/him)
Superintendent
Bandelier National Monument
[redacted]

U.S. Department of Transportation
Federal Aviation Administration

United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

August 4, 2023

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Bandelier National Monument

Pinu'u Stout
Department of Natural Resources Director
Pueblo of San Felipe
127 Hagen Road
San Felipe Pueblo, NM 87001

Pinu'u Stout,

Thank you for your email confirming receipt of the Section 106 Finding of Effect letter for an air tour management plan (ATMP) for Bandelier National Monument and continuing consultation with the FAA and the NPS regarding your April 20, 2023 email objecting to the proposed finding of no adverse effect. We appreciate that the Pueblo of San Felipe met with Superintendent Suddath on May 24, 2023, to voice concerns regarding the ATMP process. The Superintendent shared a summary of the discussion with the FAA. This letter serves as confirmation that the objection to the proposed finding has been resolved or withdrawn as a result of this meeting.

As shared by the Superintendent following his meeting with tribal members from the Pueblo of San Felipe, it is understood that the Tribe supports the new, revised ATMP that calls for no air tours over Bandelier National Monument or within ½ a mile of the boundary of the Park. In addition to revising the ATMP to ban air tours, the agencies are pursuing an Environmental Assessment (EA) to consider alternatives for the ATMP and assess the impacts of the alternatives on cultural and natural resources. The draft EA and updated Draft ATMP is currently available for public review and can be found on the National Park Service's Planning, Environment & Public Comment website: https://parkplanning.nps.gov/projectHome.cfm?projectID=103440

It is FAA's understanding that these changes regarding the ATMP, and the government-to-government consultation that has taken place between the NPS and Pueblo of San Felipe representatives, resolves the Pueblo of San Felipe's objection to the finding of no adverse effect under Section 106 of the National Historic Preservation Act.

While the agencies consulted with tribes and other consulting parties during the Section 106 process, the agencies remain committed to engaging in tribal consultation after the ATMP is implemented to address ongoing tribal concerns, as needed.

If you have any questions or concerns regarding this correspondence, please do not hesitate to contact me at (202) 267–4185 or Judith.Walker@faa.gov, copying ATMPTeam@dot.gov.

Best regards,

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Cc: Ricardo Ortiz

SOUTHWEST SAFARIS

PO Box 945
Santa Fe, NM 87504
505-988-4246

Ms. Judith Walker
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration
Washington, DC

May 19, 2023

Response to Request for Concurrence re. Sec 106
Statement of Disagreement - Submitted by Email

Dear Ms. Walker:

I am responding to your "request for concurrence" to a finding of "no adverse effects" regarding the FAA's proposed denial of continued air tour overflight rights of Southwest Safaris at Bandelier National Monument. Section 106 of the National Historic Preservation Act (NHPA) appears to be the statutory authority for your request.

I do not concur with the FAA's proposed finding (Assessment) that there will be "no adverse effects" from denying Southwest Safaris continued air tour overflight rights at Bandelier National Monument (BAND, or "the Park"). I argue that the FAA's method of assessment lacks procedural, substantive, and consequential validity.

The issue at hand is the creation of an Air Tour Management Plan for BAND. This is a legal undertaking which must follow precise statutory requirements. The controlling legal document is the National Parks Air Tour Management Act of 2000 (NPATMA, or 'the Act"). The NHPA is of secondary controlling importance. It serves only as an aid in implementing the primary Act.

Procedurally, the FAA's Assessment puts the cart before the horse. The FAA is trying to circumvent the intent of the original Act by making elimination of alleged damage, caused by air tour overflights, to buildings and structures and cultural/religious sites the primary objective of the Act. To the contrary, the primary purpose of the Act was to "mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations . . ." by eliminating alleged *excessive noise* at National Parks, not to ban the flights altogether, particularly not for social/cultural/religious objections. Congress was very explicit about this. Congress recognized that air tours are a viable and valuable means for viewing National Parks and Monuments. There is no specific mention in the Act of visual impairment to park properties from aircraft overflights, nor were postulated but unsubstantiated visual effects to be considered to be determinate when drawing up Air Tour Management Plans (ATMPs). Yet the FAA and NPS conspicuously claim the right to include ambiguous and amorphous visual "damage" as a

"significant adverse impact" of Park overflights. Under the paragraph entitled, "Assessment of Effects," in the FAA proposed Assessment, the FAA states:

> "The FAA, in coordination with the NPS, focused the assessment of effects on the *potential* for adverse effects from the introduction of audible or visual elements that could [conceivably, but not necessarily] diminish the integrity of the property's significant historic features" (emphasis added.)

The FAA's error is glaring, egregious, and defiant. They are measuring *potential* noise, not actual. And, they are including imagined visual impact of an aircraft's presence on landscape experience, which cannot possibly be measured. This is why adverse visual impression was not specifically addressed under the wording of the Act. The whole basis for the FAA's Assessment is either questionable at best or outside the law. In fact, the whole thrust of the FAA's current proposal to Southwest Safaris (SWS), i.e., elimination of all air tours over the Park, is contrary to the intent of Congress. Under the misguided application of the NHPA, the FAA's pending Assessment initiative has been corrupted. I contend that the FAA's Assessment has been based on irrelevant controlling statutory authority from the very start.

I argue that the FAA's Assessment does not follow specific, procedural, statutory requirements. Section 808 of the Act states, in effect, that no findings of *any* adverse impact of park overflights can be considered without first conducting studies based on "reasonable scientific methods" to determine the presence of objectionable aircraft noise, if excessive aircraft noise exists at all. All determinations of adverse noise impact were to be based on science. By implication, this requirement also extends to determining, by actual observations, adverse visual impact, if any, of aircraft over NPS units based on altitude. The mere presence of aircraft over parks would not be sufficient reason to determine adverse impact. Section 40128(b)(3)(F) stipulated that the FAA "shall justify and document the need for measures taken pursuant to subparagraphs (A) through (E) and include such justifications in the record of decision." In other words, the need for remedy must be firmly and incontestably established and must precede administrative cure. To be sure that the FAA did not miss these stipulations and inferences, Congress dedicated specific language of the Act to the need for documentation . . . apparently to no avail.

Despite specific instructions by Congress to the contrary, the FAA's assumption of need for remedy is predicated on pure conjecture, anecdotal testimony, supposition, and theoretical noise modeling, none of which speculative theories have been proven to be accurate or even real. Likewise, no visual-effects models have ever been created. Therefore, under the Act, the evidence the FAA has so painstakingly contrived carries no validity until it can be substantiated by reasonable scientific/observational methodology. So far, the FAA and NPS have provided no reliable noise-related data acquired by any kind of professionally-recognized standard of measurement or even made any efforts to gather such information. Nor has the FAA established any guidelines by which to measure the supposed "significant adverse impacts" (40128(b)(1)(B)) of the mere presence of aircraft over NPS units. In the present case, as a matter of procedural law, no reliable conclusions can be drawn from nonexistent hard evidence. The FAA's assessment appears to be a fix looking for a problem.

Substantively, the FAA's finding is also without merit. The finding completely ignores the major issue of the Act, that is, development of ways and means to lessen, not eliminate altogether, aircraft noise and/or visual presence over the parks. The means used to accomplish this were to be route, altitude, and frequency modification. Only if this process failed would denial of overflight rights even be considered. The conclusion of the FAA's finding, that all flights over BAND must be prohibited, is an end-run around the substance of the Act itself and, in addition, effectively denies due evidentiary process. In other words, the FAA and NPS are trying to deny the intent and substance of the primary Act by raising secondary NHPA objections (i.e., findings relating to aircraft noise and visual presence) that cannot be substantiated. The FAA and NPS are attempting to make the specific findings of the lesser (NHPA) control the general conclusions the greater (NPATMA), to get around the intent of the Act, which is substantive abuse of law.

But the FAA's abuse of the Act is even worse. Instead of basing its Assessment on the statutory wording of the NPATMA favoring operational methods of mitigation, the FAA is relying on its own internally-contrived decision that cultural and religious "rights" over-ride all other methods of alleviation without regard to constitutional and regulatory guarantees. The FAA is single-handedly dismissing the importance of freedom of commerce, freedom of speech, freedom of association, equal treatment under the law (e.g., commercial vs. non-commercial use of airspace), and equal treatment of the various States in favor of upholding the values of Native American society. These are issues that go beyond the scope of this response. The FAA's proposed finding ignores these fundamental clashes of such priorities, and instead tears apart the fabric of established legal and operational practice, exploiting Native American values to achieve a dark political/control agenda that has heretofore failed by other means. The FAA is artfully changing the thrust of the argument from mitigation of demonstrable environmental degradation to a political determination of priority of rights (cultural vs. constitutional.) It has no statutory authority under NHPA to deny/take human rights from air tour operators, only to assert/insure the rights of others. The FAA's "finding" that denial of Southwest Safaris' right to continue flying over the Park will have "no adverse effect" spits in the face of justice to air tour operators.

The proposed Assessment also errs substantively because it targets a specific person/small business and does not even attempt to justify doing so on the basis of objective data that would explain the proposed "taking" of operational and human rights. Moreover, the FAA's finding, that they are empowered to withdraw Park overflight rights for one park and not another, is discriminatory against selected States, operators, and persons. The FAA's preliminary decision is flagrantly one-sided, arbitrary, and capricious. The FAA never states why one park, party, or person has greater "rights" than another; it never defines those rights; nor does the FAA reveal how the conflicting "rights" will be consistently applied, arbitrated, or appealed. The FAA seems to be claiming for itself sole decision-making authority outside of existing law. Congress never gave the FAA the power to arbitrate priority of human rights, only operational procedures. The former is a matter for Congress; only the latter, strictly interpreted, is a matter for agency, subject to judicial review.

Furthermore, **consequentially**, the FAA's denial of overflight rights will explicitly make the alleged noise problem over Indian lands worse. Southwest Safaris has carefully designed its air tour routes so as to minimize, if not eliminate, any objectionable noise impact on people who are

on the ground. SWS' tour routes are deliberately multiple and diverse in order to spread the noise footprint over a large area combined with infrequent flights. Many of the routes are for transportation purposes only. By eliminating all air tour flights over Bandelier, or demanding overflights at unreasonably high levels, the FAA and NPS will force Southwest Safaris to do what it has so carefully tried to avoid, i.e., fly directly over noise-sensitive Pueblo lands to the south and east of the Park. The Cochiti and San Ildefonso Pueblos would be immediately adversely affected. If this turns out to be the result, neither the FAA nor the NPS will then have authority to alter the undesirable consequential outcome of poor decision-making.

The strategy of Southwest Safaris has, to this date, been undeniably effective. There exists an inconvenient truth in favor of SWS, one that the FAA has arduously tried to avoid acknowledging. Until the actual drafting of the BAND ATMP, no Federal, State, Local, or Tribal agency was even aware of the presence of Southwest Safaris' air tours over Bandelier. Southwest Safaris has been conducting air tours over Bandelier for 49 years. During that time, not one single complaint, noise or otherwise, has been lodged against Southwest Safaris. The FAA has no record of complaints, nor does the NPS, nor have the Tribes (except at the FAA's and NPS' current prodding) ever come forward with any allegations, either general or specific. SWS has already solved the noise issue. Southwest Safaris' Park overflights have already been proven, by lack of testimony to the contrary, to produce "no adverse impact" on Pueblo lands.

The air tour noise issue at BAND has thus already been determined to be non-existent. The FAA's obfuscating Assessment that their decision to deny all Park overflights cannot possibly have "adverse effects" serves only to pervert the logic of argument. The FAA is claiming the inverse of the argument that overflights of the Park will cause no harm to Indian lands and remote "sacred" areas because aircraft operations leave no footprints and are very short in duration, unlike park visitations on the ground. The FAA's finding is obtuse contra-logic designed to obstruct constructive analysis of syllogism. The FAA's Assessment is a pointless statement of the obvious but provides no justification for its own conclusion. It represents the error of circular, self-defeating logic, going nowhere. For example, if you kill a duck to restore quiet, it will not quack; neither will it lay any golden eggs, so the measurable loss exceeds the gain. With respect to the unfortunate duck, the effect of the positive assertion (that killing the duck will restore a state of quiet) is negated by the consequence of the adverse conclusion (people will go hungry.) Likewise, in the present instance, the proof of the FAA's error of "finding" is in numbers that contradict the relevance of the FAA's postulate.

Southwest Safaris flies air tours over BAND a maximum of 126 times per year. That is approximately one air tour every three days. SWS has a policy of never flying the same route over two consecutive flights. That means that no route is flown over more than once per week. The Tribal claim that SWS is causing excessive aircraft noise or sacred intrusion is ludicrous. However, changing the route structure of Southwest Safaris' air tours will be very much noticed. The loss to the adjoining Pueblos will be significant and permanent.

The average time spent by SWS flying air tours over BAND amounts to two minutes per flight. Many of these flights are, in fact, merely "transportation" in nature, or for the purpose of taking off and landing at the Santa Fe Regional Airport. These operations are included in SWS' semi-annual reports of Park overflights because of the broad, over-reaching definitions of air tours in

the NPATMA. Examination of Southwest Safaris' air tour routes reveals that at no time does the company circle any landmark or in any way draw attention to the fact that an air tour is being conducted. Some bends in routes are, of course, mandated by rising terrain. Attempts to climb over the entire Park with high power settings are avoided. There is virtually no difference in the way SWS flies across BAND and the way any non-commercial or charter flight would be conducted. At any rate, denying SWS the right to fly air tours over BAND will have no effect on the continued existence of these takeoff/landing/transportation overflights.

The FAA's own noise modeling numbers seem to confirm the fact that Southwest Safaris' overflights of BAND are having "no adverse impact" on the Park. I refer to Figure 2 on page 21 of the FAA's pending Assessment. There are only five instances where the projected (not actual) noise emissions from SWS' aircraft will generate decibels exceeding a modest 35 dba, and then, at most, for only 18-36 seconds per flight. Four of the points of noise impact lie along a straight line, which is used as a transportation route simply to cross the Park, and so do not count. Many GA aircraft fly the same route. Only one route involves a noise impact exceeding 52 decibels, and that is at the bottom of the Rio Grande canyon, the walls of which block the noise shortly after aircraft passage. The "time above 52 dBA" for this leg is thus limited to only six seconds, hardly impactful in a remote area where Park interpretive programs are rarely, if ever, given. Cars, motorcycles, trucks, and busses entering and exiting the Park up a steep slope directly above this geographic point make more noise than this. Therefore, the FAA appears to be saying that SWS is doing an excellent job of managing noise. The problem, I submit, is more political than real.

I must observe, based on the numbers above, that the FAA, NPS, and Tribes have a funny way of saying "thank you" to Southwest Safaris for being so considerate of Native American and Park Service values for so many years.

To the contrary, the FAA, NPS, and Tribes are using Southwest Safaris as a scapegoat. They are trying to load onto SWS all the noise being created by the entirety of aircraft operations over the Rio Grande. The Santa Fe Airport is now a regional airport. It has been discovered by the public, which is now demanding more and more airline connections to Denver, Dallas, and Phoenix. Even more destinations will surely be added. Both Tribal and non-Trible members take advantage of these airline flights. The US Army National Guard has a huge training/maintenance airbase on the airport. All branches of the military use KSAF for training and refueling purposes for noisy, high-performance jets. The majority of these flights depart to the west, flying directly over Pueblo lands. Moreover, because of the increase in corporate, commercial, and military jet traffic, the Santa Fe Regional Airport is now a radar environment. This has pushed general aviation traffic out to the west, directly over Pueblo lands. This includes flight training and acrobatic practice. Additionally, the Rio Grande has always been a "flyway," a corridor between KSAF and the Jemez Mountains, which routes GA flights over Pueblo lands. The existence of the restricted area of Los Alamos further pushes traffic into a narrow "Pueblo-oriented" flight path. Southwest Safaris air tours have nothing to do with this situation. SWS alleges that the FAA, NPS, and Tribes are using the scenic tours of a small, lone, single-pilot, air tour operator as part of a witch-hunt upon which to focus blame. The Tribes, themselves, benefit greatly from tourists brought into the region by air to purchase Native American arts, as well as from using air transportation for their own personal benefit. Many clients of SWS purchase

expensive Indian paintings, jewelry, pottery, and rugs after taking a scenic flight over Indian Country. There is an obvious double standard that the FAA's "finding" overlooks.

The carefully disguised "little secret" is that the FAA's finding and line of reasoning constitute a subtle way of changing the whole purpose of the National Parks Air Tour Management Act. It is everywhere apparent from reading the FAA's proposed Section 106 finding that the FAA and NPS have together abandoned attempts to reduce flights over national parks via scientifically-based justification, and instead are endeavoring to eliminate such overflights entirely for reasons of "administrative simplification." The argument has cleverly been changed from objecting to undefined and undocumented "excessive noise" to that of eliminating the mere presence of aircraft for cultural, religious, and political reasons. The main argument of Native Americans has taken this "remedy" to the extreme; they are now opposed to even the concept of aircraft flying over their ancestral lands. Where will this end? Will all aviation be banned in the Western United States? Do cultural privileges of the few now trump constitutional rights of the many? Can specific individuals now be targeted by hate-laws and revenge-regulations? Congress does not think so. There is no substantive existing legal authority to employ such rationale.

In summary, so far, denial of air tour overflights of BAND is ill-conceived public policy for three reasons. (1) The FAA's finding errs procedurally because: prohibition of air tours places the NHPA above the NPATMA in order to circumvent the Act; the Assessment is contrary to the Act by not employing scientific study to arrive at the FAA's finding; and because the draft Finding of Effects is written so as to replace the draft Bandelier National Monument Air Tour Management Plan as published in the federal register without proper legal notification or form. (2) The Assessment errs substantively because it is contrary to the will of Congress: because it targets a specific named individual/business; and because it is not based on existing priority of law but, in fact, defies the Act. The Assessment was conceived outside of normally recognized law; it is based on the flawed notion that an agency has congressional permission to affirm the rights of one group by denying the civil rights of another. Therefore, the Assessment is fundamentally unconstitutional. And, (3) the FAA's finding is consequentially unjustified as the prohibition of scenic overflights will greatly increase the noise footprint of air tours on Pueblo lands outside the Park. In my opinion, the FAA's Assessment represents the worst kind of abuse of administrative process and egregious agency over-reach, and should be withdrawn for lack of legal authority. The FAA has totally failed to justify its findings that Southwest Safaris should be denied the right of continued overflight of the Park. Sadly, the law of unintended consequences will likely have the last say.

I wish now to add "a few" **peripheral comments** on the only existing draft Bandelier National Monument Air Tour Management Plan (ATMP) as published in the federal register, because there are overlapping of issues and concerns with the FAA's Section 106 findings.

I have numerous objections to the wording of the draft proposal for Bandelier National Monument, all of which carry over to the other proposed ATMPs covering the operations of Southwest Safaris, i.e., ARCH, CANY, NABR, and BRCA. They relate to authorized aircraft, allowable altitudes, reporting requirements, flight allocations, the national value of air tours, the self-assumed autonomy of the parks, and other management and legal concerns.

First, there is the issue of my Cessna T207A. It has always been and is still very much being used in my air tour business. The opening comments below are in relation to Attachment D of the FAA's Section 106 findings, which does not include mention of said aircraft.

About three years ago, I informed Mr. Keith Lusk, FAA Coordinator for ATMPs at that time, that my Cessna T207 would soon be coming up for regulatory-mandated overhaul. FAA regulations require all commercial 135 operators to overhaul piston aircraft engines at least every twelve years. I was approaching that deadline, and I informed him that the process would be both time-consuming and expensive. During that time frame, I would be doing all my flying in my Cessna 182R. The process of raising the money and then performing the overhaul and reinstalling the new engine could easily consume a whole year or more.

Shortly after that phone conversation, I was hit with serious hernia injuries. I discussed this situation with Mr. Luks several times over the phone. Unfortunately, the required operations had temporary but significant consequences, meaning that I could not start the overhaul until one year later than planned.

Then, about a year-and-a-half ago, the Pandemic virus hit. Aviation came to a standstill. It became impossible both to raise money from operations and to schedule maintenance in overhaul shops (due to backlogs). So, the overhaul of my engine had to be postponed again, at great cost to my business.

Just before the Pandemic broke out, my Primary Maintenance Inspector (PMI) reviewed my operation and informed me that I either had to overhaul my engine, regardless of circumstances, or take my plane off my Operations Specifications. I said that the first option was impossible, for reasons beyond my control. His response was, "Then either you voluntarily take your plane off your Ops Specs, or I will do it for you." He advised me to do it "voluntarily." He said that it would be an easy thing to put the plane back on flying status once the overhaul was completed, so there would be no loss to me. He said the FAA simply did not want to carry inoperable 135 aircraft indefinitely on Ops Specs.

I have since been informed by other FAA inspectors that the demands of the PMI were both unreasonable and incorrect. However, that is water over the dam, now, from a maintenance perspective.

From an operations perspective, things have since become more complicated. Anyone looking at my flight logs over the last year-and-a-half might be led to conclude that I had willingly dropped the use of my T207 from park overflights. During that period, I was forced to use my C182 exclusively, although at great inconvenience and added expense to me. I did, however, manage to raise over $60,00 to conduct the overhaul and, as promised both to Mr. Lusk and to my local FSDO, finally ordered the overhaul to begin. The overhaul has just now been completed. It took over six months to perform, an outrageous amount of time. But delays worse than this are now typical in the aviation MRO industry.

In the meanwhile, another wave of the virus has settled upon us, with possibly further grave consequences yet to come.

I have always told Mr. Lusk and my FSDO that the absence of my T207 on my Ops Specs was a temporary setback, not a permanent choice. Therefore, I was dismayed to see that no allowance for my predicament was made in any of the proposed ATMPs. In Appendix A of all the proposed ATMPs, authorization is only granted for use of the C182.

Nowhere in the National Parks Air Tour Management Act of 2000 does it say that an operator may not temporarily withdraw an aircraft from flights over national parks, because such withdrawal would obviously be to the short-term benefit of the NPS. It simply says that, when ATMPs are created, operators may not add aircraft to their fleets beyond what was originally allowed under original IOA provisions.

Nowhere do my ops specs say that I cannot temporarily reduce the size of my fleet for fear of losing operating authority down the line. Nor do the FAA regulations for Part 135 operators impose any such restrictions. Commercial operators would not tolerate such punitive language.

The FAA ATMP steering committee, which I believe Mr. Lusk heads, and the NPS appear to have made a very obvious clerical mistake. The question is, will they own up to it and make the necessary changes to Appendix A of the ATMPs affecting Southwest Safaris? The present danger is that these agencies will now take it upon themselves to change the way policies, promises, and procedures are selectively applied in favor of accelerating the attrition rate of air tour operators, many of whom cannot defend themselves. I hope that is not the case. I will not easily succumb to dictatorial manipulation of false law and errant regulation.

Because of a massive present labor shortage about which we all know, I am having to install the TSIO-520-M engine in my T207, myself. This is a huge undertaking for a single-pilot/mechanic operator. The task will probably take two to six months to complete, along with my other duties. When my plane does come back on line, I fully intend to use it, as allowed by existing law and regulation, to fly my authorized routes over all parks. And, I will continue to use my C182.

My T207 is neither a “New” nor a “Replacement” aircraft with respect to my air tour fleet. Rather, it is an “Existing” aircraft and must be included in Appendix A with respect to all the ATMPs affecting Southwest Safaris. This demand is based on proof of usage over a long period of time. Moreover, it is to the advantage of the NPS to allow for its flights over the parks, as one flight in the T207 is equal to two to three flights in the C182, considering passenger load. And, I believe, the T207 is actually a little quieter than the C182R. These are some of the good reasons we use it.

Please make the necessary changes to the FAA’s draft ATMPs and to the FAA’s draft Section 106 findings, Attachment D, to reflect the legitimacy of my above-stated concerns. The fact that my T207 was not listed on my ops specs at the time the BAND ATMP was drafted is irrelevant to the issue of my right to reinstate the plane on my Ops Specs at any time, and with it my right to use the plane over national park units, there being no law or regulation to the contrary.

The issue of allowable altitude over Bandelier (which issue carries over to all the other proposed ATMPs) is more difficult to address. The altitude resulting from the formula proposed by the NPS is unreasonably high and, when and if applied, would result in erratic and noisy flight paths annoying to both passengers and persons on the ground.

The proposed minimum flight altitude of 2,600 feet over the highest point in BAND within half-a-mile of a tour aircraft is bad policy, for several reasons. The average elevation of the park is 8500 feet high. The park slopes down at a fairly steep angle from west to east. High mountains are very close to low canyons. The effective geography of the park means that at the very least I would have to fly my air tours at 11,100 feet, according to the proposed ATMP. My passengers would need to be on oxygen! Furthermore, the time to climb in a non-turbo C182 to altitude would consume most of the entire flight. Moreover, flying 2600 feet above the highest point would mean that I would be over 5000 feet above the lowest contiguous valley, which would mean that I would be above the park at that point and not in need of altitude restrictions. At any rate, my flight path would involve radical fluctuations if I tried to stay within the park's airspace. This would not only make my passengers sick, but greatly increase the noise over the park, as full power would need to be frequently applied to repeatedly climb back to minimum acceptable altitudes over fluctuating terrain. Contrary to politically correct thinking, the minimum noise level over the park would actually be best achieved if the minimum altitude were simply 1000 feet, allowing for low power settings and a smaller radiant noise cone that would not attract the attention of park visitors.

To get around these problems, the NPS has added a terrible second altitude requirement, namely that "the minimum altitude applies to the entirety of the routes." This essentially makes it impossible for an ATO to fly over the park from west to east, which is the majority of my flying. If I were to cross a ridgeline at 10,000 feet on the west side of the park, then I would have to fly at 12,600 feet at full power all the way to the east side of the park, which is absurd. Instead, I should be in a low-power descent, which no one would notice. On the other hand, if I approached BAND from the east, I would have to be in high-power mode the whole time to climb to 12,600 feet in order to fly over the ridge, which would annoy all sorts of people because of my higher altitude contributing to a greater cone of noise. This and other altitude restrictions of the document needs to be deleted and rethought. As wrotten, they will only add to the noise levels.

BAND is a very small park. From an altitude of 11,100 it simply looks insignificant in context of the total horizon. Parks such as Arches and Canyonlands make sense to view from high elevations, because of their enormity. In contrast, all the beauty of Bandelier is lost above 1000 feet. Still, flying at 2,900 feet over Arches, for instance, also totally defeats the purpose of showing that park from the air. It appears from the minimum flight altitudes suggested for the current block of proposed ATMPs that the FAA and NPS intend to eliminate the air tour industry by destroying the very viability of air tourism. The requirement that Southwest Safaris fly at 2,600 feet over the highest point of Bandelier along the route of flight is a thinly disguised way of granting SWS permission to fly over the park on its established routes, at the same time making it impossible and fruitless to do so.

Ill-conceived altitude restrictions over BAND can be easily resolved if there is goodwill on both sides of the bargaining table. For instance, I propose that the FAA and NPS allow flight over at least the southern two-thirds of BAND at 1000-ft altitudes. This would ensure that no noise would ever reach the visitor's center. Almost no one hikes the southern two-thirds of the park, especially in late Spring, all summer, and early Fall, when there simply is no water to drink out there. Parenthetically, I must comment that I have never seen any hikers in the area I am talking about, regardless of time of year, so aircraft noise in general over the majority of BAND is a largely irrelevant point. Proportionately and numerically, very few hikers visit the southern portions of the park.

As alluded to above, Southwest Safaris flies over Bandelier NP mostly as a matter of convenience and necessity. The park lies along a long-established fly-way, following the Rio Grande. General aviation pilots have to fly over portions of the park because they are squeezed between the Los Alamos restricted area and the expanded traffic patterns of the ever-growing Santa Fe Regional Airport due to airline operations. Most of the flights over the park are due to flight training and transient operations, many conducted by employees of Los Alamos NL who commute to work from ABQ by private plane. The BAND ATMP never takes these facts into account, but tries to put all the blame for imagined/hypothetical aircraft noise on one small ATO who flies over the park relatively infrequently. The absurdity of the time, money, and effort to establish an ATMP for BAND speaks for itself.

Southwest Safaris generally flies in a straight line over the park, performing minimum turns and limiting its time over the park. It flies an average of two to three flights a week over the park, mostly along the perimeters, never at sunrise or sunset, and each flight is generally less than five minutes. Most of the flights are flown from west to east, descending in low power settings, in order to enter the traffic pattern of the Santa Fe Regional Airport. All of this probably explains why the NPS has never received a noise complaint regarding our operations in over 46 years! Considering that fact alone, I see no reason why a 1000-foot minimum flight altitude over BAND would not be appropriate for the entire park. Unless, of course, the whole point of the ATMP process, itself, is to simply destroy the entire air tour industry and then be done with a make-believe problem.

I note from the BAND ATMP meeting of September 15, 2021 that there were countless attempts to discredit air tours over the park on the basis of general noise from planes. Conspicuously absent from the testimonies and questions were any specific reference to documented complaints of such noise. Every complaint was directed to future not present abuse, theoretical not actual issues, philosophical not empirical evidence, anecdotal not first-person testimony, offers of verbal recollection not hard written testimony. There was no actual evidence presented that any court of the land would accept. No actual accusers of the current air tour operator came forward to launch a charge. It appears from the meeting that the whole issue of excessive aircraft noise at BAND has been manufactured by the NPS. The meeting provided ample justification to conclude that the September 15 meeting was orchestrated to have a predetermined outcome, condemning air tours in general as part of an obvious national effort to destroy commercial aviation's presence over national parks. At no time, for instance, did the FAA speak up to defend the ATO's constructive contribution to providing added-value for park visitors.

If air tour noise over BAND were such a problem, how is it that virtually no one at the meeting was aware of the fact, till the FAA pointed it out, that Southwest Safaris has been conducting air tours over that landmark for over 49 years? And, I add, without a single directed complaint! Neither the public nor the NPS had any idea that such "terrible abuse" of the park had been occurring in plain sight and sound all these years. This fact alone negates the right of the NPS to suddenly now come forward to destroy an important, well-established, and respected way to see the park as an integral part of the magnificent surrounding landscapes.

More importantly, however, the requirement in the proposed BAND ATMP (and all the other parks coming up for review) that high minimum flight altitudes be enforced is premature, out of order, and unfounded at this time. The reasoning for the altitude floors is fundamentally justified on account of supposed aircraft noise. However, it is clear from the ATMP proposals that no scientifically conducted air tour noise studies have ever been conducted in these parks, especially at Bandelier. The requirement for the minimum flight altitudes (MFAs) seems to simply be that "the NPS knows best." There is no formal methodology for determining the MFAs, and the whole process of determining them is thus in direct disregard to the wording of the National Parks Air Tour Management Act of 2000.

Section 808 of the Act addresses "methodologies used to assess air tour noise." In order to prevent arbitrary, biased, and subjective conclusions as to the impact of aircraft noise, the Act requires that: "Any methodology adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) shall be based on reasonable scientific methods." Either the Federal, State, local, and tribal agencies involved with the BAND ATMP think they can dictate policy without having to justify it, or they think they can just ignore intent of Congress because of their self-assumed autonomy. There really has been no noise modeling at BAND and what little empirical evidence there is certainly has no scientific component to it. Neither does the supposed noise-modeling at any of the other proposed ATMP parks, as far as I am aware. Public discussions of MFAs at this point in time are totally premature, and the current draft ATMP proposals should be scrapped. No one knows what they are talking about. There is no scientific basis upon which to establish a reasonable and defensible altitude standard, nor for reducing the number of flights from current IOA allocations, nor for changing route structures.

During the BAND meeting, attempts were made to explain and justify the altitude restrictions over the park. I specifically asked, as the last question of the evening, that the NPS expound upon their justification for the 2600-ft floor. The answer was basically a rephrasing of the wording of Section 4.0 of the draft air tour management plan for BAND. The justification seems to be that this restriction "complies with [general] guidance for raptor protection including threatened and endangered and migratory bords, notably the Mexican spotted owl" and the peregrine falcon. However, the Fish and Wildlife Agency is not expected to say that the air tours being challenged either have, are, or will in the future cause any damage to five endangered species in the park. I observe, therefore, that the NPS testimony is contradictory and entirely without science. In fact, the word, "science," was never even mentioned as being part of the altitude justification and never came up as a point of discussion or concern during the public meeting. As far as I am aware, no noise monitoring studies have ever been performed in the park. Therefore, for lack of assessment of air tour noise, as it affects both people and birds, that

is, for lack of reasonable scientific methods, the ATMP for BAND must be withdrawn until such evidence can be presented on a yearly basis. This is the mandate of Congress, which is the controlling legal authority, not the NPS or the FAA or the Tribes.

The very same argument can be applied to the issue of reducing the number of allowed flights by Southwest Safaris over the park. The only reason to do so must be based on demonstrable negative impact of aircraft noise on a repetitive basis. Neither the FAA nor the NPS have done any scientifically-based studies at BAND that would support a reduction of flights from the severely limited number currently authorized. The decision to base the allowable future number of flights over the park on the average number given for three arbitrarily-chosen years, rather than the maximum number of flights for specific years, is without empirical or economic justification, and it lacks any effort to consider the impact on the public of denying them equal access to the park experience by air. In the current instance, the FAA chose two of those three years (2017 and 2018) to include years where the pilot of Southwest Safaris was stricken with severe hernia issues that prevented him for flying as much as he normally would have. Mr. Lusk of the FAA is fully aware of this fact, but failed to disclose it. The clear implication at the meeting was that Southwest Safaris simply does not deserve the right to provide public view of the back country of BAND. For some unexplained reason, providing 126 flights per year over BAND is objectionable, if not unthinkable, where as another operator, according to the FAA's testimony, is allowed to provide thousands of flights per year over the "sacred" Grand Canyon. Southwest Safaris is one of the smallest of the air tour operators (ATOs) in the country, operating some of the smallest air tour airplanes. Reducing the number of allowed scenic flights over BAND from 126 to 101 would have no meaningful, justifiable, or scientifically documentable impact on the overall noise at the park. The number of flights is just too small. The planned "taking" of Southwest Safaris already-limited number of park overflights is arbitrary and capricious. The FAA failed to disclose this obvious fact, too, in defense of one of its own. The favoritism and injustice of the whole allocation process stinks like a dead fish.

Finally, the reporting requirements for all the parks are obviously absurd, deliberately abusive, and unjustly punitive. Small air tour operators simply cannot afford the exorbitant expense of time, money, and effort required to implement a digital reporting system. Surely, fair-minded government agencies would know this because of their own experience with such tracking technology (e.g., the USFS and DOI), unless they are totally out of touch with reality. Do the FAA and NPS not realize that it is blatantly unfair to require enormous investment in digital equipment, software, training, data management and reporting, plus user subscriptions, of operators who can be shut down at any time for any cause at parks managed by ATMPs? Is it not blatant discrimination to forego the same of ATOs at the Grand Canyon or Glen Canyon NRA, for instance, where the large operators reside? Do federal agencies not know that imposition of digital tracking requirements would bury a small ATO? Or is it the real intent of government to further accelerate attrition? The FAA has already implemented ADS-B reporting. That should be sufficient.

Moreover, the requirement for special tracking hardware in air tour aircraft has no substantive justification in the NPATM Act of 2000 (the Act). Congress never anticipated that the FAA and NPS would enact such significant regulation and certainly never authorized it, either directly or indirectly. Nowhere in the Act is a requirement for digital tracking even hinted at. In the Act,

Congress simply states in 40128(d)(1) that an ATO "shall submit to the Administrator and the Director a report regarding the number of commercial air tour operations over each national park that are conducted by the operator and such other information as the Administrator and the Director may [reasonably] request in order to facilitate administering the provisions of this section." It is assumed by Congress that all requests for additional information will be reasonable, necessary, and cost-effective, not punitive, over-reaching, or irrelevant to the safe conduct of air tours. Congress is simply saying that the agencies can ask ATOs for broad summary information relating to their flights, such as written confirmation as to time of day, routes, and altitudes. The Act does not authorize the agencies to demand that this information be submitted in the most expensive digital format possible; most ATOs simply do not have the means to provide that. A long-hand written report should be sufficient to "facilitate administration," i.e., the time-honored conveyance of reports either by mail or email in simple spreadsheet format by manual entry. Digital tracking of flights is also unnecessary because flight paths can simply be observed in real time by Park Service personnel standing on the ground and/or by competing ATOs observing one another in the air.

Nor can the FAA find wording in its own regulations to justify digital tracking requirements. Reread FAR 136.39C(2). No mention of requirements for experimental, expensive, and complicated tracking devices is ever made, authorized, justified, or contemplated by the FAR. The FAA interprets the Act as saying that the FAA "may establish conditions for the conduct of commercial air tours," but the word "conduct" does not include imposition of equipment unrelated to the safe in-flight operations of air tours. The word simply means "the way air tours are performed, i.e., flown." Air tours can be and are conducted perfectly safely and in accordance with regulation every day without tracking devices. The imposition of such a requirement is unnecessary to the safe conduct of an air tour (the FAA's primary management responsibility under the Act), overly costly and burdensome to ATOs, and without justification. The methodology of keeping digital track of all flights over multiple park units, and sorting them out by flight, day, and park would bring any ATO to its knees. At the very least, law requires the FAA to do a cost/benefit analysis on all new regulations. None have been conducted for this back-door mandate. Therefore, I request that all mention of required tracking equipment be taken out of the proposed ATMP for BAND as well as for all the other affected Park Service units.

Most small air tour operators will be blind-sided by the ATMP requirements that the FAA and NPS are proposing. Both agencies could have let the air tour industry know far in advance what they were planning so ATOs could have reacted with reasoned debate before the agencies brought in the hostile public. I think that trade associations, as well, would have appreciated the courtesy. Sadly, the air tour industry is being hastily railroaded to comply with ill-conceived and unnecessary regulations without proper time to respond, while the FAA and NPS ignore their duty to perform due diligence. This makes a mockery of public debate and informed consent. Southwest Safaris, for instance, has been given only thirty-days in the height of its season to respond in detail to complicated regulatory changes involving five parks, each with its own labyrinth of delicate issues. This amounts to insult added to injury. The deck is clearly stacked against small business and a free and open economy. The FAA and NPS are clearly using a court order for prompt action to justify bringing into existence an unneeded and ill-managed

ATMP system that will create more government jobs but no public benefit and great moral and economic harm. Expediency is no substitute for justice.

I have five other management concerns, briefly considered but of no less importance. First, ATOs should have the option of attending all meetings and training cessions by phone/zoom. This will reduce cost, increase the chance of participation, and decrease the likelihood of a meeting being cancelled due to inclement weather.

Second, the requirement for in-flight communication on frequency 122.9 should be dropped at BAND. Very few general aviation pilots monitor this frequency in flight and non-tour pilots won't know what an air tour pilot is talking about, anyway. Sounds good on paper, but a waste of time in practice for this park, where there is only one ATO. All pilots are responsible to "see and avoid" under existing FAA regulations. This stipulation for BAND has been incorrectly copied from the wording of other ATMPs.

Third, the amendment process proposed under Section 9.0 of the proposed ATMP is not fair for ATOs. The FAA and NPS get to make "minor" modifications to the ATMP without a formal ATMP amendment process, including taking away or reducing an existing ATO's allocations "for cause," including competitive bidding for existing allocations. This may be a minor modification from the point of view of an agency that will not be affected, but it will be a major modification for the impacted ATO. If this provision stands, then an existing ATO should also be allowed to be issued additional allocations without imposing the requirement for a formal ATMP amendment process. Justice demands equality at the negotiating table.

Fourth, the provisions of the ATMP should not be made part of an ATO's Ops Specs. Legally, Ops Specs are an agreement between an operator and the FAA; the NPS has nothing to do with the content of Ops Specs. Yet, the NPS will control an ATO's operations as well as his Ops Specs through the ATMP process. The FAA needs to really think this through, as the precedent it sets for all commercial operators, not just ATOs, is probably irreversible. Has the FAA been reduced to merely acting as a legal agent for the NPS? Section 10.0 is bad rulemaking precedent which the FAA will come to regret. As a practical matter, I suggest that individual FSDOs will want no part of this deal. Section 10.0 constitutes a de facto merger between two independent agencies. Congress never contemplated nor authorized such a union. Nothing good will come of it.

Fifth, it is logical and customary in legal documents to specify that the aggrieved parties to a unilaterally-imposed mandate be granted the right of judicial review of disputes. Right of access to the courts is a stipulation that must be put into all ATMPs, as these impositions do not represent voluntary agreements. Without such a stipulation, the ATMPs become an act of pure dictatorship, as there is no guarantee that the federal agencies involved will listen to any of the changes to the proposed draft ATMPs submitted by ATOs. Without such inclusion, the ATMPS will become a form of "kill regulation," not an ongoing working management plan. Besides, paragraph 40128(b)(4)(5) of the Act requires such inclusion: "An air tour management plan developed under this subsection shall be subject to judicial review."

There is yet another point of logic associated with the "taking" of IOA allocations from ATOs that neither the FAA nor the NPS (the agencies) have yet addressed. The ATMP process was created to ensure that noise generated by air tour aircraft would not impinge on national park units. Supposedly, noise studies based on science, as required by the National Park Air Tour Management Act of 2000 (NPATMA, or the Act), have shown that flying, even at full power, in the higher altitudes proposed by draft ATMPs, would sufficiently accomplish the objectives of the Act. Otherwise, the NPS would not have proposed the higher altitudes with such conviction. It follows, then, if altitude by itself reduces aircraft noise to the point where it is no longer "significant," there should be no problem with ATOs flying at those higher altitudes picked by the NPS. It also follows in sequence that there is every logical reason to grant ATOs their full IOA allocations based on the principle of their "doing no harm." On the other hand, if the NPS has not conducted scientific analysis of noise over the parks, then the agency must recant and scientifically prove its case before any ATMP can be implemented. Either way, there is no justification under NPATMA (the Act) for "taking" IOAs away from air tour operators.

The FAA and NPS have never stated why an ATO's IOAs might need to be reduced. It is simply assumed by the agencies, in violation of the Act, that altitude restrictions by themselves might not be enough to mitigate aircraft noise. But, without scientific study of aircraft noise over individual park units, there can be no certainty that the agencies' assumption is correct. There may be other hidden reasons why the agencies might want to take advantage of a self-serving conclusion/prophesy. Might the purpose be to force ATOs out of business "just because" of their mere presence over a park? Or, might it be that the NPS never conducted the legislatively-mandated scientifically-based studies of aircraft noise in the first place and therefore wants to cover up this fact by seizing allocations to limit operations? Perhaps the NPS doesn't feel that ATOs ever did deserve their allocations and now wants to confiscate them based on a unilaterally-concocted formula retroactively imposed without even a hearing. In any case, the "taking" of IOAs cannot be justified by the NPATM ACT, as it is neither reasonable nor necessary to do so if the higher altitudes are scientifically justified and because it defeats the goal of Congress to protect the rights of ATOs to fly over the parks if no significant adverse noise impact at the higher altitudes can be demonstrated by objective standards.

Most ATOs will be willing to fly at the higher altitudes, but the FAA and NPS must first restore the full IOA allocations of operators to make the arrangement legal, equitable, workable, and sustainable (lasting). Otherwise, we have a "confiscation" without compensation or due process. This is precisely why Congress allowed the ATMP to be subject to judicial review.

These points, however, almost miss the greater issue. Nowhere in the NPATMA does Congress authorize the FAA and NPS to "take" an ATOs allocations of economic opportunity. The agencies have simply created this power for themselves. They have attempted to make new law, overstepping their legislated authority. This is stealthily done under section 4.0 of the all the draft proposals for new ATMPs under the section of the drafts labeled, "Justification for Measures Taken." Congress intended that the total number of air tour authorized under an ATMP should be consistent <u>not</u> with "the existing air tours reported" over a park, but with the original ("grandfathered") allocations given by Congress to then-operating ATOs. There is no wording in the Act to the contrary. For the agencies to say, "The total number of air tours authorized under this ATMP is consistent with the existing air tours reported over the Park" is a

red herring. The agencies have no authority under the Act to limit air tour on that basis. Besides, the observation is irrelevant. Nowhere in the current Act does it say that originally-issued IOAs do not carry over to new ATMPs. Emphatically saying something is true does not make it so. Under the justifications section of the draft ATMPs, the agencies must make reference to the specific wording of the NPATM Act of 2000 in order to prove that they have the authority to deprive ATOs of their operating rights originally granted by Congress. Lacking the ability to do so, the agencies must withdraw any attempt to "take" IOAs from existing ATOs.

In 2017, air tour operators entered into a voluntary agreement (VA) with Glen Canyon National Recreation Area. At that time, Southwest Safaris was granted operating rights over the park unit equal to SWS' full original IOA allotment. There was discussion by the agencies of a "taking" back of allocations, but the idea was emphatically rejected by the ATOs involved. Those ATOs successfully argued that there was nothing in the wording of the Act that authorized the FAA and NPS to arbitrarily "take" way their operating rights. Eventually, both agencies agreed and the VA was signed. By so doing, the ATOs of that VA set precedent, which carries over to the formal ATMPs of today, again there being no legislation that argues to the contrary. Mr. Keith Lusk of the FAA is a witness to the referenced proceedings, as he oversaw them.

When the Act states that "An air tour management plan for a national park may prohibit commercial air tour operations in whole or in part," it is not referring to allocations. The operative word is "operations." The "prohibit clause" simply means that agencies may deny ATOs the right to fly over any or all geographic areas of a national park. Rocky Mountain National Park is an example of a park where no air tours are allowed to fly because of a geographic restriction on movement. No allocations are involved, because none were ever issued. Therefore, no "taking" has occurred at Rocky Mountain. In other instances, the Act says that flights over parks where IOAs do exist may also be prohibited, but the allocations remain in place in case the operating prohibitions are someday removed or modified. The right to eventually use allocations of economic opportunity is preserved, though "temporarily" curtailed.

The underlying principle is that, under the current Act, allocations were given to ATOs by Congress and cannot be taken away by agencies. There is no direct wording in the Act of 2000 that would permit confiscation of IOAs. "Taking" an ATO's allocations would be a forever denial of opportunity to conduct otherwise permitted operations. There is a big difference between "temporarily" prohibiting physical movements of all ATOs for "cause" versus rescinding the issuance of targeted ATOs' basic rights of existence protected in the Act by Congress.

The Act states that "an air tour management plan for a national park shall provide for the initial allocation of opportunities to conduct commercial air tour operations <u>if</u> the plan includes a limitation on the number of commercial air tour operations for any time period." The draft BAND ATMP contains no language closing the park to air tours during any extended time period during the normal working day. Therefore, there is no authority for agencies to "take" away an ATOs initial allocation of economic opportunities at Bandelier.

For all of the above reasons, as well as those contained in my original letter, I ask that all references to diminished allocations be removed from the draft ATMP for BAND and that the number of allocations granted be restored to the allocations originally allowed under IOA.

One final point on another topic. The requirement for ATOs to provide tracking equipment at their own expense for the benefit of the FAA and NPS amounts to an unfunded mandate. The costs involved will be crushing. Moreover, the requirement for such equipment changes the way aircraft will be tracked and controlled. The mandate for tracking devices on aircraft is a significant change to the air navigation system and requires formal rule-making under the FARs before forced inclusion of the devises in ATMPs should be considered.

In closing, I must comment that the meeting on September 15 to discuss the BAND ATMP was a disgrace. It amounted to a witch-hunt, trying to burn a "wicked" air tour operator. At no time was anything said about the positive contribution of the ATO involving efforts to reveal the natural history of the park impossible to grasp from the ground. At no time did anyone mention that the ATO provides the only way to see the back country of the southern part of the park, excepting a rare handful of well-conditioned hikers willing to assume the considerable risks. At no time did anyone mention that there has never been a single registered complaint against the ATO at BAND over by then 46 years of operation. At no time did the NPS ever acknowledge the extraordinary benefits to the local economy this ATO provides. At no time did the NPS mention that the ATO only flies over the park, on average, less two times per week, or that he is mostly just transiting the park airspace, or that he is not circling the park, or that he is not advertising specific scenic flights over this specific park, or that the park lies along a well-established and highly active flyway along the Rio Grande and is flown over by many other aircraft whose total volume of flights dwarfs that of the ATO. The whole venue was a set-up, but it backfired. People could easily see through the hypocrisy and one-sidedness of the presentation. The unacknowledged elephant in the room is that there is a large segment of the public that truly wants to see the Great American West from the air, and the FAA and NPS have a duty to preserve their right to do so. Congress recognized this right when it created the ATMP process; the goal was to manage air tours, not kill this industry. It is ironic that the very opening picture the NPS used to advertise the ATMP meeting was an aerial photograph of the park, an open de facto admission by the PS of the value of seeing national parks from the air at 1000-ft altitude!

Thank you for your kind consideration of the manifold serious failings of both the FAA draft Section 106 findings and the draft ATMP proposal.

Sincerely yours,

Bruce Adams

Bruce Adams

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Ms. Judith Walker
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration
Washington, DC

May 19, 2023

Response to Request for Concurrence re. Sec 106
Statement of Disagreement - Submitted by Email

Dear Ms. Walker:

I am responding to your "request for concurrence" to a finding of "no adverse effects" regarding the FAA's proposed denial of continued air tour overflight rights of Southwest Safaris at Bandelier National Monument. Section 106 of the National Historic Preservation Act (NHPA) appears to be the statutory authority for your request.

I do not concur with the FAA's proposed finding (Assessment) that there will be "no adverse effects" from denying Southwest Safaris continued air tour overflight rights at Bandelier National Monument (BAND, or "the Park"). I argue that the FAA's method of assessment lacks procedural, substantive, and consequential validity.

The issue at hand is the creation of an Air Tour Management Plan for BAND. This is a legal undertaking which must follow precise statutory requirements. The controlling legal document is the National Parks Air Tour Management Act of 2000 (NPATMA, or 'the Act"). The NHPA is of secondary controlling importance. It serves only as an aid in implementing the primary Act.

Procedurally, the FAA's Assessment puts the cart before the horse. The FAA is trying to circumvent the intent of the original Act by making elimination of alleged damage, caused by air tour overflights, to buildings and structures and cultural/religious sites the primary objective of the Act. To the contrary, the primary purpose of the Act was to "mitigate or prevent the significant adverse impacts, if any, of commercial air tour operations . . ." by eliminating alleged *excessive noise* at National Parks, not to ban the flights altogether, particularly not for social/cultural/religious objections. Congress was very explicit about this. Congress recognized that air tours are a viable and valuable means for viewing National Parks and Monuments. There is no specific mention in the Act of visual impairment to park properties from aircraft overflights, nor were postulated but unsubstantiated visual effects to be considered to be determinate when drawing up Air Tour Management Plans (ATMPs). Yet the FAA and NPS conspicuously claim the right to include ambiguous and amorphous visual "damage" as a

"significant adverse impact" of Park overflights. Under the paragraph entitled, "Assessment of Effects," in the FAA proposed Assessment, the FAA states:

> "The FAA, in coordination with the NPS, focused the assessment of effects on the *potential* for adverse effects from the introduction of audible or visual elements that could [conceivably, but not necessarily] diminish the integrity of the property's significant historic features" (emphasis added.)

The FAA's error is glaring, egregious, and defiant. They are measuring *potential* noise, not actual. And, they are including imagined visual impact of an aircraft's presence on landscape experience, which cannot possibly be measured. This is why adverse visual impression was not specifically addressed under the wording of the Act. The whole basis for the FAA's Assessment is either questionable at best or outside the law. In fact, the whole thrust of the FAA's current proposal to Southwest Safaris (SWS), i.e., elimination of all air tours over the Park, is contrary to the intent of Congress. Under the misguided application of the NHPA, the FAA's pending Assessment initiative has been corrupted. I contend that the FAA's Assessment has been based on irrelevant controlling statutory authority from the very start.

I argue that the FAA's Assessment does not follow specific, procedural, statutory requirements. Section 808 of the Act states, in effect, that no findings of *any* adverse impact of park overflights can be considered without first conducting studies based on "reasonable scientific methods" to determine the presence of objectionable aircraft noise, if excessive aircraft noise exists at all. All determinations of adverse noise impact were to be based on science. By implication, this requirement also extends to determining, by actual observations, adverse visual impact, if any, of aircraft over NPS units based on altitude. The mere presence of aircraft over parks would not be sufficient reason to determine adverse impact. Section 40128(b)(3)(F) stipulated that the FAA "shall justify and document the need for measures taken pursuant to subparagraphs (A) through (E) and include such justifications in the record of decision." In other words, the need for remedy must be firmly and incontestably established and must precede administrative cure. To be sure that the FAA did not miss these stipulations and inferences, Congress dedicated specific language of the Act to the need for documentation . . . apparently to no avail.

Despite specific instructions by Congress to the contrary, the FAA's assumption of need for remedy is predicated on pure conjecture, anecdotal testimony, supposition, and theoretical noise modeling, none of which speculative theories have been proven to be accurate or even real. Likewise, no visual-effects models have ever been created. Therefore, under the Act, the evidence the FAA has so painstakingly contrived carries no validity until it can be substantiated by reasonable scientific/observational methodology. So far, the FAA and NPS have provided no reliable noise-related data acquired by any kind of professionally-recognized standard of measurement or even made any efforts to gather such information. Nor has the FAA established any guidelines by which to measure the supposed "significant adverse impacts" (40128(b)(1)(B)) of the mere presence of aircraft over NPS units. In the present case, as a matter of procedural law, no reliable conclusions can be drawn from nonexistent hard evidence. The FAA's assessment appears to be a fix looking for a problem.

Substantively, the FAA's finding is also without merit. The finding completely ignores the major issue of the Act, that is, development of ways and means to lessen, not eliminate altogether, aircraft noise and/or visual presence over the parks. The means used to accomplish this were to be route, altitude, and frequency modification. Only if this process failed would denial of overflight rights even be considered. The conclusion of the FAA's finding, that all flights over BAND must be prohibited, is an end-run around the substance of the Act itself and, in addition, effectively denies due evidentiary process. In other words, the FAA and NPS are trying to deny the intent and substance of the primary Act by raising secondary NHPA objections (i.e., findings relating to aircraft noise and visual presence) that cannot even be substantiated. The FAA and NPS are attempting to make the specific findings of the lesser (NHPA) control the general conclusions the greater (NPATMA), to get around the intent of the Act, which is substantive abuse of law.

But the FAA's abuse of the Act is even worse. Instead of basing its Assessment on the statutory wording of the NPATMA favoring operational methods of mitigation, the FAA is relying on its own internally-contrived decision that cultural and religious "rights" over-ride all other methods of alleviation without regard to constitutional and regulatory guarantees. The FAA is single-handedly dismissing the importance of freedom of commerce, freedom of speech, freedom of association, equal treatment under the law (e.g., commercial vs. non-commercial use of airspace), and equal treatment of the various States in favor of upholding the values of Native American society. These are issues that go beyond the scope of this response. The FAA's proposed finding ignores these fundamental clashes of such priorities, and instead tears apart the fabric of established legal and operational practice, exploiting Native American values to achieve a dark political/control agenda that has heretofore failed by other means. The FAA is artfully changing the thrust of the argument from mitigation of demonstrable environmental degradation to a political determination of priority of rights (cultural vs. constitutional.) It has no statutory authority to do so.

The proposed Assessment also errs substantively because it targets a specific person/small business and does not even attempt to justify doing so on the basis of objective data that would explain the proposed "taking." Moreover, the FAA's finding, that they are empowered to withdraw Park overflight rights for one park and not another, is discriminatory against selected States, operators, and persons. The FAA's preliminary decision is flagrantly one-sided, arbitrary, and capricious. The FAA never states why one park, party, or person has greater "rights" than another; it never defines those rights; nor does the FAA reveal how the conflicting "rights" will be consistently applied, arbitrated, or appealed. The FAA seems to be claiming for itself sole decision-making authority outside of existing law.

Furthermore, **consequentially**, the FAA's denial of overflight rights will explicitly make the alleged noise problem over Indian lands worse. Southwest Safaris has carefully designed its air tour routes so as to minimize, if not eliminate, any objectionable noise impact on people who are on the ground. SWS' tour routes are deliberately multiple and diverse in order to spread the noise footprint over a large area combined with infrequent flights. Many of the routes are for transportation purposes only. By eliminating all air tour flights over Bandelier, or demanding overflights at unreasonably high levels, the FAA and NPS will force Southwest Safaris to do what it has so carefully tried to avoid, i.e., fly directly over noise-sensitive Pueblo lands to the

south and east of the Park. The Cochiti and San Ildefonso Pueblos would be immediately adversely affected. If this turns out to be the result, neither the FAA nor the NPS will then have authority to alter the undesirable consequential outcome of poor decision-making.

The strategy of Southwest Safaris has, to this date, been undeniably effective. There exists an inconvenient truth in favor of SWS, one that the FAA has arduously tried to avoid acknowledging. Until the actual drafting of the BAND ATMP, no Federal, State, Local, or Tribal agency was even aware of the presence of Southwest Safaris' air tours over Bandelier. Southwest Safaris has been conducting air tours over Bandelier for 49 years. During that time, not one single complaint, noise or otherwise, has been lodged against Southwest Safaris. The FAA has no record of complaints, nor does the NPS, nor have the Tribes (except at the FAA's and NPS' current prodding) ever come forward with any allegations, either general or specific. SWS has already solved the noise issue. Southwest Safaris' Park overflights have already been proven, by lack of testimony to the contrary, to produce "no adverse impact" on Pueblo lands. The air tour noise issue at BAND has thus already been determined to be non-existent. The FAA's obfuscating Assessment of "no adverse effects" perverts the logic of speech, by claiming the inverse of the argument that denying all overflights of the park will, counterintuitively, cause harm to Indian lands and remote "sacred" areas. The FAA's finding is obtuse contra-logic designed to obstruct constructive analysis of complicated argument. The FAA's Assessment is a pointless statement of the obvious but provides no justification for its own conclusion. It represents the error of circular logic, going nowhere. For example, if you kill a duck to restore quiet, it will not quack; neither will it lay any golden eggs, so the measurable loss exceeds the gain. With respect to the unfortunate duck, the effect of the positive assertion (that killing the duck will restore a state of quiet) is negated by the consequence of the adverse conclusion (people will go hungry.) Likewise, in the present instance, the proof of the FAA's error is in the numbers.

Southwest Safaris flies air tours over BAND a maximum of 126 times per year. That is approximately one air tour every three days. SWS has a policy of never flying the same route over two consecutive flights. That means that no route is flown over more than once per week. The Tribal claim that SWS is causing excessive aircraft noise or sacred intrusion is ludicrous. However, changing the route structure of Southwest Safaris' air tours will be very much noticed. The loss to the adjoining Pueblos will be significant and permanent.

The average time spent by SWS flying air tours over BAND amounts to two minutes per flight. Many of these flights are, in fact, merely "transportation" in nature, or for the purpose of taking off and landing at the Santa Fe Regional Airport. These operations are included in SWS' semi-annual reports of Park overflights because of the broad, over-reaching definitions of air tours in the NPATMA. Examination of Southwest Safaris' air tour routes reveals that at no time does the company circle any landmark or in any way draw attention to the fact that an air tour is being conducted. Some bends in routes are, of course, mandated by rising terrain. Attempts to climb over the entire Park with high power settings are avoided. There is virtually no difference in the way SWS flies across BAND and the way any non-commercial or charter flight would be conducted. At any rate, denying SWS the right to fly air tours over BAND will have no effect on the continued existence of these takeoff/landing/transportation overflights.

The FAA's own noise modeling numbers seem to confirm the fact that Southwest Safaris' overflights of BAND are having "no adverse impact" on the Park. I refer to Figure 2 on page 21 of the FAA's pending Assessment. There are only five instances where the projected (not actual) noise emissions from SWS' aircraft will generate decibels exceeding a modest 35 dba, and then, at most, for only 18-36 seconds per flight. Four of the points of noise impact lie along a straight line, which is used as a transportation route simply to cross the Park, and so do not count. Many GA aircraft fly the same route. Only one route involves a noise impact exceeding 52 decibels, and that is at the bottom of the Rio Grande canyon, the walls of which block the noise shortly after aircraft passage. The "time above 52 dBA" for this leg is thus limited to only six seconds, hardly impactful in a remote area where Park interpretive programs are rarely, if ever, given. Cars, motorcycles, trucks, and busses entering and exiting the Park up a steep slope directly above this geographic point make more noise than this. Therefore, the FAA appears to be saying that SWS is doing an excellent job of managing noise. The problem, I submit, is more political than real.

I must observe, based on the numbers above, that the FAA, NPS, and Tribes have a funny way of saying "thank you" to Southwest Safaris for being so considerate of Native American and Park Service values for so many years.

To the contrary, the FAA, NPS, and Tribes are using Southwest Safaris as a scapegoat. They are trying to load onto SWS all the noise being created by the entirety of aircraft operations over the Rio Grande. The Santa Fe Airport is now a regional airport. It has been discovered by the public, which is now demanding more and more airline connections to Denver, Dallas, and Phoenix. Even more destinations will surely be added. Both Tribal and non-Trible members take advantage of these airline flights. The US Army National Guard has a huge training/maintenance airbase on the airport. All branches of the military use KSAF for training and refueling purposes for noisy, high-performance jets. The majority of these flights depart to the west, flying directly over Pueblo lands. Moreover, because of the increase in corporate, commercial, and military jet traffic, the Santa Fe Regional Airport is now a radar environment. This has pushed general aviation traffic out to the west, directly over Pueblo lands. This includes flight training and acrobatic practice. Additionally, the Rio Grande has always been a "flyway," a corridor between KSAF and the Jemez Mountains, which routes GA flights over Pueblo lands. The existence of the restricted area of Los Alamos further pushes traffic into a narrow "Pueblo-oriented" flight path. Southwest Safaris air tours have nothing to do with this situation. SWS alleges that the FAA, NPS, and Tribes are using the scenic tours of a small, lone, single-pilot, air tour operator as part of a witch-hunt upon which to focus blame. The Tribes, themselves, benefit greatly from tourists brought into the region by air to purchase Native American arts, as well as from using air transportation for their own personal benefit. Many clients of SWS purchase expensive Indian paintings, jewelry, pottery, and rugs after taking a scenic flight over Indian Country. There is an obvious double standard that the FAA's "finding" overlooks.

The carefully disguised "little secret" is that the FAA's finding and line of reasoning constitute a subtle way of changing the whole purpose of the National Parks Air Tour Management Act. It is everywhere apparent from reading the FAA's proposed Section 106 finding that the FAA and NPS have together abandoned attempts to reduce flights over national parks via scientifically-based justification, and instead are endeavoring to eliminate such overflights entirely for reasons

of "administrative simplification." The argument has cleverly been changed from objecting to undefined and undocumented "excessive noise" to that of eliminating the mere presence of aircraft for cultural, religious, and political reasons. The main argument of Native Americans has taken this "remedy" to the extreme; they are now opposed to even the concept of aircraft flying over their ancestral lands. Where will this end? Will all aviation be banned in the Western United States? Do cultural privileges of the few now trump constitutional rights of the many? Can specific individuals now be targeted by hate-laws and revenge-regulations? Congress does not think so. There is no substantive existing legal authority to employ such rationale.

In summary, so far, denial of air tour overflights of BAND is ill-conceived public policy for three reasons. (1) The FAA's finding errs procedurally because: prohibition of air tours places the NHPA above the NPATMA in order to circumvent the Act; the Assessment is contrary to the Act by not employing scientific study to arrive at the FAA's finding; and because the draft Finding of Effects is written so as to replace the draft Bandelier National Monument Air Tour Management Plan as published in the federal register without proper legal notification or form. (2) The Assessment errs substantively because it is contrary to the will of Congress: because it targets a specific named individual/business; and because it is not based on existing law. Therefore, it is unconstitutional. And, (3) the FAA's finding is consequentially unjustified as the prohibition of scenic overflights will greatly increase the noise footprint of air tours on Pueblo lands outside the Park. In my opinion, the FAA's Assessment represents the worst kind of abuse of administrative process and egregious agency over-reach, and should be withdrawn for lack of legal authority. The FAA has totally failed to justify its findings that Southwest Safaris should be denied the right of continued overflight of the Park. Sadly, the law of unintended consequences will likely have the last say.

I wish now to add "a few" **peripheral comments** on the only existing draft Bandelier National Monument Air Tour Management Plan (ATMP) as published in the federal register, because there are overlapping of issues and concerns with the FAA's Section 106 findings.

I have numerous objections to the wording of the draft proposal for Bandelier National Monument, all of which carry over to the other proposed ATMPs covering the operations of Southwest Safaris, i.e., ARCH, CANY, NABR, and BRCA. They relate to authorized aircraft, allowable altitudes, reporting requirements, flight allocations, the national value of air tours, the self-assumed autonomy of the parks, and other management and legal concerns.

First, there is the issue of my Cessna T207A. It has always been and is still very much being used in my air tour business. The opening comments below are in relation to Attachment D of the FAA's Section 106 findings, which does not include mention of said aircraft.

About three years ago, I informed Mr. Keith Lusk, FAA Coordinator for ATMPs at that time, that my Cessna T207 would soon be coming up for regulatory-mandated overhaul. FAA regulations require all commercial 135 operators to overhaul piston aircraft engines at least every twelve years. I was approaching that deadline, and I informed him that the process would be both time-consuming and expensive. During that time frame, I would be doing all my flying in

my Cessna 182R. The process of raising the money and then performing the overhaul and reinstalling the new engine could easily consume a whole year or more.

Shortly after that phone conversation, I was hit with serious hernia injuries. I discussed this situation with Mr. Luks several times over the phone. Unfortunately, the required operations had temporary but significant consequences, meaning that I could not start the overhaul until one year later than planned.

Then, about a year-and-a-half ago, the Pandemic virus hit. Aviation came to a standstill. It became impossible both to raise money from operations and to schedule maintenance in overhaul shops (due to backlogs). So, the overhaul of my engine had to be postponed again, at great cost to my business.

Just before the Pandemic broke out, my Primary Maintenance Inspector (PMI) reviewed my operation and informed me that I either had to overhaul my engine, regardless of circumstances, or take my plane off my Operations Specifications. I said that the first option was impossible, for reasons beyond my control. His response was, "Then either you voluntarily take your plane off your Ops Specs, or I will do it for you." He advised me to do it "voluntarily." He said that it would be an easy thing to put the plane back on flying status once the overhaul was completed, so there would be no loss to me. He said the FAA simply did not want to carry inoperable 135 aircraft indefinitely on Ops Specs.

I have since been informed by other FAA inspectors that the demands of the PMI were both unreasonable and incorrect. However, that is water over the dam, now, from a maintenance perspective.

From an operations perspective, things have since become more complicated. Anyone looking at my flight logs over the last year-and-a-half might be led to conclude that I had willingly dropped the use of my T207 from park overflights. During that period, I was forced to use my C182 exclusively, although at great inconvenience and added expense to me. I did, however, manage to raise over $60,00 to conduct the overhaul and, as promised both to Mr. Lusk and to my local FSDO, finally ordered the overhaul to begin. The overhaul has just now been completed. It took over six months to perform, an outrageous amount of time. But delays worse than this are now typical in the aviation MRO industry.

In the meanwhile, another wave of the virus has settled upon us, with possibly further grave consequences yet to come.

I have always told Mr. Lusk and my FSDO that the absence of my T207 on my Ops Specs was a temporary setback, not a permanent choice. Therefore, I was dismayed to see that no allowance for my predicament was made in any of the proposed ATMPs. In Appendix A of all the proposed ATMPs, authorization is only granted for use of the C182.

Nowhere in the National Parks Air Tour Management Act of 2000 does it say that an operator may not temporarily withdraw an aircraft from flights over national parks, because such withdrawal would obviously be to the short-term benefit of the NPS. It simply says that, when

ATMPs are created, operators may not add aircraft to their fleets beyond what was originally allowed under original IOA provisions.

Nowhere do my ops specs say that I cannot temporarily reduce the size of my fleet for fear of losing operating authority down the line. Nor do the FAA regulations for Part 135 operators impose any such restrictions. Commercial operators would not tolerate such punitive language.

The FAA ATMP steering committee, which I believe Mr. Lusk heads, and the NPS appear to have made a very obvious clerical mistake. The question is, will they own up to it and make the necessary changes to Appendix A of the ATMPs affecting Southwest Safaris? The present danger is that these agencies will now take it upon themselves to change the way policies, promises, and procedures are selectively applied in favor of accelerating the attrition rate of air tour operators, many of whom cannot defend themselves. I hope that is not the case. I will not easily succumb to dictatorial manipulation of false law and errant regulation.

Because of a massive present labor shortage about which we all know, I am having to install the TSIO-520-M engine in my T207, myself. This is a huge undertaking for a single-pilot/mechanic operator. The task will probably take two to six months to complete, along with my other duties. When my plane does come back on line, I fully intend to use it, as allowed by existing law and regulation, to fly my authorized routes over all parks. And, I will continue to use my C182.

My T207 is neither a “New” nor a “Replacement” aircraft with respect to my air tour fleet. Rather, it is an “Existing” aircraft and must be included in Appendix A with respect to all the ATMPs affecting Southwest Safaris. This demand is based on proof of usage over a long period of time. Moreover, it is to the advantage of the NPS to allow for its flights over the parks, as one flight in the T207 is equal to two to three flights in the C182, considering passenger load. And, I believe, the T207 is actually a little quieter than the C182R. These are some of the good reasons we use it.

Please make the necessary changes to the FAA’s draft ATMPs and to the FAA’s draft Section 106 findings, Attachment D, to reflect the legitimacy of my above-stated concerns. The fact that my T207 was not listed on my ops specs at the time the BAND ATMP was drafted is irrelevant to the issue of my right to reinstate the plane on my Ops Specs at any time, and with it my right to use the plane over national park units, there being no law or regulation to the contrary.

The issue of allowable altitude over Bandelier (which issue carries over to all the other proposed ATMPs) is more difficult to address. The altitude resulting from the formula proposed by the NPS is unreasonably high and, when and if applied, would result in erratic and noisy flight paths annoying to both passengers and persons on the ground.

The proposed minimum flight altitude of 2,600 feet over the highest point in BAND within half-a-mile of a tour aircraft is bad policy, for several reasons. The average elevation of the park is 8500 feet high. The park slopes down at a fairly steep angle from west to east. High mountains are very close to low canyons. The effective geography of the park means that at the very least I would have to fly my air tours at 11,100 feet, according to the proposed ATMP. My passengers would need to be on oxygen! Furthermore, the time to climb in a non-turbo C182 to altitude

would consume most of the entire flight. Moreover, flying 2600 feet above the highest point would mean that I would be over 5000 feet above the lowest contiguous valley, which would mean that I would be above the park at that point and not in need of altitude restrictions. At any rate, my flight path would involve radical fluctuations if I tried to stay within the park's airspace. This would not only make my passengers sick, but greatly increase the noise over the park, as full power would need to be frequently applied to repeatedly climb back to minimum acceptable altitudes over fluctuating terrain. Contrary to politically correct thinking, the minimum noise level over the park would actually be best achieved if the minimum altitude were simply 1000 feet, allowing for low power settings and a smaller radiant noise cone that would not attract the attention of park visitors.

To get around these problems, the NPS has added a terrible second altitude requirement, namely that "the minimum altitude applies to the entirety of the routes." This essentially makes it impossible for an ATO to fly over the park from west to east, which is the majority of my flying. If I were to cross a ridgeline at 10,000 feet on the west side of the park, then I would have to fly at 12,600 feet at full power all the way to the east side of the park, which is absurd. Instead, I should be in a low-power descent, which no one would notice. On the other hand, if I approached BAND from the east, I would have to be in high-power mode the whole time to climb to 12,600 feet in order to fly over the ridge, which would annoy all sorts of people because of my higher altitude contributing to a greater cone of noise. This and other altitude restrictions of the document needs to be deleted and rethought. As wrotten, they will only add to the noise levels.

BAND is a very small park. From an altitude of 11,100 it simply looks insignificant in context of the total horizon. Parks such as Arches and Canyonlands make sense to view from high elevations, because of their enormity. In contrast, all the beauty of Bandelier is lost above 1000 feet. Still, flying at 2,900 feet over Arches, for instance, also totally defeats the purpose of showing that park from the air. It appears from the minimum flight altitudes suggested for the current block of proposed ATMPs that the FAA and NPS intend to eliminate the air tour industry by destroying the very viability of air tourism. The requirement that Southwest Safaris fly at 2,600 feet over the highest point of Bandelier along the route of flight is a thinly disguised way of granting SWS permission to fly over the park on its established routes, at the same time making it impossible and fruitless to do so.

Ill-conceived altitude restrictions over BAND can be easily resolved if there is goodwill on both sides of the bargaining table. For instance, I propose that the FAA and NPS allow flight over at least the southern two-thirds of BAND at 1000-ft altitudes. This would ensure that no noise would ever reach the visitor's center. Almost no one hikes the southern two-thirds of the park, especially in late Spring, all summer, and early Fall, when there simply is no water to drink out there. Parenthetically, I must comment that I have never seen any hikers in the area I am talking about, regardless of time of year, so aircraft noise in general over the majority of BAND is a largely irrelevant point. Proportionately and numerically, very few hikers visit the southern portions of the park.

As alluded to above, Southwest Safaris flies over Bandelier NP mostly as a matter of convenience and necessity. The park lies along a long-established fly-way, following the Rio

Grande. General aviation pilots have to fly over portions of the park because they are squeezed between the Los Alamos restricted area and the expanded traffic patterns of the ever-growing Santa Fe Regional Airport due to airline operations. Most of the flights over the park are due to flight training and transient operations, many conducted by employees of Los Alamos NL who commute to work from ABQ by private plane. The BAND ATMP never takes these facts into account, but tries to put all the blame for imagined/hypothetical aircraft noise on one small ATO who flies over the park relatively infrequently. The absurdity of the time, money, and effort to establish an ATMP for BAND speaks for itself.

Southwest Safaris generally flies in a straight line over the park, performing minimum turns and limiting its time over the park. It flies an average of two to three flights a week over the park, mostly along the perimeters, never at sunrise or sunset, and each flight is generally less than five minutes. Most of the flights are flown from west to east, descending in low power settings, in order to enter the traffic pattern of the Santa Fe Regional Airport. All of this probably explains why the NPS has never received a noise complaint regarding our operations in over 46 years! Considering that fact alone, I see no reason why a 1000-foot minimum flight altitude over BAND would not be appropriate for the entire park. Unless, of course, the whole point of the ATMP process, itself, is to simply destroy the entire air tour industry and then be done with a make-believe problem.

I note from the BAND ATMP meeting of September 15, 2021 that there were countless attempts to discredit air tours over the park on the basis of general noise from planes. Conspicuously absent from the testimonies and questions were any specific reference to documented complaints of such noise. Every complaint was directed to future not present abuse, theoretical not actual issues, philosophical not empirical evidence, anecdotal not first-person testimony, offers of verbal recollection not hard written testimony. There was no actual evidence presented that any court of the land would accept. No actual accusers of the current air tour operator came forward to launch a charge. It appears from the meeting that the whole issue of excessive aircraft noise at BAND has been manufactured by the NPS. The meeting provided ample justification to conclude that the September 15 meeting was orchestrated to have a predetermined outcome, condemning air tours in general as part of an obvious national effort to destroy commercial aviation's presence over national parks. At no time, for instance, did the FAA speak up to defend the ATO's constructive contribution to providing added-value for park visitors.

If air tour noise over BAND were such a problem, how is it that virtually no one at the meeting was aware of the fact, till the FAA pointed it out, that Southwest Safaris has been conducting air tours over that landmark for over 49 years? And, I add, without a single directed complaint! Neither the public nor the NPS had any idea that such "terrible abuse" of the park had been occurring in plain sight and sound all these years. This fact alone negates the right of the NPS to suddenly now come forward to destroy an important, well-established, and respected way to see the park as an integral part of the magnificent surrounding landscapes.

More importantly, however, the requirement in the proposed BAND ATMP (and all the other parks coming up for review) that high minimum flight altitudes be enforced is premature, out of order, and unfounded at this time. The reasoning for the altitude floors is fundamentally justified on account of supposed aircraft noise. However, it is clear from the ATMP proposals that no

scientifically conducted air tour noise studies have ever been conducted in these parks, especially at Bandelier. The requirement for the minimum flight altitudes (MFAs) seems to simply be that "the NPS knows best." There is no formal methodology for determining the MFAs, and the whole process of determining them is thus in direct disregard to the wording of the National Parks Air Tour Management Act of 2000.

Section 808 of the Act addresses "methodologies used to assess air tour noise." In order to prevent arbitrary, biased, and subjective conclusions as to the impact of aircraft noise, the Act requires that: "Any methodology adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) shall be based on reasonable scientific methods." Either the Federal, State, local, and tribal agencies involved with the BAND ATMP think they can dictate policy without having to justify it, or they think they can just ignore intent of Congress because of their self-assumed autonomy. There really has been no noise modeling at BAND and what little empirical evidence there is certainly has no scientific component to it. Neither does the supposed noise-modeling at any of the other proposed ATMP parks, as far as I am aware. Public discussions of MFAs at this point in time are totally premature, and the current draft ATMP proposals should be scrapped. No one knows what they are talking about. There is no scientific basis upon which to establish a reasonable and defensible altitude standard, nor for reducing the number of flights from current IOA allocations, nor for changing route structures.

During the BAND meeting, attempts were made to explain and justify the altitude restrictions over the park. I specifically asked, as the last question of the evening, that the NPS expound upon their justification for the 2600-ft floor. The answer was basically a rephrasing of the wording of Section 4.0 of the draft air tour management plan for BAND. The justification seems to be that this restriction "complies with [general] guidance for raptor protection including threatened and endangered and migratory bords, notably the Mexican spotted owl" and the peregrine falcon. However, the Fish and Wildlife Agency is not expected to say that the air tours being challenged either have, are, or will in the future cause any damage to five endangered species in the park. I observe, therefore, that the NPS testimony is contradictory and entirely without science. In fact, the word, "science," was never even mentioned as being part of the altitude justification and never came up as a point of discussion or concern during the public meeting. As far as I am aware, no noise monitoring studies have ever been performed in the park. Therefore, for lack of assessment of air tour noise, as it affects both people and birds, that is, for lack of reasonable scientific methods, the ATMP for BAND must be withdrawn until such evidence can be presented on a yearly basis. This is the mandate of Congress, which is the controlling legal authority, not the NPS or the FAA or the Tribes.

The very same argument can be applied to the issue of reducing the number of allowed flights by Southwest Safaris over the park. The only reason to do so must be based on demonstrable negative impact of aircraft noise on a repetitive basis. Neither the FAA nor the NPS have done any scientifically-based studies at BAND that would support a reduction of flights from the severely limited number currently authorized. The decision to base the allowable future number of flights over the park on the average number given for three arbitrarily-chosen years, rather than the maximum number of flights for specific years, is without empirical or economic justification, and it lacks any effort to consider the impact on the public of denying them equal

access to the park experience by air. In the current instance, the FAA chose two of those three years (2017 and 2018) to include years where the pilot of Southwest Safaris was stricken with severe hernia issues that prevented him for flying as much as he normally would have. Mr. Lusk of the FAA is fully aware of this fact, but failed to disclose it. The clear implication at the meeting was that Southwest Safaris simply does not deserve the right to provide public view of the back country of BAND. For some unexplained reason, providing 126 flights per year over BAND is objectionable, if not unthinkable, where as another operator, according to the FAA's testimony, is allowed to provide thousands of flights per year over the "sacred" Grand Canyon. Southwest Safaris is one of the smallest of the air tour operators (ATOs) in the country, operating some of the smallest air tour airplanes. Reducing the number of allowed scenic flights over BAND from 126 to 101 would have no meaningful, justifiable, or scientifically documentable impact on the overall noise at the park. The number of flights is just too small. The planned "taking" of Southwest Safaris already-limited number of park overflights is arbitrary and capricious. The FAA failed to disclose this obvious fact, too, in defense of one of its own. The favoritism and injustice of the whole allocation process stinks like a dead fish.

Finally, the reporting requirements for all the parks are obviously absurd, deliberately abusive, and unjustly punitive. Small air tour operators simply cannot afford the exorbitant expense of time, money, and effort required to implement a digital reporting system. Surely, fair-minded government agencies would know this because of their own experience with such tracking technology (e.g., the USFS and DOI), unless they are totally out of touch with reality. Do the FAA and NPS not realize that it is blatantly unfair to require enormous investment in digital equipment, software, training, data management and reporting, plus user subscriptions, of operators who can be shut down at any time for any cause at parks managed by ATMPs? Is it not blatant discrimination to forego the same of ATOs at the Grand Canyon or Glen Canyon NRA, for instance, where the large operators reside? Do federal agencies not know that imposition of digital tracking requirements would bury a small ATO? Or is it the real intent of government to further accelerate attrition? The FAA has already implemented ADS-B reporting. That should be sufficient.

Moreover, the requirement for special tracking hardware in air tour aircraft has no substantive justification in the NPATM Act of 2000 (the Act). Congress never anticipated that the FAA and NPS would enact such significant regulation and certainly never authorized it, either directly or indirectly. Nowhere in the Act is a requirement for digital tracking even hinted at. In the Act, Congress simply states in 40128(d)(1) that an ATO "shall submit to the Administrator and the Director a report regarding the number of commercial air tour operations over each national park that are conducted by the operator and such other information as the Administrator and the Director may [reasonably] request in order to facilitate administering the provisions of this section." It is assumed by Congress that all requests for additional information will be reasonable, necessary, and cost-effective, not punitive, over-reaching, or irrelevant to the safe conduct of air tours. Congress is simply saying that the agencies can ask ATOs for broad summary information relating to their flights, such as written confirmation as to time of day, routes, and altitudes. The Act does not authorize the agencies to demand that this information be submitted in the most expensive digital format possible; most ATOs simply do not have the means to provide that. A long-hand written report should be sufficient to "facilitate administration," i.e., the time-honored conveyance of reports either by mail or email in simple

spreadsheet format by manual entry. Digital tracking of flights is also unnecessary because flight paths can simply be observed in real time by Park Service personnel standing on the ground and/or by competing ATOs observing one another in the air.

Nor can the FAA find wording in its own regulations to justify digital tracking requirements. Reread FAR 136.39C(2). No mention of requirements for experimental, expensive, and complicated tracking devices is ever made, authorized, justified, or contemplated by the FAR. The FAA interprets the Act as saying that the FAA "may establish conditions for the conduct of commercial air tours," but the word "conduct" does not include imposition of equipment unrelated to the safe in-flight operations of air tours. The word simply means "the way air tours are performed, i.e., flown." Air tours can be and are conducted perfectly safely and in accordance with regulation every day without tracking devices. The imposition of such a requirement is unnecessary to the safe conduct of an air tour (the FAA's primary management responsibility under the Act), overly costly and burdensome to ATOs, and without justification. The methodology of keeping digital track of all flights over multiple park units, and sorting them out by flight, day, and park would bring any ATO to its knees. At the very least, law requires the FAA to do a cost/benefit analysis on all new regulations. None have been conducted for this back-door mandate. Therefore, I request that all mention of required tracking equipment be taken out of the proposed ATMP for BAND as well as for all the other affected Park Service units.

Most small air tour operators will be blind-sided by the ATMP requirements that the FAA and NPS are proposing. Both agencies could have let the air tour industry know far in advance what they were planning so ATOs could have reacted with reasoned debate before the agencies brought in the hostile public. I think that trade associations, as well, would have appreciated the courtesy. Sadly, the air tour industry is being hastily railroaded to comply with ill-conceived and unnecessary regulations without proper time to respond, while the FAA and NPS ignore their duty to perform due diligence. This makes a mockery of public debate and informed consent. Southwest Safaris, for instance, has been given only thirty-days in the height of its season to respond in detail to complicated regulatory changes involving five parks, each with its own labyrinth of delicate issues. This amounts to insult added to injury. The deck is clearly stacked against small business and a free and open economy. The FAA and NPS are clearly using a court order for prompt action to justify bringing into existence an unneeded and ill-managed ATMP system that will create more government jobs but no public benefit and great moral and economic harm. Expediency is no substitute for justice.

I have five other management concerns, briefly considered but of no less importance. First, ATOs should have the option of attending all meetings and training cessions by phone/zoom. This will reduce cost, increase the chance of participation, and decrease the likelihood of a meeting being cancelled due to inclement weather.

Second, the requirement for in-flight communication on frequency 122.9 should be dropped at BAND. Very few general aviation pilots monitor this frequency in flight and non-tour pilots won't know what an air tour pilot is talking about, anyway. Sounds good on paper, but a waste of time in practice for this park, where there is only one ATO. All pilots are responsible to "see

and avoid" under existing FAA regulations. This stipulation for BAND has been incorrectly copied from the wording of other ATMPs.

Third, the amendment process proposed under Section 9.0 of the proposed ATMP is not fair for ATOs. The FAA and NPS get to make "minor" modifications to the ATMP without a formal ATMP amendment process, including taking away or reducing an existing ATO's allocations "for cause," including competitive bidding for existing allocations. This may be a minor modification from the point of view of an agency that will not be affected, but it will be a major modification for the impacted ATO. If this provision stands, then an existing ATO should also be allowed to be issued additional allocations without imposing the requirement for a formal ATMP amendment process. Justice demands equality at the negotiating table.

Fourth, the provisions of the ATMP should not be made part of an ATO's Ops Specs. Legally, Ops Specs are an agreement between an operator and the FAA; the NPS has nothing to do with the content of Ops Specs. Yet, the NPS will control an ATO's operations as well as his Ops Specs through the ATMP process. The FAA needs to really think this through, as the precedent it sets for all commercial operators, not just ATOs, is probably irreversible. Has the FAA been reduced to merely acting as a legal agent for the NPS? Section 10.0 is bad rulemaking precedent which the FAA will come to regret. As a practical matter, I suggest that individual FSDOs will want no part of this deal. Section 10.0 constitutes a de facto merger between two independent agencies. Congress never contemplated nor authorized such a union. Nothing good will come of it.

Fifth, it is logical and customary in legal documents to specify that the aggrieved parties to a unilaterally-imposed mandate be granted the right of judicial review of disputes. Right of access to the courts is a stipulation that must be put into all ATMPs, as these impositions do not represent voluntary agreements. Without such a stipulation, the ATMPs become an act of pure dictatorship, as there is no guarantee that the federal agencies involved will listen to any of the changes to the proposed draft ATMPs submitted by ATOs. Without such inclusion, the ATMPS will become a form of "kill regulation," not an ongoing working management plan. Besides, paragraph 40128(b)(4)(5) of the Act requires such inclusion: "An air tour management plan developed under this subsection shall be subject to judicial review."

There is yet another point of logic associated with the "taking" of IOA allocations from ATOs that neither the FAA nor the NPS (the agencies) have yet addressed. The ATMP process was created to ensure that noise generated by air tour aircraft would not impinge on national park units. Supposedly, noise studies based on science, as required by the National Park Air Tour Management Act of 2000 (NPATMA, or the Act), have shown that flying, even at full power, in the higher altitudes proposed by draft ATMPs, would sufficiently accomplish the objectives of the Act. Otherwise, the NPS would not have proposed the higher altitudes with such conviction. It follows, then, if altitude by itself reduces aircraft noise to the point where it is no longer "significant," there should be no problem with ATOs flying at those higher altitudes picked by the NPS. It also follows in sequence that there is every logical reason to grant ATOs their full IOA allocations based on the principle of their "doing no harm." On the other hand, if the NPS has not conducted scientific analysis of noise over the parks, then the agency must recant and

scientifically prove its case before any ATMP can be implemented. Either way, there is no justification under NPATMA (the Act) for "taking" IOAs away from air tour operators.

The FAA and NPS have never stated why an ATO's IOAs might need to be reduced. It is simply assumed by the agencies, in violation of the Act, that altitude restrictions by themselves might not be enough to mitigate aircraft noise. But, without scientific study of aircraft noise over individual park units, there can be no certainty that the agencies' assumption is correct. There may be other hidden reasons why the agencies might want to take advantage of a self-serving conclusion/prophesy. Might the purpose be to force ATOs out of business "just because" of their mere presence over a park? Or, might it be that the NPS never conducted the legislatively-mandated scientifically-based studies of aircraft noise in the first place and therefore wants to cover up this fact by seizing allocations to limit operations? Perhaps the NPS doesn't feel that ATOs ever did deserve their allocations and now wants to confiscate them based on a unilaterally-concocted formula retroactively imposed without even a hearing. In any case, the "taking" of IOAs cannot be justified by the NPATM ACT, as it is neither reasonable nor necessary to do so if the higher altitudes are scientifically justified and because it defeats the goal of Congress to protect the rights of ATOs to fly over the parks if no significant adverse noise impact at the higher altitudes can be demonstrated by objective standards.

Most ATOs will be willing to fly at the higher altitudes, but the FAA and NPS must first restore the full IOA allocations of operators to make the arrangement legal, equitable, workable, and sustainable (lasting). Otherwise, we have a "confiscation" without compensation or due process. This is precisely why Congress allowed the ATMP to be subject to judicial review.

These points, however, almost miss the greater issue. Nowhere in the NPATMA does Congress authorize the FAA and NPS to "take" an ATOs allocations of economic opportunity. The agencies have simply created this power for themselves. They have attempted to make new law, overstepping their legislated authority. This is stealthily done under section 4.0 of the all the draft proposals for new ATMPs under the section of the drafts labeled, "Justification for Measures Taken." Congress intended that the total number of air tour authorized under an ATMP should be consistent <u>not</u> with "the existing air tours reported" over a park, but with the original ("grandfathered") allocations given by Congress to then-operating ATOs. There is no wording in the Act to the contrary. For the agencies to say, "The total number of air tours authorized under this ATMP is consistent with the existing air tours reported over the Park" is a red herring. The agencies have no authority under the Act to limit air tour on that basis. Besides, the observation is irrelevant. Nowhere in the current Act does it say that originally-issued IOAs do not carry over to new ATMPs. Emphatically saying something is true does not make it so. Under the justifications section of the draft ATMPs, the agencies must make reference to the specific wording of the NPATM Act of 2000 in order to prove that they have the authority to deprive ATOs of their operating rights originally granted by Congress. Lacking the ability to do so, the agencies must withdraw any attempt to "take" IOAs from existing ATOs.

In 2017, air tour operators entered into a voluntary agreement (VA) with Glen Canyon National Recreation Area. At that time, Southwest Safaris was granted operating rights over the park unit equal to SWS' full original IOA allotment. There was discussion by the agencies of a "taking" back of allocations, but the idea was emphatically rejected by the ATOs involved. Those ATOs

successfully argued that there was nothing in the wording of the Act that authorized the FAA and NPS to arbitrarily "take" way their operating rights. Eventually, both agencies agreed and the VA was signed. By so doing, the ATOs of that VA set precedent, which carries over to the formal ATMPs of today, again there being no legislation that argues to the contrary. Mr. Keith Lusk of the FAA is a witness to the referenced proceedings, as he oversaw them.

When the Act states that "An air tour management plan for a national park may prohibit commercial air tour operations in whole or in part," it is not referring to allocations. The operative word is "operations." The "prohibit clause" simply means that agencies may deny ATOs the right to fly over any or all geographic areas of a national park. Rocky Mountain National Park is an example of a park where no air tours are allowed to fly because of a geographic restriction on movement. No allocations are involved, because none were ever issued. Therefore, no "taking" has occurred at Rocky Mountain. In other instances, the Act says that flights over parks where IOAs do exist may also be prohibited, but the allocations remain in place in case the operating prohibitions are someday removed or modified. The right to eventually use allocations of economic opportunity is preserved, though "temporarily" curtailed.

The underlying principle is that, under the current Act, allocations were given to ATOs by Congress and cannot be taken away by agencies. There is no direct wording in the Act of 2000 that would permit confiscation of IOAs. "Taking" an ATO's allocations would be a forever denial of opportunity to conduct otherwise permitted operations. There is a big difference between "temporarily" prohibiting physical movements of all ATOs for "cause" versus rescinding the issuance of targeted ATOs' basic rights of existence protected in the Act by Congress.

The Act states that "an air tour management plan for a national park shall provide for the initial allocation of opportunities to conduct commercial air tour operations <u>if</u> the plan includes a limitation on the number of commercial air tour operations for any time period." The draft BAND ATMP contains no language closing the park to air tours during any extended time period during the normal working day. Therefore, there is no authority for agencies to "take" away an ATOs initial allocation of economic opportunities at Bandelier.

For all of the above reasons, as well as those contained in my original letter, I ask that all references to diminished allocations be removed from the draft ATMP for BAND and that the number of allocations granted be restored to the allocations originally allowed under IOA.

One final point on another topic. The requirement for ATOs to provide tracking equipment at their own expense for the benefit of the FAA and NPS amounts to an unfunded mandate. The costs involved will be crushing. Moreover, the requirement for such equipment changes the way aircraft will be tracked and controlled. The mandate for tracking devices on aircraft is a significant change to the air navigation system and requires formal rule-making under the FARs before forced inclusion of the devises in ATMPs should be considered.

In closing, I must comment that the meeting on September 15 to discuss the BAND ATMP was a disgrace. It amounted to a witch-hunt, trying to burn a "wicked" air tour operator. At no time was anything said about the positive contribution of the ATO involving efforts to reveal the

natural history of the park impossible to grasp from the ground. At no time did anyone mention that the ATO provides the only way to see the back country of the southern part of the park, excepting a rare handful of well-conditioned hikers willing to assume the considerable risks. At no time did anyone mention that there has never been a single registered complaint against the ATO at BAND over by then 46 years of operation. At no time did the NPS ever acknowledge the extraordinary benefits to the local economy this ATO provides. At no time did the NPS mention that the ATO only flies over the park, on average, less two times per week, or that he is mostly just transiting the park airspace, or that he is not circling the park, or that he is not advertising specific scenic flights over this specific park, or that the park lies along a well-established and highly active flyway along the Rio Grande and is flown over by many other aircraft whose total volume of flights dwarfs that of the ATO. The whole venue was a set-up, but it backfired. People could easily see through the hypocrisy and one-sidedness of the presentation. The unacknowledged elephant in the room is that there is a large segment of the public that truly wants to see the Great American West from the air, and the FAA and NPS have a duty to preserve their right to do so. Congress recognized this right when it created the ATMP process; the goal was to manage air tours, not kill this industry. It is ironic that the very opening picture the NPS used to advertise the ATMP meeting was an aerial photograph of the park, an open de facto admission by the PS of the value of seeing national parks from the air at 1000-ft altitude!

Thank you for your kind consideration of the manifold serious failings of both the FAA draft Section 106 findings and the draft ATMP proposal.

Sincerely yours,

Bruce Adams

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May 31, 2023

Response to Request for Concurrence re. Sec 106
Additional Statement of Disagreement - Submitted by Email

Dear Ms. Walker:

On April 20, 2023, you wrote to me, asking that I assess the FAA's draft "Section 106 determination" regarding Bandelier National Monument. I originally responded to your request as a general issue regarding both Section 106 of the National Historic Preservation Act (NHPA) and the entire Air Tour Management Plan (ATMP) process. However, I did not target my legal objections to the FAA's finding specifically to Section 106. I will now address the alleged errors in the FAA's conclusion primarily in terms of NHPA, presenting different arguments no less determinate.

My overall disagreement with the FAA's finding comes down to legal (procedural and substantive), circumstantial, and logical issues. In my letter of response, dated May 19, 2023, subsequently revised for clarity, I pointed out many shortcomings in the legal and circumstantial categories of the FAA's arguments. I now come forward with objections that are based strictly on the errant reasoning of the FAA's finding under Section 106. My analysis requires less space than my original letter, but the criticisms I offer are equally important. I introduced these concepts in my prior letter of May 19, but now find that further analysis is required to explain how the FAA's environmental determination went astray solely with respect to NHPA. The task does not require a legal mind, but rather the disciplined application of logic alone.

The FAA's determination (hereafter, "finding") under Section 106 of NHPA, is that denying Southwest Safaris (SWS), an air tour operator (ATO), the right to fly over Bandelier National Monument (BAND, or "the Park) will have "no adverse effects" on the persons and historic properties in the Park. Coincidentally, the FAA has arrived at the same finding in every instance where it wants to deny ATOs the right to continue flying over National Parks. The FAA's argument, under Section 106, is: if a governmental agency denies ATOs all rights of overflight at any given National Park, then there can not possibly be any negative impacts to persons and property, both inside and outside said park, from the "action" because there cannot possibly be any consequential damages from flights that do not exist (i.e., that are not allowed). I observe that repeating a mantra over and over, from park to park, however appealing in its simplicity, does not make it true.

The FAA's mantra is actually a syllogism. It breaks down to this: (Major premise) All flights make noise and have visual impact. (Minor premise) All noise and visual impact have adverse effects to persons and historic properties on the ground. (Primary conclusion) Therefore, eliminating all flights will necessarily eliminate all noise and visual impact caused by aircraft. (Secondary conclusion) Eliminating all noise and visual impact means that no harm can be done to persons and property on the ground by taking such administrative action.

The logical fallacies are multiple. First, regarding the FAA's Section 106 minor premise, it is not true that all aircraft noise and visual impact have adverse effects for persons and historic properties on the ground. Just because someone claims on the basis of personal feelings alone that he/she is experiencing negative impacts, does not make it so. Without reasonable scientific measurement, the minor premise can not be verified. Therefore, the FAA's shotgun-like conclusion, that eliminating all flights will necessarily eliminate all noise and visual impact caused by aircraft, may or may not be true, because of the variables involved in determining the veracity of the minor premise. Such a determination can only be arrived at by empirical evidence, not deductive reasoning. The FAA and NPS together (the Agencies), acting as one, have refused for the last twenty years to provide any reasonable scientific evidence to substantiate their minor premise. Therefore, the syllogism cannot stand. No absolute conclusions can be drawn from the FAA's mantra upon which the FAA wishes to base sweeping administrative remedy. Substantively speaking, the FAA's "finding of no adverse effect" can not be relied upon to be universally true. The fact that the FAA's secondary conclusion follows logically from the primary conclusion does not mean that the primary conclusion, itself, is accurate (i.e., that is necessarily follows from the major and minor premises). The FAA has short circuited the reasoning process. The FAA errs in basing an empirical finding on deductive evidence, so the finding must be withdrawn.

The FAA argues, under Section 106 of NHPA, that the FAA (speaking for the combined Agencies) is not obligated to substantiate the legitimacy of Native American claims that aircraft noise over National Parks is excessive, but that the FAA is only required to act on the fact that aircraft noise and presence have been claimed to be offensive and felt by persons to destroy the cultural value of their historic sites and the quality of their sacred ceremonies. To the contrary, NPATMA does require under Section 808 "reasonable scientific" process to validate such allegations. I argue (see also my letter of May 19, 2023), that NPATMA is the logical controlling legal authority in this case, because it calls NHPA into effect and not the other way around. In any case, priority of law is a matter for the courts to decide, not the FAA. Until the courts do rule, I argue that the FAA is legally and logically required to withdraw its finding and, consequentially, suspend the ATMP process for lack of a valid Environmental Assessment under NEPA. The FAA's draft finding for BAND under NHPA, as summarized above, will hopelessly and unfairly direct and prejudice the FAA's conclusions under NEPA. Therefore, the issues of procedural and substantive priorities of law (see my letter of May 19) both cry out for judicial review of the FAA's Section 106 finding before an Environmental Assessment (NEPA) and administrative determination (ATM)P regarding BAND can properly be made. A proper end can only be justified by proper means.

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Second, the FAA's logical error in applying Section 106 is, however, even more complex. The concealed flaw in the FAA Section 106 finding consists of circular reasoning superimposed on top of a major premise which is false (in addition to that of the minor premise). The FAA's major premise is that all flights create noise and have visual impact. They do not. To illustrate, no Agency (neither the FAA, nor the NPS, nor the Pueblo Tribes), during the last 49 years, even knew of the presence of air tours over Bandelier National Monument. It is a fact that not one of these entities ever received a single complaint, noise or otherwise, about the air tours until Southwest Safaris was required to report said flights under NPATMA and the Agencies shoved the presence of Southwest Safaris into the faces of the Tribes, asking if there might be an objection. The alleged "problem" has been fabricated politically by the US Government, not by the operation of air tours by SWS. Consequently, it is not necessarily true that eliminating all flights will prevent all significant adverse impacts to persons and property on the ground any more than would allowing said inconspicuous flights to continue. A positive determination concerning the continued existence of air tours, however, carries the greater weight of argument, for want of any actual proof that air tours over the Park cause harmful effects. The burden of proof is on the FAA, but that agency has never provided any convincing evidence to support their finding and, indeed, they cannot. The combined Agencies simply rely on their hollow mantra to justify their lack of due diligence, Section 106 of NHPA notwithstanding.

The circular reasoning error imbedded in the FAA's finding comes from the FAA's conclusion(s) having ignored the imbedded fallacy of the arguable premise. The FAA's primary and secondary conclusions say that denial of all flights is justified on the grounds that absence of cause precludes consequence of effects, supposedly "proving" that there can be no damage to persons and property on the ground from lack of overflights; but that conclusion might be just as untrue as the major premise it is tied to. The conclusion denies reality, relying only on force of assertion rather than facts. For instance, in most instances, National Parks and associated persons and historic properties benefit greatly from park overflights, as is the case for Indian and other subcontractors providing guided ground tours for air tour operators; famous hotels inside the parks providing overnight accommodations for ATOs; and local restaurants/convenience stores in a park serving the needs of ATO clients. People who visit National Parks frequently want to get "the total experience" of the park. This includes getting a grand overview that only an air tour can provide. This includes seeing the back country without leaving any trace of visitation. This includes enjoying the freedom of responsible flight available to all other persons elsewhere, such as Alaska and Lake Meade, where no park overflight restrictions exist. All of these individual and corporate "persons" and properties benefit from air tours in general. Cutting off the flights would do measurable damage to these living and/or corporate "persons" and properties in a National Park.

Speaking of which, the category of "persons" is a very broad. Even the Park Service can be considered to be a legal "person;" it, too, benefits from air tours due to greater visitor numbers directly attributable to free advertising and other promotion provided by successful air tour operators who want to see that National Parks succeed. Moreover, National Parks, themselves, have become "historic structures" that air tours actually help to protect in very measurable environmental ways (see Objection #3 below, page 4).

So, it is easy to demonstrate that there might actually be significant adverse effects to persons and historic properties from denying selected unobtrusive flights that should otherwise have been allowed. The circular reasoning now becomes obvious, even though difficult to verbalize. In the present instance, a not-necessarily-true premise, broadly considered, is misused to justify a sweeping false conclusion only narrowly considered, which is then used to assert the validity of the questionable original premise, broadly considered. Clearly, I argue, the FAA's finding under Section 106 cannot be measured or tested to be true, goes nowhere, and makes no sense as a basis for remedial decision making. Therefore, the FAA's finding, though dramatic, carries no weight.

Third, the FAA's deductive Section 106 error stems from trying to prove a positive based on a negative, which cannot be logically, conclusively, or reliably achieved. The syllogism can be reworded: (Negative premise) No good can be demonstrated to come to persons and historic properties from flights conducted over parks. (Neutral minor premise) All air tours are flights. (Positive conclusion) Therefore, all air tours create adverse environmental impact to persons and property on the ground. (Second derivative conclusion) Thus, eliminating all air tours can cause no harm to persons and historic properties on the ground. In point of fact, it can be demonstrated, as I have already herein done, that not all flights do create adverse noise and/or visual effects to persons or historic properties on the ground. Therefore, eliminating all air tours will not necessarily prevent adverse effects from said flights. To the contrary, the reverse is more likely to be true. Prohibiting air tours will increase the noise and physical presence of machinery in a park, because extra noise and offensive visual impact will be created by greater demand for ground tours, which will be of much greater duration. Passengers on air tours leave no footprints, leave no litter behind, and make no lasting noise. Physical ground contact with delicate nature has far longer lasting consequences than fleeting aerial sounds. Air tours come and go in only half-a-minute. They contribute greatly to a park's popularity, local employment (including Native Americans and Park Service personnel), and measurably help to preserve and protect (see above) a pristine environment which counts as "historic property." The FAA's narrow, one-sided, and self-serving draft environmental assessment considers none of this.

Contrary to the Agencies' built-in prejudicial assumptions in all forms of their syllogism, respectfully-conducted air tours actually contribute to the overall quality of life in and around a park. All of the constructive benefits from air tours over BAND and other National Parks (such as Canyon de Chelly, Chaco Canyon, Mesa Verde, and Navajo National Monument) will be lost if the flights are arbitrarily and politically prohibited, so there will, in fact, be significant adverse effects to persons and historic properties on the ground from banning scenic sorties.

Moreover, denying air tour overflights of BAND, in specific, will only serve to move the flights away from remote areas of the Park to truly sensitive routes over Pueblo lands on the perimeter, causing real outcry, the impact of which the FAA negligently fails to measure and will be powerless to rectify. The purpose of Southwest Safaris air tours has always been to present the geology and archaeology of the Great American Southwest, not to focus on Bandelier, a unit of the NPS which SWS does not even advertise. The totally unnecessary consequence of changing SWS' routes to outside the Park will be most unfortunate. In any case, one cannot incontestably prevent something from happening (harmful adverse aircraft effects) that does not necessarily exist in the first place (invasive aircraft noise/presence).

For all these reasons and more (see my revised letter of May 19, 2023), it cannot be proven always to be true that there will be "no adverse impact" from disallowing environmentally sensitive air tours over Bandelier National Monument or any other National Park Service unit over which SWS flies. I submit, then, that the FAA's draft finding for BAND, and any other park that the FAA might be considering for Southwest Safaris, is a meaningless argument designed to obstruct constructive remedy.

For these and all the other numerous reasons cited in my revised letter to you of May 19, 2023, I respectfully request that you withdraw your draft determination of "no adverse effect" from the FAA's environmental assessment for Bandelier National Monument under Section 106 of the National Historic Preservation Act. The FAA's pending determination cannot be logically, consequentially (see letter of May 19, 2023), or even factually proven always to be true. Therefore, it should not be used as a basis for radical decision at BAND. In my opinion, the damage of the FAA's draft finding amounts to effective deconstruction of legal process and operational rights.

Thank you for your consideration.

Sincerely yours,

Bruce Adams

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June 6, 2023

3rd Response to Request for Concurrence on Sec. 106 - BAND
Re. Due Process & Priority of Law - Submitted by Email

Dear Ms. Walker:

This is my third letter of response to your request for evaluation of the FAA's draft EA for Bandelier National Monument (BAND, or "the Park"). I appreciate the opportunity for continued comment.

In my other two letters, I expressed numerous objections to the FAA's "finding" that there would be "no adverse effect" under Section 106 of NHPA from denying Southwest Safaris the right to continue to fly air tours over BAND. I argued that the assessment by the FAA would be used to radically modify the originally proposed Air Tour Management Plan (ATMP) for the Park. Indeed, I was right; the FAA is now proposing to change the draft ATMP of September, 2022 so as to disallow air tours over Bandelier altogether. This "taking" of all operating rights by the FAA is supposedly justified by the alleged damage said flights might conceivably inflict on persons and historic structures on the ground. The calculation of damage, in turn, is based on supposed negative cultural and religious impacts from aircraft noise and the visual assault caused by an aircraft's faint image presence, all of which have been "determined" by mere conjecture, supposition, and allegation to be "significant." However, none of the FAA's evidentiary assertions have been objectively measured and verified to be true, as I have repeatedly demonstrated. So, I argue, the FAA's draft "finding," if implemented, carries no weight.

I further argue that the FAA's "finding of no significant impact" (FONSI) from prohibiting any further air tours over BAND must be withdrawn until the courts rule on the FAA's and NPS's (the Agencies) failure to follow due process. I argue that the controlling legal authority for the entire ATMP process, including NHPA and NEPA review, is governed by NPATMA. Section 808 of that Act defines the method of due process that must be used to determine the degree, if any, of damaging noise and physical presence from said overflights:

> Any methodology adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) shall be based on reasonable scientific methods.

The FAA and NPS (the Agencies) have taken the position that NPATMA's Section 808 does not apply to NHPA and NEPA, and have taken liberty to skirt the above quoted doctrine of fairness written into NPATMA, which explicit stipulation was intended to protect the rights of air tour operators. No comprehensive sound studies of any kind have ever been performed by the Agencies, let alone studies "based on reasonable scientific methods." I have objected to the Agencies that they have incorrectly relied on totally subjective testimony (including "feelings") to gather "evidence" supporting a conclusion that no air tours should be allowed over BAND and many other parks over which Southwest Safaris flies. I have presented arguments to the FAA's Office of Environment and Energy and, indeed, to the entire ATMP Team, that all environmental analysis, "findings," "determinations," and "undertakings" (as referenced by NHPA) must necessarily come to a halt until the courts can rule on the primacy of law. I ask, "Which is the controlling legal authority, NPATMA, NHPA, or NEPA?" Until this question of law is settled, further constructive "consulting" by the FAA's office of Environment and Energy with "parties of interest" will likely lead to hopeless confusion and stalemate.

In support of my above arguments, I quote from the language of NHPA, itself (36 CFR Part 800, Subpart A, 801.2(a)(4)):

> The agency official shall involve the consulting parties described in paragraph (c) of this section in findings and determinations made during the section 106 process. The agency official should plan consultations appropriate to the scale of the undertaking and the scope of Federal involvement *and coordinate with other requirements of other statutes as applicable, such as . . . agency-specific legislation*. [Emphasis added.]

NPATMA is agency-specific legislation. It is primary statutory law.

NPATMA controls the rule-making process that creates ATMPs, because it calls the decision-making process into existence and because NPATMA never cedes specific authority to NHPA or NEPA. Section 808 of NPATMA, as written, is an iron mandate that must be followed in the case of all ATMPs, NHPA and NEPA notwithstanding. No administrative discretion . . . such as a ruling that "purpose and need" for a park takes priority over congressionally-directed due process . . . is allowed under NPATMA; Section 808 must be complied with by "operation of law," to use a phrase from NHPA.

I respectfully request, then, that your office suspend all further development of Environmental Assessments and other NHPA and NEPA analysis for Bandelier and Canyon de Chelly until this legal disagreement between parties of interest can be settled in a court of law. Amongst other claims, I maintain that no "findings" under Section 106 of NHPA can be made without basing them on Section 808 of NPATMA. I have formally petitioned Mr. Lawrence Fields, Executive Director of Flight Standards Service, to this effect. After judicial finding for priority of law is determined, and without regard to NHPA, I have asked Mr. Fields to get a second court opinion on the legality of the Agencies' refusal to comply with Section 808 within NPATMA before finalizing the ATMPs for Arches, Bryce, Canyonlands, and Natural Bridges, all of which parks additionally relate to Southwest Safaris. I petitioned that both rulings need to be determined

before the ATMP process is allowed to go forward and before any Operations Specifications are altered. Remedy requires restraint.

In the meanwhile, if your office would care to continue discussion based on new information or interpretation, I am always open to do so pending the decision of the courts.

Thank you for your consideration.

Sincerely,

Bruce Adams

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Ms. Judith Walker
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AMA-200, Building 5, Room 206
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Oklahoma City, OK 73125

June 9, 2023

Petition for Suspension of Process - BAND
Re. Priority of Law and Due Process
Submitted by Certified Mail and Email

Dear Ms. Walker:

Based on your email to me of June 7, 2023, I believe you have misunderstood my letter to you of June 6, 2023. I was not responding to the FAA's "invitation for comment" on a draft proposal notifying me of a radically new FAA undertaking and a listing of historical properties contained therein. My letter had nothing to do with the closing of the comment period on May 20, 2023.

I was objecting to any further action on the part of the FAA to issue an Impact Statement (or an Environmental Analysis, or an Environmental Impact Statement) for Bandelier NM until the FAA and parties of interest to said undertaking can agree to fundamental rules regarding primacy of law and due process. This will require at least two rulings by a court of law, not administrative opinion. I have attached a second copy of my June 6 letter in which I set forth my plea that you immediately suspend any further ATMP undertakings until this problem is resolved.

I think that the Office of Environment and Energy has erred by issuing a draft determination banning all air tours over BAND before any environmental analysis has been conducted, thereby unjustly and irrevocably prejudicing the final outcome of the eventual environmental "finding" regarding effects of overflights on that Park Service Unit. The FAA is creating a self-fulfilling determination which, therefore, will have to be rejected for reasons of due process. The FAA's yet unannounced "final finding" has obviously been predetermined. The consultation exercise has been short-circuited.

Moreover, I reject the very process that the FAA is using for arriving at any of its "findings". The FAA's statements of environmental impact have been based on assumptions and methods prescribed by NHPA. To the contrary, I argue, the relevant procedures for noise and visual assessment should be prescribed by NPATMA, which I believe is the controlling legal authority in the present instance, specifically Section 808, not NHPA's guidelines. Even NHPA, itself, specifically alludes to my argument (36 CFR Part 800, Subpart A, 801.2(a)(4)) and supports my

conclusion of fact. Until this deficiency of process is rectified, I argue, the FAA's "findings" have no legal weight. See attached letter.

I ask that you cease any further environmental consultation and assessment under NHPA until the FAA can get a judicial determination on the primacy of law governing its methods of finding and a second legal ruling on the FAA's apparent decision to ignore Section 808 of NPATMA for Bandelier National Monument. Only then, i.e., only after the ground rules for presentation of evidence are set, can constructive further consultation under Section 106 continue and a fair "finding" be rendered.

I request that your office substantively respond to this petition with relevant reasoning within 30 days and certainly before the FAA's Office of Environment and Energy sends me any additional vague requests for comment on a defective set of "findings" for various units of the National Park Service. Pending decision on these matters by the FAA, I consider the ATMP process to be halted.

Thank you for your consideration.

Sincerely,

Bruce Adams

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August 11, 2023 — 4th Response to Request for Concurrence on Sec. 106 Draft BAND ATMP

Dear Ms. Walker:

This is my fourth letter of response to your request for evaluation of the FAA's proposed finding of "no adverse effects" from implementation of Alternative 2 which would prohibit air tours over Bandelier National Monument (BAND, or "the Park"). I am responding to your request for continued consultation and more information.

I will first comment on the identification of historic properties selected at BAND by the FAA.

I believe that the FAA has failed to properly identify historic properties that meet the definition of "historic properties" as determined by 36 CFR §800.4 and §800.16(l)(1).

First, the FAA's list of historic properties (LHP) pertaining to the draft BAND ATMP relies on hearsay. I allege that the FAA has compiled its LHP from five sources: (1) the NPS, (2) the New Mexico Preservation Division, (3) the National Register, (4) verbal testimonies with the Pueblo tribes (the tribes) through process of Section 106 consultation, and (5) from lists compiled by the tribes following consultation. The FAA gives no details relative to the data. There is no statement by the FAA as to the numbers of sites reported by the NPS or whether the sites were assessed based on field research/studies, or site sampling together with statistical modeling, or recollection and lore. Lacking such information, I conclude that the data was determined anecdotally and deductively. The data on the National Register is simply a repeat of the data recorded by the NM Preservation Division, which itself is undocumented as to source. I conclude that the data on the State records is based on tradition, informal consulting, opinion, best estimate, and "professional opinion" … which was standard assessing "methodology" back in 1970-1971 … not on archaeological survey. The data was recorded into the State records in 1971 and has not been updated since, contrary to §800.4(c)(1), affecting the reliability of the data on both State and National registers. I furthermore allege that the tribes were coached as to the number and types of ceremonial and sacred sites they were to report, because the five letters

submitted to the FAA by the tribes as part of the record, after consultation, all made substantially the same points in roughly the same order. No letters were submitted before the 2021 consultations, but were submitted shortly thereafter. The FAA conducted no current field studies, no current archeological excavations, and did not walk the Park to make first hand observations as to the credibility of the sites referenced by the NPS, State Historic Office, National Register, and the tribes.

Had the FAA walked the Park, the agency would have discovered that almost all of the 3,000 alleged cultural and ceremonial sites have been diminished by nature to their natural states. There are only the collective fading memories of tribal members to document where the once-important sites lie. The importance of the sites is lessened both by natural events (fire and storms) and by time, itself, burying the past one shovel of sand per year for 1,000 years. Few members of any tribe, I allege, can positively identify the 3,000 sites, today.

Second, the FAA wrongly relies on the numbers and locations of historic properties listed on the National Registry of Historic Sites. For most of the cultural and religious sites, the only record of their one-time presence is recorded in the National Registry, not in the active minds of the tribes. Records of these sites is important for religious and historic reasons, but if there is not proof of their use in current practice, these sites have already relinquished their claim on current land use. This is consistent with tribal practices of most Indian cultures. Once a family is no longer living on a piece of property, another family is free, with permission of the tribe, to occupy the same space without regard to the spirits of the past. "Sacred trespass" is a relative concept, even for Native Americans. The relevance of the term to cultural and ceremonial sites is to the past, not the present. The FAA offers no evidence that the sites are in active use.

Third, the FAA errs by accepting without question the number of historic sites the tribes claim to have. The number of sacred sited has never been reduced due to normal attrition. I allege that 90% of the sites recorded 50 yrs ago could be eliminated. §800.4(c)(1) agrees, in principle. It says:

> The passage of time, changing perceptions of significance, or incomplete prior evaluations may require the agency official to reevaluate properties previously determined eligible or ineligible.

The 3,000 sites the FAA claims to be active are undoubtedly grossly exaggerated.

Fourth, even the tribes question the validity of the FAA's 3,000 estimate for the number of cultural and ceremonial sites. The FAA states in Section 2.1 of the draft BAND ATMP that the Park contains more than 3,000 archaeological sites. The Cochiti Pueblo agrees with that figure (see Cochiti Pueblo letter dated 2/21/22), but the Pueblo of Pojoaque reports that the figure is 50% less, claiming only 2,000 sites (see Pueblo of Pojoaque letter dated 8/27/21).

The FAA's assessment of historic properties is demonstrably overstated. The FAA is simply taking the word of the tribes and State and Federal agencies for approximate numbers, but provides no field data to support the claim. Even the Pueblo de San Ildefonso admits that no conclusive archaeological survey has been completed. In a letter from Ms. Judith Walker of the FAA's Office of Environment and Energy to the NM State Historic Preservation Office, dated

4/20/2023, page 6 (see Appendices for the Draft Environmental Assessment, digital page 106), the FAA states:

> The Pueblo de San Ildefonso noted that the inventory of historic properties based upon archaeological survey is currently incomplete and would benefit from additional inventory documenting ethnographic use within the APE.

The FAA claims in Attachment C that 2,974 "contributing sites" exist. The agency never defines what "contributing sites" means. There is no way of knowing how many of these are archaeological sites of cultural and ceremonial significance today. The inventory of sites was made in 1970 and included in the National Registry. That inventory is hopelessly out of date and most of the "contributing sites" would not be allowed on the Registry today, using current standards of acceptance. Even the FAA admits, under "Identification of Historic Properties" on page 7 of the Request for Concurrence, that most of the sites the agency's argument relies on are irrelevant. The document states:

> There are thousands of additional below-ground archaeological sites within the APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.

This supports my allegation that the number of relevant sites of current cultural and ceremonial significance can probably be reduced by 90%, the tribes never haven disclosed the number of sacred sites that lie beneath cover of earth.

Fifth, most of the supposed 3,000 cultural and ceremonial sites would not meet the criteria for inclusion in the National Registry if they had to be separately considered today. They are included under "grandfather rights," as per§800.16(l)(2). The properties do not meet the current tests of acceptability.

Under §60.4, which sets forth the "Criteria for Evaluation" of historic sites, "Ordinary cemeteries, birthplaces, or graves of historical figures … shall not be considered eligible for the National Register." This would apply to Native Americans, too. Moreover, the criteria for Evaluation makes no allowance for undistinctive shrines and sacred sites, saying:

> A property primarily commemorative in intent [is allowed as an historic property] if design, age, tradition, or symbolic value has invested it with its own *exceptional* significance.

Mere event of death and burial at a particular site is not enough. Furthermore, the property must be "primarily commemorative in intent," which is different than being of "spiritual importance."

Sixth, §60.4 makes no allowance for inclusion of sites based on the beauty of natural topography.

Seventh, nor does the section of code consider "sacredness" to be a determining-criteria of "historic value" that causes it to be set aside.

Eighth, considerations of airspace surrounding historic properties is not relevant to the National Registry's "Criteria for Evaluation." §60.4 makes no mention of "viewsheds" being a part of a historic property's intrinsic value. "Diminishment of viewshed" is a concept foreign to the Criteria for Evaluation and not a factor of relevance when determining adverse impact of aircraft presence. This discounts most of the FAA's criticism of air tours over the Park.

Ninth, the Criteria for Evaluation attaches no vertical column of airspace to any historic property. Therefore, cultural and ceremonial sites have no claim of trespass or intrusion of presence by persons or machines passing overhead either by foot or wing. This largely discounts the rest of the FAA's objections to air tours over the Park.

The FAA abuses the National Registry, saying that Southwest Safaris is imposing adverse impact on historic sites, when the historic sites it refers to are simply cultural sites worthy of the same sensitivities as any modern cultural site, judging by today's definition of "historic properties."

I will now turn my attention to "assessment of adverse effects."

The FAA's "criteria of adverse effect" is defined as "an adverse effect [that alters] … any of the characteristics of a historic property that qualify the property for inclusion in the National Register" (§800.5). Because the individual historic properties in question do not properly belong on the National Registry, and because they have no claim to special religious set-aside, and because they serve no commemorative purpose of exceptional significance, and because they have no sacred space above them, it is not possible for the presence air tours to have an adverse impact on non-existing "historic properties" in the "Area of Potential Effect."

Moreover, there can be no adverse effect from non-existent flights over historic properties that do not exist. The FAA's "criteria of adverse effect" is a quiet syllogism. The logic is absurd and, therefore, impossible to argue. See my letter of May 31, 2023. Any court would discard the logic behind the FAA's hopelessly convoluted "criteria of adverse effect;" it doesn't make sense.

On the other hand, it is very possible for the absence of air tour to have a very substantial negative effect on historic properties in the Area of Potential Effect, i.e., the Park.

For instance, in most cases, National Parks, themselves, have become "historic structures" (CCC Projects from the 30's) that air tours actually help to protect National Parks and other historic properties benefit greatly from park overflights, as is the case for Indian and other subcontractors using the historic properties of the Park for providing guided ground tours for air tour operators; famous hotels (historic properties) inside the Park providing overnight accommodations for ATOs; and local historic restaurants/convenience stores in a park serving the needs of ATO clients. People who visit National Parks frequently want to get "the total experience" of a park. This includes getting a grand overview that only an air tour can provide. This avoids negative impact on historic properties by allowing passengers to see the back country without leaving any trace of visitation or having any adverse impact on park infrastructure, including trails, lodging facilities, restaurants, bathrooms, gift shops, amphitheaters, and parking lots. Elimination of the flights would cut off substantial economic contribution to historic business properties within the

Park, causing the diminishment of historic structures, all the while significantly adding to the cost of maintaining the historic properties within the APE.

Despite the humor of this partly exaggerated argument, there are much more important reasons for allowing an air tour operator to transit BAND. It is true that denying air tours over the Park will not, in and of itself, allow for any impact of air tour noise on historic properties directly below an aircraft. It is not true, however, that denying Park overflights will have a positive effect (decrease) noise in the overall APE. The air tour operator at BAND will simply be forced to fly the perimeter of the Park on the west, south, and east sides, increasing the total noise impact on the APE by a factor of three, especially impacting wilderness areas. The impact of noise will only partially be diminished by distance (10%), but the time exposure will be increased by 300% in high power-settings. The net gain to the park from disallowing direct overflights (transportation routes) will be *significantly* negative, defeating the purpose of Alternative 2.

Thus, the FAA's finding … that denying Southwest Safaris the right to continue its air tours over BAND would have "no adverse effect" on historic properties … is wrong on the face of argument.

The FAA Alternative 2 does not satisfy NHPA. However, digging ever deeper, the tools the FAA uses to determine imposition of adverse effect do not satisfy NPATMA, either.

NPATMA, Section 808, dictates that:

> *Any methodology* adopted by a Federal agency to assess air tour noise in a unit of the national par system (including the Grand Canyon and Alaska) *shall* be based on reasonable scientific methods. [Emphasis added.]

This is the prime directive of NPATMA.

I assert that NPATMA is the controlling legal authority for creating Air Tour Management Plans. Under NPATMA, "*any methodology*" used to assess air tour noise, must be based on science.

The FAA's methods for assessing air tour noise at BAND are not based on "reasonable scientific methods." The FAA errs by using Noise Modeling at BAND to determine the presence of aircraft noise instead of scientific field tests to measure actual (not theoretical) noise. Noise modeling is not science, it is technology, prone to many errors. The internal formulas can be wrong and the external data fed to the model can be erroneous. I allege that the FAA procedurally stumbles by not using pertinent (defined to mean "current, comprehensive, relevant, accurate, and science-based") data in their noise models. The FAA's input data at BAND is stale-dated and insufficient, having been gathered 11 years ago and having only been sampled at four points in the Park. Therefore, it is not possible for the FAA to accurately assess adverse effects at Bandelier National Monument by use of AEDT "estimation" techniques, and I dispute the FAA's findings in the draft BAND ATMP and EA. The FAA's reliance on §1502.21 (and §1502.23) for not complying with Section 808 is misdirected; in the present instance, NPATMA is the controlling legal authority, not NEPA. For detailed analysis of these arguments, see my letter to Volpe National Transportation system, dated August 7, 2023, and my second letter to same, dated August 10, 2023.

In summary, I do not concur with the FAA's Section 106 findings, based on faulty evidence and unacceptable procedure. I respectfully request, based on the FAA's disregard for the Primacy of Law… which contempt of process permeates the whole of the agency's Section 106 investigations and findings… that the ATMP process for BAND be halted until a determination can be made by court of law as to the controlling jurisprudence of the undertaking.

Thank you for your continued consideration.

Sincerely,

Bruce Adams

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Washington, DC

August 14, 2023

5th Response to Request for Concurrence on Sec. 106
Draft BAND ATMP

Dear Ms. Walker:

This is my fifth letter of response to your request for evaluation of the FAA's proposed finding of "no adverse effects" from implementation of Alternative 2, which would prohibit air tours over Bandelier National Monument (BAND, or "the Park"). Under license of continuing consultation, I am writing to clarify multiple issues relating to my 4th letter of response.

My amplifications of meaning primarily address the paragraphs on the bottom of page 4 and on the top of page 5 of my letter of August 11. These paragraphs concern the imposition of adverse effects from aircraft noise on historic properties within the Area of Potential Effect (APE).

With respect to both paragraphs, I believe that the FAA and Pueblo tribes (the tribes) are of the opinion that the whole of Bandelier National Monument is a "historic property,' as defined by §800.16(i)(1). This says:

> ***Historic property*** means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Inpdian tribe or Native Hawaiian organization and that meet the National Register criteria.

BAND supposedly fits all of the above criteria for inclusion in the National Register. The apparent proof is that the historic district of the CCC buildings and all of the supposed 3,000 cultural and ceremonial sites in the APE have been included in the National Register.

The FAA emphasizes the strength of its opinion that BAND is a "historic property" by a statement made in the draft BAND ATMP, lines 157-161. Here the FAA says:

> The provisions and conditions in this ATMP are designed primarily to protect the Park's National Register listed or eligible cultural resources, including sacred sites, ancestral sites, cultural landscapes, and traditional cultural properties, all of which include the natural resources within, from the effects of commercial air tours, and to support NPS management objectives for the Park.

So, for the purposes of this letter, I am considering BAND, from the perspective of the FAA, to be a "historic property" on the Register, which includes all of the APE.

To clarify my meaning in the paragraph at the bottom of page 4, I assert that the commercial buildings of CCC vintage in the APE will be adversely impacted by Alternative 2 whereby all air tours over the Park will be prohibited. The adverse impact will be caused by physical curtailment of economic opportunity … having formerly been provided by the passengers of commercial air tours returning by ground to patronize the Park … from reduction of surface visitation, which cutback will lead to loss of revenues and deterioration of physical structures, all resulting directly from the material loss of air tours over the Park. Moreover, the fewer the air tour passengers, the greater the number of back country hikers staying in the Park for extended periods of time … because there will be no other way to see the wilderness. The physical adverse impact on Park infrastructure will be magnified everywhere by the greater wear and tear imposed on historic properties from diverting air tour traffic to expanded ground exploration. The redirection of traffic will affect diminishment of Park resources at a faster rate, impacting trails, lodging facilities, restaurants, bathrooms, gift shops, amphitheaters, and parking lots. The net consequence will be significant accelerated depreciation … resulting from adverse physical impact … of historic properties, directly caused by prohibiting air tours from serving the needs of the park and the demands of the public.

Howevrer, to clarify my meaning expressed at the top of page 5, the more important adverse effect imposed on the entire historic property of BAND … including historic buildings and properties of traditional, religious, and cultural importance to Indian tribes, all of which the FAA claims to meet the National Register criteria … will be caused by magnified sound intrusion from air tours trying to avoid said historic property. This outcome will be the inevitable result of compelling the air tour operator (ATO) to circumnavigate the APE but still remain in the closest proximity to it to save time. These routes of avoidance will require flying just outside the Park, at higher altitudes which expose the Park to the greatest cone of noise impact, tripling exposure to noise due to greater distances and slower airspeeds in climb mode, in turn requiring maximum power output … a bad combination for "historic properties" only slightly offset in reference to the aircraft's track. Moreover, the prevailing wind in the Park is from west to east. As an air tour plane climbs to the west, all of its sound will be blown over both the wilderness and developed areas of the Park, adversely impacting the most noise-sensitive "historic properties" of the APE. The greater the noise footprint, the more an aircraft will be noticed, and the greater the diminishment of "viewshed," physically reducing the total value of "historic properties" … as the FAA so forcefully claims in the draft BAND ATMP.

I bring all of this to your renewed attention because of a technical issue in the wording of §800.16(i)(1). The word "effect," in the context of Sec 106, only applies to "a historic property qualifying it for inclusion in or eligibility for the National Register." I want to clarify that all of

BAND is part of the APE which, in turn, is essentially part of the National Register. Therefore, the word, "effect," includes application of aircraft noise to the whole of Bandelier N. M.

My interpretation is consistent with the statement on page 7, "Assessment of Noise Effects," of your request for concurrence, that:

> The FAA, in coordination with the NPS, focused the assessment of effects on the potential for adverse effects [on the whole of BAND] from the introduction of audible or visual elements that could diminish the integrity of the property's significant historic features. [Clarification added.]

In summary, my observations and conclusions are directly contrary to those of the FAA's letter of April 20, 2023, wherein I was asked to concur with a decision of "no adverse effect" from prohibiting air tours over BAND. Referring to the last two sentences on page 7, "Assessment of Noise Effects," it is <u>not</u> true that the elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. Paradoxically, it <u>is</u> true that all historic properties within the APE will experience significantly greater noise impact by eliminating all air tours *over* the Park. Eliminating all air tours over the park will only heighten noise everywhere in the Park, by causing tour aircraft circumnavigating the APE to climb over varied terrain on all sides, using full power, at high altitude, for three-times the period of time required to simply transit the park in a straight line on a carefully chosen route, at lower altitude, with lower power settings.

To disprove my allegations, the FAA will need to conduct sound studies on the impact of air tour noise on "historic properties" in the APE of BAND. The agency will have to use "reasonable scientific methods" and "pertinent data" (defined to mean current, comprehensive, relevant, accurate, and science-based), in compliance with Section 808 of NPATMA. Under that Act, noise modeling does not qualify as employing "reasonable scientific methods;" NPATMA is the controlling legal authority for ATMPs, not NEPA, and not NHPA. Congress inserted Section 808 of NPATMA precisely because Congress explicitly wanted to negate NEPA §1502.21 & §1502.23 and direct the methods of allowable application of NHPA §800.5.

At the end of our phone conversation of August 10, 2023, I questioned the FAA's BAND listing of 3,000 cultural and ceremonial sites on the National Register. I said that there is little actual basis for the registration, and that I alleged their registration is based on hearsay. We did not have time to go into the debate, but promised to get back into "the thick of it" in the near future. However, in defense of the listing of the sites on the Register, you said that one of the factors supporting their inclusion on the listing was their "viewshed" qualities.

When we "get back at it," I am going to respectfully challenges your claim for authenticity per the registry.

36 CFR §60.4 lists the "Criteria for Evaluation" of potential historic properties. Nowhere is there any mention of "viewshed" or even reference to scenic qualities of a property that could be used to qualify it for listing. Under the statute, the value of the scenic grandeur of a property is irrelevant for consideration of registration. In fact, it is not even mentioned as being a contributing factor for consideration. The FAA takes words and phrases, such as "feeling,"

"association," and "integrity of location," out of context and applies them broadly rather than narrowly, as was the original intent of the "Criteria for Evaluation." The FAA stretches the application of legislative language. In the description of the four properties included in Attachment C of the FAA's "Request for Concurrence," natural scenery is hardly mentioned. One must look to find it. When it is mentioned, it is only in passing. "Natural canyon Settings," "spectacular and unobstructed views," and "the unique feeling that the district conveys" are only mentioned in three of the four listings, and generally towards the end of the descriptions of "Significant Characteristics." These adjectival musings are descriptive and accurate but not determinant qualities of the property, applying to the properties surrounding the listed sites, but not to the specific properties, themselves. "Historic properties" are not allowed by the statute to make a possessive claim on surrounding properties, such as to prevent them from being changed over time to "preserve" the authenticity of original listing. Under §60.4, there is no mention of associative powers of distant landscapes having any affect on a local property. Therefore, I maintain my observation that most of the archaeological listings on the BAND Resister are of historic value, but are founded on tradition, lore, professional opinion, and hearsay, not documentable current field research and qualification. At any rate, the Qualifications for listing have nothing to do with determination of navigable airspace below a "reasonable" altitude considering the terrain. If recollection correctly serves me, these sites were "grandfathered" into the Register before the stricter characteristics were defined. Neither the NPS nor the State Historic Office have yet presented any evidence to the ATO that would refute this claim.

As a sidebar, I realize that the process of Section 106 consultation is not concerned with the agencies' determination as to which of three alternatives to select regarding overflights of the Park. Nonetheless, my arguments in the numerous letters I have sent with regards to Sec 106 make it plain that Alternative 2, the "no air tours permitted" decision supposedly grounded on the FAA's "criteria of no adverse effects," is completely unjustifiable on the basis of science, logic, and law. Alternative 3 is just a thinly disguised backup version of Option 2, offered only in case the FAA is forced to take Alternative 2 off the table. Alternative 1, the "no change" option, clearly satisfies all objections of the FAA, NPS, and the tribes, and is therefore the obvious choice for objective minds. Sadly, Alternative 4, a voluntary agreement, was never offered, in violation of law (§1502.1 and §1502.14(a)) … for which the FAA will be held to account.

I hope this helps to explain some of the meaning of my August 11, 2023 letter. I wish to continue with Sec 106 consultation, not conceding any of my legal contentions with the agencies' methods of implementing ATMPs. I think that this letter and the one before, dated August 11, 2023, speak to the questions of clarification that you raised during our phone conversation of August 10, 2023. Let me know when you would like to speak further.

Thank you for your continued consideration.

Sincerely,

Bruce Adams

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September 25, 2023

6th Response to Request for Concurrence on Sec. 106 Draft BAND ATMP

Dear Ms. Walker:

This is my sixth letter of response to your request for evaluation of the FAA's proposed finding of "no adverse effects" from implementation of Alternative 2 of the Bandelier National Monument (BAND) Air Tour Management Plan (ATMP). This option would prohibit air tours from operating over BAND (or "the Park"). I am writing under permission of "continuing consultation."

New issues have come to light since my last letter of August 14, 2023. This letter has been precipitated by the FAA's publishing of correspondence relating to the agency's determination of no adverse effect from overflights of Hawaii Volcanic National Park (HAVO). Arguments have been made by both the FAA and the Advisory Council on Historic Properties (ACHP) that directly relate to the draft Air Tour Management Plan (ATMP) for Bandelier National Monument. The HAVO letters expose many glaring errors and inconsistencies in the BAND ATMP. In this letter, I will uncover the fallacious and contradictory general arguments of the FAA, drawn from the HAVO papers but relating to the BAND ATMP.

Errors re. Controlling Legal Authority

On July 24, 2023, Ms. Judith Walker of the FAA's Office of Environment and Energy sent a letter to the Advisory Council on Historic Preservation (ACHP) requesting a review of the FAA's findings regarding "no adverse effect" from choosing Alternative 4 of the draft ATMP for HAVO. In the opening sentence of "The Undertaking" section at the bottom of page 3, Ms. Walker (hereafter, "the FAA,") states that:

> The FAA has determined that the development and implementation of an ATMP for the Park [HAVO] is an undertaking under the National Historic Preservation Act.

This statement of fact documents the fundamental and seemingly irreconcilable disagreement between Southwest Safaris and the FAA relating to jurisprudence governing the development and implementation of Air Tour Management Plans.

Southwest Safaris (SWS) has repeatedly and forcefully argued in seven previous letters[1] that, with respect to the creation of ATMPs, the National Parks Air Tour Management Act of 2000 (NPATMA, or "the Act") is the controlling legal authority, not the National Environmental Policy Act (NEPA) nor the National Historic Preservation Act (NHPA). Until reading the FAA's (Ms. Walker's) letter of July 24, however, I did not have proof that the FAA is claiming to the contrary, that NHPA is the actual controlling legal authority.

I argue that Congressional statute controls agency regulations. The FAA argues … based on the logic contained in its draft BAND ATMP and associated EA … that agency regulations define and direct the application of Congressional intent. I argue that the application of the principle of Primacy of Law[2] says that the greater law controls the lesser. The FAA historically disagrees, arguing that Congress has given agencies "wide latitude" to interpret and apply law de novo, unless Congressional statute is so specific as to direct the implementation of law in a certain and unambiguous manner. Based on the "wide latitude" theory, the FAA has solely determined that it will predicate its ATMP proceedings on NHPA first, NEPA second, and NPATMA last . . . the reverse of the order instructed by theory of Primacy of Law … with enormous adverse consequence, I allege, namely the violation of Continuity of Law[3] and disruption of legal process.

I argue that NPATMA ("the Act") is both mandatory and emphatically clear. It was drafted by Congress to be "agency specific."[4] It included Section 808 which, empowered by a "*shall*" clause, instructed the FAA that the agency *must* perform science-based sound studies which rely on "pertinent data."[5] These studies *must* be done in order to justify any decision of adverse effect requiring a corrective remedy for alleged air tour impacts on persons and property in National Park Service (NPS) units.

NPATMS's Section 808 says:

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[1] See Southwest Safaris' letters dated: May 19, 31; June 6; August 7, 10, 11, and 14, 2023

[2] The principle of Primacy of Law directs the order of application of laws in a vertical manner. Where multiple laws affect a result, course of action, or determination, the laws must be satisfied in accordance with the most controlling to the least.

[3] The principle of Continuity of Law means that one law cannot horizontally contradict another.

[4] "Agency specific" means that the legislation was targeted specifically to the FAA, requiring NPATMA to dictate the manner and direction for application of NEPA and NHPA. Under law, NEPA could only control the NPATMA process if NEPA were "consistent" with NPATMA (40 CFR §1500.3(a)), and NHPA could only control NPATMA process if NHPA were compatible with the means and methods of NPATMA (36 CFR §800.2(a)(4) and §800.3(b)). Neither NEPA nor NHPA are consistent or compatible with NPATMA because of Section 808, so the Act, itself, becomes the controlling legal authority re. ATMPs.

[5] In Southwest Safaris' letter to Volpe of August 7, 2023, on page 17, SWS defined "pertinent" sound-study data to mean "current, comprehensive, relevant, accurate, and science-based."

> *Any methodology* adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) *shall* be based on *reasonable scientific methods*. [Emphasis added.]

Section 808 seems pretty straight forward, but "the devil is in the details."

My letter of August 7, beginning on page 22, describes the meaning and application of Section 808. I wish to emphatically reinforce the observation that Section 808 negates any authority of NEPA's 43 CFR §1502.21 … wherein NEPA excuses incomplete or unavailable information and allows theoretical approaches or research methods instead of science-based studies … and §1502.23 … wherein NEPA allows agencies to make use of existing data and resources instead of pertinent, scientifically-researched data. NPATMA makes it mandatory to conduct sound studies, based on "reasonable scientific methods." This agency-specific power of Act by itself asserts the authority of NPATMA over NEPA.

In like manner, NATMA's Section 808 controls NHPA. Section 808 negates application of NHPA's 36 CFR §800.5, "Assessment of Adverse Effects." Under NPATMA, it is not enough to claim adverse effects by merely alleging the actual or possible diminishment of the integrity of "setting, . . . feeling, or association" of a park's historic resources per 36 CFR §800.5(a)(1). Nor is it sufficient to simply allege that air tours within a park either result in or have the potential to result in an introduction of "visual, atmospheric or audible elements that diminish the integrity of a property's significant historic features" per 36 CFR §800.5(a)(2)(v). Such accusations must be proven by "reasonable scientific methods," incorporating "pertinent" (defined by reason to mean "current, comprehensive, relevant, accurate, and science-based") data. Under NPATMA, the standard of regulation is demonstrated-science alone, which makes NPATMA inconsistent and incompatible with NEPA and NHPA.

For all these reasons and more (see below), the FAA's allegations against Southwest Safaris … rendered under Section 800.5 of NHPA, "justified" by Part 1502 of NEPA, and documented in the draft BAND ATMP … are false, malicious, without legal authority, and totally inappropriate for an administrative action. The draft BAND ATMP reads more like a legal indictment than an administrative action plan. The FAA has used accusatory language and ill-founded, extremist, environmental/social theory[6] to concoct administrative justifications for deconstruction of law.

Moreover, NHPA, which the FAA has arguably "determined" to be the controlling legal authority for ATMPs, is inconsistent with NPATMA for reasons of general as well as specific applicability. In a letter (no date provided in the letter) to Mss. Raquel Girvin (Regional Administrator, Western-Pacific Region), refuting the FAA's finding of "no adverse effect," the ACHP claimed

[6] See draft BAND ATMP. Extremist language and unfounded assertions are found in the following locations, there being too many to comment on: line 79, 177, 184, 197, 214, 220, 228, 246, and 249 in specific, though the entire "Justification" section is objectionable. Its focus is on accusation, not remedy, and offers no substantiating evidence. Its focus is uniquely that of Section 106, where mere accusations serve as proof of adverse impact. Other, equally disturbing assertions are made throughout the Environmental Assessment.

that the FAA's decision under NHPA re. Hawaii failed to account for the "potential" impact of air tours on HAVO.

On page 1, the ACHP says:

> Based on the documentation submitted, it appears FAA has not appropriately applied the criteria of adverse effect [36 CFR § 800.5(a)(1)] for this undertaking and that a finding of adverse effect, based on the ***potential*** for adverse effects to occur, is appropriate. While we acknowledge the FAA has attempted to reduce the ***potential*** for adverse effects through imposition of several conditions, these conditions do not avoid the ***possibility*** for adverse effects to result. (Emphasis added).

On page 3, the ACHP summarizes its opinion by saying:

> Accordingly, the ACHP recommends that the FAA reconsider its "no adverse effect" finding to be consistent with the threshold in 36 CFR §800.5(a)(1), which recognizes that an adverse effect finding is appropriate when such diminishment of integrity ***may [potentially]*** result from the undertaking, but that diminishment does not have to be a certainty. (Emphasis added).

According to the ACHP, then, a broad range of "potential" adverse impacts must be considered under NHPA's §800.5, "Assessment of Adverse Effects," when evaluating an undertaking (i.e., an ATMP). Consideration of existing current impacts is not enough. In a complicated rejoinder, the FAA dissented.

I agree with the FAA's refutation of the ACHP's finding, but not necessarily for the same reasons. The FAA states on page 2 of its September 12 letter (signed by Ms. Jule Marks, Executive Director of the AEE) to the ACHP that:

> The FAA, in assessing the effects of the undertaking, analyzed **any** changes that could result from the implementation of the ATMP, rather than the effects of the **existing** condition of air tour operations. The FAA assessed the effects of the undertaking in accordance with the Section 106 regulations and appropriately determined that none of the minor noise increases occurring less than two minutes a day when flights occur would diminish the integrity of the historic properties within the APE. (Emphasis added.)

The FAA says, but did not demonstrate, that it took into account all **(any)** possible future impacts that might result from implementation of the ATMP … and so complied with Section 106 … but then dismissed the obvious current **(existing)** noise impact from flying over certain historic properties on the edge of the APE (the Coastal Route). This is a weak set of arguments, and the ACHP pointed that out.

Instead, Southwest Safaris argues that wide-ranging phrases that appear in or relate to NHPA's §800.5 "Criteria of Adverse Effect"… such as "potential for adverse effects;" "may result from;" "diminishment that does not have to be a certainty;" and "reasonably foreseeable effects that might occur later in time, be farther removed in distance, or be cumulative" … are completely

foreign to NPATMA. The Act includes no such wordings, concepts, or anticipation of such. NPATMA is concerned with actual impact, not potential. The Act is referenced to the here-and-now, backed by reasonable scientific methods and data. This is the second reason that NHPA is incompatible with NPATMA,[7] leaving NPATMA to be the controlling legal authority with respect to ATMPs, not Section 106.

Southwest Safaris points out that the FAA's better defense for its HAVO determination would have been to say that NHPA is irrelevant under NPATMA. There is no requirement under the Act to show that all potential adverse impacts, imaginary and hypothetical in nature, must be taken into account if sound studies were to demonstrate that there is no reasonable cause of complaint in the first place. Of course, the FAA could not make this counter-claim, because it has refused to comply with Section 808, which would have exonerated it outright.

The FAA errs in trying to use Section 106, which does not specifically apply to air tour operations, to end run NPATMA, which does specifically apply to air tour operations, in order to arrive at a determination that Congress never intended, namely the general destruction of the air tour industry by disallowing most flights over units of the NPS by means of contrived argument. This is particularly and egregiously true of the draft BAND ATMP, where the FAA's accusatory language, concocted under NHPA's theory of adverse impacts, aimed at a tiny ATO, flying mostly a small C182 twice-a-week over the Park, is extreme.[8]

Ironically, the FAA's own arguments buttress my conclusions. By extension of logic, based on FAA reasoning, NEPA and NHPA do not necessarily apply to the implementation of an ATMP for yet other reasons. On page 3 of the FAA's July 24 letter to the ACHP, the FAA says:

> Since 2005, most commercial air tours over national parks, including Hawai'i Volcanoes National Park, have been conducted pursuant to IOA issued by the FAA in accordance with NPATMA. *See* 70 Fed. Reg. 36,456 (June 23, 2005). Because the FAA's grant of IOA was a non-discretionary agency act mandated by Congress, compliance with the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act was not required. *See Sugarloaf Citizens Ass'n v. FERC*, 959 F.2d 508, 513 (4th Cir. 1992) (holding that where an agency did not have the discretion to deny certification to a facility that met certain criteria, compliance with NEPA and Section 106 was not required); *Sac & Fox Nation of Missouri v. Norton*, 240 F.3d 1250, 1263 (10th Cir. 2001) (compliance with Section 106 and NEPA is not required for nondiscretionary actions).

Since the imposition of ATMPs and Voluntary Agreements is mandated by Congress, the creation of ATMPs is a non-discretionary undertaking. By the same reasoning … see court citations above … ATMPs need not be ruled by NEPA and NHPA, either. Instead, ATMPs are to be regulated under NPATMA, which is consistent with the theory of Primacy of Law.

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[7] The first reason being that Section 106 cannot be coordinated with NPATMA because of conflicting mandates of agency-specific legislation (36 CFR §800.2(a)(4) and §800.3(b)) due to the necessity for current, science-based, sound studies.

[8] See footnote #5

Under NPATMA, the FAA would not have been able to use extremist environmental and social theories to justify deconstructing law in order to dismantle SWS' air tours at BAND.

Moreover, the FAA unwittingly argues against itself in both of its letters to the ACHP. In the draft BAND ATMP and EA, the FAA argues in favor of a complete shutdown of air tours over the Park on the basis of *potential* adverse impact on historic properties, and *potential* invasion of privacy on Pueblo people, and *potential* disruption of religious ceremonies. Then, the FAA turns around and argues to the ACHP regarding HAVO that, under NPATMA, *potential* adverse effects do not have to be considered. The FAA's arguments regarding BAND and HAVO are totally inconsistent and contradictory. Either the FAA acknowledges at HAVO that Potential adverse impacts on historic properties have to be considered … and thereby concedes the ACHP's argument … in order to uphold the FAA's pending decision at BAND, or the FAA must give up its accusations of Southwest Safaris at BAND … that potential impacts to historic properties are completely unacceptable … and decide in favor of Alternative 1 for BAND in order to uphold the logic of its determination at HAVO, that potential impacts don't matter. The FAA cannot have it both ways. This topic will be discussed in detail below. See "Errors re. Baseline Conditions."

While on the topic of Primacy of Law, there is a separate-but-related issue that must be addressed. By disregarding the principle of Primacy of Law, the FAA has hopelessly complicated operational, environmental, and legal analysis of the draft BAND ATMP by first assuming, then operating on the basis of, and finally even announcing (e.g., in the Judith Walker letter of July 24, page 3, bottom) that the implementation of an ATMP for a park is an undertaking under the National Historic Preservation Act" (versus NEPA and NPATMA). This unilateral and unchallenged (until now) declaration is in defiance of the alternate but correct theory of jurisprudence which states that NPATMA is the controlling legal authority. The FAA's determination means that NHPA controls the process of writing, implementing, and reviewing ATMPs. By so declaring, the FAA makes it impossible to raise most substantive matters during Section 106 consulting, cutting off objections by air tour operators (ATOs) to most ATMP-related issues under NEPA, which denies ATOs due process. This is yet one more reason why Congress intended NPATMA to have controlling legal authority over NEPA and NHPA.

Because of the FAA's disregard for Primacy of Law, making NHPA (instead of NPATMA) the gatekeeper for ATMP oral objections to the ATMP process, SWS reserves the right to discuss all issues related to the ATMP process during Section 106 consulting, and the company expects all objections to be fully noted and considered. In the past, any objections not strictly related to an effect's audible and/or visual diminishment of the integrity of a property's significant historic features was not allowed. This artificial restriction of argument has made constructive airing of ATO grievances all but impossible, because all oral objections coming from any other direction were cut off. The flaw in due process is sufficient to require legal review of process under NPATMA before any final further ATMP decisions can be made and to make it possible to challenge, under Section 106 (re. consulting), NEPA-related determinations regarding BAND as well as those arising under NHPA.

Errors re. Baseline Conditions

The FAA argues in HAVO that the baseline of conditions against which adverse effects should be measured is "existing conditions," not a condition of "no air tours." On page 8 of Judith Walker's July 24 letter, the FAA states:

> Given that Congress expressly preserved the status quo of existing air tour operations pending the establishment of an ATMP, had it intended to require the agencies to evaluate the impacts of regulating air tours under an ATMP against a condition of no air tours, it would have done so expressly.

The FAA goes on to say:

> NPATMA requires the agency to assess the environmental impacts of the ATMP (the undertaking) and not the operations of air tours generally. *Id.* § 40128(b)(2). Neither NPATMA nor the NHPA require the effects of the undertaking (an ATMP) to be measured against a condition under which no air tours are occurring.

Two problems arise. First, the FAA is now asserting the authority of NPATMA to control NHPA, admitting that NPATMA is the controlling legal authority re. ATMPs, not Section 106. Otherwise, the ACHP would be correct; all existing and potential effects would have to be considered under NHPA without exception for extenuating "minor" effects of de minimis circumstances. Fortunately for the FAA in their HAVO decision, the FAA's logic is correct, but only so long as the FAA acknowledges the Primacy of Laws involved … in other words, that NPATMA controls NHPA. The FAA is caught its own logic trap. This, leads to the second problem.

The draft ATMP for Bandelier National Monument, in fact, imposes a standard of "no air tours" as the baseline for comparison of allowable noise at that specific Park. The Environmental Assessment for BAND makes this standard very clear.

The FAA begins its categorical ban on all air tours over Bandelier National Monument (the Park) by saying in Section 2.2.1 of the BAND EA that "Air tours above existing levels would unacceptably impact existing sacred sites and cultural practices of pueblo culture within the Park and the cultural landscape as a whole." This left the possibility of Alternative 1, "No Action," open for the air tour operator (ATO).

Realizing the opening this gave the ATO, the FAA went on to limit the application of the allowance in concept, if not yet in numbers and mere presence.

> The NPS Management Policies direct the NPS to avoid adversely affecting the physical integrity of sacred sites to the extent practicable (NPS Management Policies §5.3.5.3.2, 2006). Additionally, culturally appropriate sounds are important elements of the national park experience, which includes this Park, and therefore, the NPS is directed to prevent inappropriate noise from unacceptably impacting cultural and

> historic resource sounds associated with park purposes (NPS Management Policies §5.3.1.7, 2006). Air tours above existing conditions would impede the NPS's ability to fully meet the Park's purposes of protecting cultural resources and providing for the cultural practices of pueblo culture. For these reasons, the agencies have considered but eliminated alternatives that would increase air tours above existing air tour numbers.

Then the clincher. In Section 2.2.2 of the EA, the FAA bluntly cuts off all possibility for the ATO to conduct any kind of scenic flights over the Park. The FAA states:

> **The agencies considered but eliminated** the alternative that would authorize air tour operations consistent with current operator reported operating parameters as presented in the 2021 draft ATMP. Comments received during the public comment period for the prior draft ATMP (September 3, 2021 – October 13, 2021) and information learned through tribal consultation demonstrate that impacts from the existing number of air tours flown on current operator reported routes **would [potentially]** have too great of an impact on Park resources to carry forward and those impacts cannot be further reduced. Specifically, the routes included in the 2021 draft ATMP **could potentially have]** infringed upon the privacy of the pueblo people and disrupted the traditional use and sacredness of many important sites for the pueblos, including National Register listed or eligible TCPs, ancestral sites, and the cultural landscape**; air tours, in general, introduce a conflict with the core components of the Park by allowing an opportunity for those outside of the tribal community to infringe upon the sacredness of these ancestral lands**. The elevation of the terrain overflown limits the NPS's ability to reduce these impacts by raising the minimum altitudes flown by commercial air tours on these routes. Based on information learned during consultation and from the comments received from the pueblos (see Appendix G, *Cultural Resources Consultation and Summary*)**, air tours on the routes presented would [might] unreasonably interfere with the cultural landscape of the Park and the connections to TCPs and [might] unreasonably detract from the sacred sites and tribal practices of the pueblo people.** Because of the comments received on the September 3, 2021 draft ATMP, the NPS has determined that the **[potential]** impacts of this alternative to cultural practices, sacred sites, and the cultural landscape of the Park are **[might potentially be]** too great and **[might potentially]** inhibit the NPS's ability to provide the pueblos their cultural connection to the landscape which is essential to meeting the purpose of the Park. **Thus, this alternative [allowing for the possibility of conducting any air tours over the Park] was considered but dismissed from further evaluation.** (Emphasis added.)

In other words, the FAA argues that the possibility of the mere presence of air tour aircraft above the Park is so objectionable as to disallow tour planes altogether. The artful justification is supposed invasion of privacy, interruption of sacred ceremonies, and destruction of historic viewsheds. None of this line of objection is allowed under NPATMA, unless there is proof of same by means of actual current science-based noise studies, which the FAA has not conducted.

Hypothetical accusations of adverse impact are not admissible "evidence" under NPATMA. In any case, the FAA's pending determination for BAND flies in the face of the reasoning for allowing scenic flights over culturally-sensitive communities at HAVO.

The FAA argues this point in Southwest Safaris' favor in the FAA's letter of September 12, 2023 to the ACHP. In response to the ACHP's charge that "there does not appear to be a way to eliminate the potential for adverse effects" from HAVO air tours, the FAA replies:

> Though its reasoning is not clear, the ACHP seems to assume that air tour operations under existing conditions have an adverse effect on historic properties. Therefore, the FAA's undertaking must completely ban air tours to remove the adverse effect, and any action that does less than a total ban does not address the adverse effect of air tours. That view goes beyond the authority of the Section 106 process and its implementing regulations.

The FAA's double-standard for HAVO versus BAND is everywhere evident.

The FAA asserts in Ms. Walker's letter of July 24 to the ACHP, it is impermissible under NPATMA to argue that the mere existence of air tours is an adverse effect. The FAA said there is no room in the Act for the assumption that all air tours, by definition, either create direct adverse effects or the potential for adverse effects. The FAA states that:

> Permitting air tours or the presence of air tours is not the standard the regulations implementing the National Historic Preservation Act impose when assessing visual and auditory effects from an undertaking. Rather, the standard is whether there is an *introduction* of visual or audible elements that diminish the integrity of the property's significant historic features. *See* 36 CFR §800.5(a)(2)(v).

Yet, at BAND the FAA persists in arguing that the mere presence of aircraft is so offensive to Native Americans that even the concept of air tours over the Park cannot be tolerated, let alone the actual physical presence of planes. No field studies have been performed at the Park to validate the claim that air tour planes provide a means of observing religious ceremonies. No tests have been conducted to validate that relatively rare flights over the park are unreasonably intrusive of right of privacy. No research has yet been conducted to document harmful effects of aircraft presence so as to diminish the integrity of a property's significant historic features. Had Southwest Safaris air tours been inflicting any kind of visual or audible elements that would diminish the integrity of sacred properties' significant historic features, the Tribes would have already screamed, but no such complaints have been received and documented by the FAA, NPS, or the Tribes in the 49 years of the ATO's operation. Indeed, no factual damage can be demonstrated, only that there is the "potential" for adverse effect, which NPATMA does not recognize.

The FAA, in effect, asserts that the mere existence of air tours at BAND is an adverse effect. Southwest Safaris rejoins that there is no basis in fact or in law for the FAA's claim. The FAA offers no proof and argues against itself

Thus, Southwest Safaris counter-argues, the FAA's own reasoning is not clear. In fact, the FAA's self-serving arguments for disallowing park overflights at BAND but allowing them at HAVO are completely contradictory. SWS alleges that the FAA has no consistent and rational basis for not choosing Alternative 1, "No Action," as the preferred option for BAND ATMP.

Errors re. De Minimis Sound Impact

On September 12, 2023, Ms. Julie Marks, Executive Director of the FAA Office of Environment and Energy, replied to the ACHP regarding an opinion of that body that was averse to that of the FAA regarding an air tour route at HAVO. On page 3, the FAA argued to justify moving the tour route out over a coastline off Hawaii because, the FAA asserted, the amount of noise created by the new route would be trivial ("minor and infrequent"). The FAA summarizes its argument by saying:

> While the FAA noted that there were noise increases along the Coastal Route in assessing the effects of the undertaking, individuals might only experience minor noise increases for an average of two minutes per day on days when flights are allowed to fly.[1] Therefore, the FAA did not find that the noise increases comprised an adverse effect because the increases were minor and infrequent and would not diminish the integrity of the historic properties in the APE.

The FAA adds footnote #1 to reinforce its assessment of de minimis effects:

> *1* Individuals may experience noise increases for an average of 2 minutes across a 4-8 hour day on days that flights are allowed. The five flights allowed per day are not frequent enough to cause chronic noise disruptions. Note that the noise from air tours will only reach levels that would disrupt noise-sensitive activities for a total maximum of 10 non-consecutive minutes per day and levels that may cause speech interference for one minute per day. These timeframes would be spread across a 4-8 hour operating day; therefore, they would only be experienced for seconds or up to a couple minutes during each of the 5 flights allowed **per day [per air tour operator … there are ten ATOs]** and only on days that flights are allowed.

This line of argument is in blatant contrast to the FAA's justification for closing down all **two** air tours **per week** at BAND. Moreover, this is almost exactly the same argument used by Southwest Safaris to justify choosing Alternative 1, "No Action," for the draft BAND ATMP. The amount of time SWS spends flying over BAND on a typical tour, barring the affects of wind, varies between thirty-seconds to three minutes, with the average being two minutes, as measured in the cockpit on actual air tours. In contrast, the noise generated on a weekly basis at HAVO on the coastal route would be 150 times that of BAND considering the entirety of BAND![9] The principle of sound impact on noticeability of aircraft presence does not vary from

[9] 5 flights per day, times 6 days per week, times 10 operators, divided by two flights per week by SWS = 150. This conservative estimate does not take into account the multiplier effect of helicopter noise versus a small Cessna 182.

park to park.[10] The NPS asserts that minimal sound impact results in minimal notice of aircraft (Ibid.). The FAA's observation quoted above and the NPS' theory of noise/visual impact, explains why neither the FAA, the NPS, nor any of the tribes have any record of complaints of specific air tour noise or presence at BAND over a 49-year period. Consistency of argument requires the FAA to acknowledge the validity of Southwest Safaris' claim for insignificant impact of its existing air tours over BAND. The only logical and legal choice of ATMP options at BAND continues to be Alternative 1, "No Action."

Errors re. Finding of Adverse Effect

The FAA's correspondence relating to Hawaii's HAVO reveal errors of logic and application relating to NHPA's §800.5 "Finding of Adverse Effect." The errors are basically the same as already enumerated for other aspects of ATMP implementation. However, because of the significance of NHPA's §800.5 to federal rule-making, the mistakes and oversights at BAND in comparison with HAVO will be discussed in detail. The reader will please excuse some repetition necessary for clarity of illustration.

The FAA's arguments with respect to Section 106 are inconsistent. The FAA claims that BAND overflights cause irreparable damage to persons and cultural/sacred properties on the ground. However, at other parks the FAA argues just the opposite.

The Arches National Park EA (Environmental Screening Form, "Evaluation of the ATMP," Table 1, "Viewsheds," P. 9) observes:

> Other literature for studies on impacts from commercial air tours or overflights of viewsheds generally conclude that the visual impacts of overflights are difficult to identify because elements in a scene and visual impacts tend to be relatively short. The short duration and low number of flights (along with the position in the scene as viewed from most locations) make it unlikely the typical visitor will notice or be visually distracted by aircraft. The viewer's eye is often drawn to the horizon to take in a park view and aircraft at higher altitudes are less likely to be noticed. Aircraft at lower altitudes may attract visual attention but are also more likely to be screened by topography.

The NPS makes precisely the same argument in favor of air tours over Arches as Southwest Safaris makes for BAND. The presence of sound generally precedes observation of presence of aircraft. Air tours over BAND have no significand adverse impact on visual effects because there is almost no sound associated with BAND air tours in general (see White Report) and because the visual presence of air tours is masked by high canyon walls and high mesa tops.

[10] See page 15 of SWS' letter to Volpe National Transportation System Center, August 7, 2023. The reference made is to the ARCH EA, Environmental Screening Form, "Evaluation of the ATMP," Table 1, "Viewsheds," P. 9. This passage is quoted immediately below; see "Errors re. Finding of Adverse Effect."

Beginning on page 14 of the FAA's March 27, 2023, *Finding of Effect* letter to the Hawaii State Historic Preservation Division, under the subtitle of *Noise Effects Summery* in the section titled, *Overview of Noise Effects Throughout ATMP Planning Area,* the FAA states:

> The agencies [the FAA and NPS} recognize that air tours are disruptive to traditional practices . . . [Nonetheless,] the measures included in the [HAVO] ATMP reduce the likelihood that traditional uses of cultural resources will be impacted. [But,] while some contributing features to historic properties may be affected by air tours as a result of the undertaking, these effects are temporary and transient in nature. Overall, the increases in noise duration and/or intensity would not be frequent, with an estimated 5 flights per designated flight path anticipated each day; therefore, these resources would only experience noise effects for a limited time over the course of an operating day. The annual limit, time-of-day restrictions to avoid sunrise and sunset, QT incentives, and limiting flights to certain days of the week minimizes the likelihood that an air tour would interrupt Native Hawaiian traditional practices such as ceremonies, fishing, or other traditional activities, as compared to existing conditions.

The FAA basically repeats this argument in its July 24 letter by Judith Walker to the ACHP under the heading of *ATMP Continues to Allow Adverse Effects* on page 10. There the FAA states:

> Permitting air tours or the presence of air tours is not the standard the regulations implementing the National Historic Preservation Act impose when assessing visual and auditory effects from an undertaking. Rather, the standard is whether there is an *introduction* of visual or audible elements that diminish the integrity of the property's significant historic features. *See* 36 CFR §800.5(a)(2)(v). The undertaking is not introducing new noise impacts or new visual impacts, as air tours already exist in the ATMP planning area and have for over 40 years. However, the ATMP would instead *reduce* noise and visual impacts when compared to existing conditions. As further described in the finding of effect letter dated March 27, 2023 (*see* Exhibit 8), the undertaking would not directly or indirectly alter the integrity of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling or association. 36 CFR § 800.5(a)(1). **Therefore, the FAA has determined that the implementation of the [new routes incorporated in the] ATMP will not result in adverse effects on any historic properties.**

By force of logic, if the HAVO ATMP undertaking, whereby air tour flights are required over noise-sensitive areas, imposes no adverse noise impact on the APE in Hawaii, then the existing air tour flights of much less noise impact at BAND should be even more allowable.

Southwest Safaris only flies over BAND an average of twice-a-week, not five times per day. So, the impact of noise generated by Southwest Safaris' air tours on historic properties in comparison would be less than negligible, as previously iterated.

In the words of Jaime Loichinger of the ACHP, responding to the FAA's request for review of the FAA's HAVO ATMP determination:

> The FAA recognized that noise from air tours can be disruptive to traditional practices, and [but] reiterated its assertion that these effects are temporary and transitory in nature, and would not result in a diminishment of the characteristics of the properties that qualify them for inclusion in the NRHP.

Though the ACHP disagreed with the FAA's determination of "no adverse effects" from the coastal overflights at HAVO based on the *possibility* of adverse noise impact, not actuality, the ACHP did not disagree with the FAA's observation re. de minimis effect of short overflights.

Buttressing this remark, in Julie Marks letter of rebuttal to the ACHP's opinion, the FAA restates and reaffirms the remarks of Judith Walker in her letter to the ACHP of July 24, 2023:

> While the FAA noted that there were noise increases along the Coastal Route in assessing the effects of the undertaking, individuals might only experience minor noise increases for an average of two minutes per day on days when flights are allowed to fly. **Therefore, the FAA did not find that the noise increases comprised an adverse effect** because the increases were minor and infrequent and would not diminish the integrity of the historic properties in the APE. (Emphasis added.)

Neither is noise a factor of realistic objection at BAND; the White Report makes this obvious. Therefore, by NPS logic (see above) neither is air tour presence. If presence is not an issue, then invasion of personal privacy and interruption of sacred ceremonies cannot be realistic objections, either. The FAA obviously agrees in theory, both with regards to air tour noise and physical presence.

On page 14 of the FAA's March 27, *Finding of Effect* letter re. HAVO, under title of *Assessment of Visual Effects,* the FAA says:

> Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the agencies [FAA and NPS] considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualifies it for inclusion in the National Register. Aircraft are transitory elements in a scene and visual impacts tend to be relatively short. While there may be an increased number of flights along the coast and the Kahuku Route under the ATMP, overall flights in the ATMP planning area will be reduced. **The short duration and low number of flights make it unlikely a historic property would experience an adverse visual effect from the undertaking.** (Emphasis added.)

This statement, the theme of which is repeated over and over by the FAA, constitutes a synthesis of all FAA opinions previously cited. Southwest Safaris has enumerated the same arguments with respect to its even shorter and less frequent flights over BAND, quoting different sources but arriving at the same conclusion.

If the FAA's opinion regarding "no adverse impact" for air tours over the coastal route at HAVO is justifiable, then Southwest Safaris' arguments validating air tours at BAND that are even shorter are all the more credible.

Errors re. Noise Modeling Technology

I have argued on page 5 of my August 11 letter ("4th Response to Request for Concurrence on Sec. 106 re. BAND ATMP") that the use of noise modeling technology does not satisfy the requirements of Sec. 808 for use of "reasonable scientific methods." In interest of brevity, I will not repeat my arguments here. However, I direct the reader's attention to a FAA Memorandum, dated June 13, 2018, titled "Noise Screening Assessments," which SWS just became aware of. It is still active.[11]

In general, the Memorandum is intended to "clarify existing FAA policy and guidance on noise screening assessments and the appropriate use of noise screening tools and methodologies." The Memorandum makes it abundantly clear that noise screening tools and methodologies afford only approximate analysis of air tour noise impacts, and are not appropriate for detailed EA or EIS analysis presented to the public. Therefore, the FAA has chosen to use AEDT (Version 3e), instead, as that constitutes "approved" analysis technology. The FAA does not say who approved it.

Regardless, the Memorandum makes it abundantly clear that noise modeling … irrespective of the technology incorporated, whether noise screening or technical noise analysis (AEDT) … is not science. The inadequacies of AEDT technology logically follow the shortcomings of noise screening. Had Congress wanted to allow reliance on AEDT analysis of air tour noise, it could have easily specified to that effect in the Act (i.e., done so expressly). This is a noticeable omission, but *not* by oversight. Reliance on AEDT technology is *not* allowed under NPATMA any more than reliance on noise screening. In any case, the data fed into either modeling tool would have to be "pertinent," defined by reason to mean "current, comprehensive, relevant, accurate, and science-based." Both noise modeling methodologies used by the FAA (noise screening and AEDT) fail to make use of "pertinent" data at BAND, so the outcome from noise modeling at BAND is flawed from the outset, irrespective of the computer programs used for analysis.

When one looks at the White Report, which analyzed all existing noise impacts at BAND based on 2012 field research, the discrepancy between AEDT analysis and scientifically-based results are immediately obvious.[12] The White Report reveals that air tour noise is so low as to have no statistical merit as basis for determination. It is de minimis, not worthy of discussion.

[11] See http://www.faa.gov/sites/faa.gov/files/air_traffic/environmental_issues/environmental_tetam/screening-memo.pdf.

[12] SWS thoroughly discussed this observation in its letter of May 19, bottom paragraph and in its letter of August 7, 2023, "Environmental Analysis" section, page 10.

It appears, based on the inadequacies of noise technical analysis and on Congressional opinion and on the White Report wherein actual science was used to gather and interpret data, that the FAA has no legitimate numbers to show adverse impact from excessive noise from air tours at BAND. Therefore, the FAA has no case for not allowing Alternative 1, "No Action," as the appropriate ATMP option of choice.

Errors re. Special-purpose Legislation

On September 12, 2019, the FAA published a Memorandum on the "Use and Documentation of Categorical Exclusions (CATEXs)." Again, Southwest Safaris also only became aware of this document a few days ago. One of the subjects addressed in the Memorandum is "extraordinary circumstances."

Extraordinary circumstances are factors or circumstances in which a normally categorically excluded action may have a significant environmental impact.

After publishing the first of two draft BAND ATMPs, the FAA determined that there existed the *possibility* for "significant environmental impact" as a result of allowing air tours over BAND. Therefore, the FAA withdrew its first draft and created a second (now current) draft of the ATMP wherein the "preferred alternative" is "no flights allowed." The FAA specifies on page 2 of its Memorandum, under "Extraordinary Circumstances," that, in order to determine extraordinary circumstances exist, special processes have to be involved. These include noise screening, preliminary analysis, consultation, and consideration of special purpose laws. The FAA appears to have performed the first three at BAND. However, the FAA failed to perform the fourth requirement under the Memorandum and under NPATMA. The FAA directive on page 2 of the Memorandum states that:

> Several of the circumstances [situations that require further consideration before using a CATEX to satisfy NEPA] refer to special purpose laws; if these apply to a proposed action, it may be necessary to complete the process under that law ***before*** determining if there are extraordinary circumstances. (Emphasis added).

The first item in the list of Extraordinary Circumstances is "an adverse effect on cultural resources protected under the National Historic Preservation Act of 1966, as amended, 54 U.S.C. §300101 et seq." The second item of possible causal impacts includes "noise sensitive areas within national parks." Both criteria are relevant for the BAND ATMP. The Memorandum of policy stipulates that "several of the circumstances [cited above] refer to special purpose laws." In that case, the Memorandum directs, "if these apply to a proposed action, it may be necessary to complete the [special purpose] process under that law ***before*** determining if there are extraordinary circumstances." (Emphasis added).

NPATMA is a "special purpose law." It directs the application of NEPA and NHPA. Section 808 of the Act requires sound studies to be conducted using reasonable scientific methods *before* any determination can be made regarding air tour impact on a unit of the NPS system. The

FAA's Memorandum stipulates the same. With respect to the draft BAND ATMP, the FAA has disregarded the ACT (Section 808) as well as its own directive.

The FAA's Memorandum thus agrees with the argument of Southwest Safaris that NPATMA is the controlling legal authority with respect to ATMPs. The Act takes priority over NEPA (re. CATEX considerations[13] plus noise-study exemptions contained in §1505.21 and §1505.23) and NHPA (re. conditions necessary to satisfy "Assessments of Adverse Effects," §800.5).

Either the FAA withdraws its current draft BAND ATMP and starts over by performing current science-based sound studies at the Park … which studies will just prove all the more the nonexistent sound impact of air tours at BAND… or the agency needs to get a ruling from a judge on the jurisprudence of Primacy of Law with respect to the ATMP process for BAND. The former is required to satisfy Section 106, the latter to satisfy NEPA. Both are required to satisfy NPATMA.

Errors re. Consistency of Agrument from Park to Park

Southwest Safaris argues that the same general arguments of principle that are used by the FAA in one park must apply to all parks, especially where theories of noise physics and general aircraft presence are concerned. The FAA cannot apply the principle of de novo review on a park-by-park basis to matters relating to agreed-upon science.

Conclusion

Southwest Safaris has submitted nearly 100 pages of argument to the FAA, documenting the flaws in the manner in which the agency is implementing the ATMP process for Bandelier National Monument. SWS' objections include operational, environmental, and legal analysis. The FAA's legal shortcomings are both substantive and procedural. Of major consequence in the current instance, the FAA has, amongst other errors, made a major procedural mistake in the draft BAND ATMP by not including a fourth alternative, as required by law (40 CFR §1502.1 and §1502.14), namely the option of a voluntary agreement. It appears to be too late now to correct a decision which, Southwest Safaris alleges, was not a mere oversight.

Because of the power of law, reason, and administrative discretion, Southwest Safaris asks the FAA one more time to stop the decision to implement the FAA's "preferred alternative," namely "No Flights" over BAND, until a judge can decide on the merits of the ATO's arguments. If necessary, Southwest Safaris is prepared to petition the Appeals Court to issue a restraining order blocking the implementation of an adverse determination until matters of law are settled. A likely decision in favor of a restraining order by the Court would be highly prejudicial against a

[13] See FAA Memorandum, September 13, 2019, E*xtraordinary Circumstances*. Here the FAA states: ". . . special purpose laws; if these apply to a proposed action, it may be necessary to complete the process under that law before determining if there are extraordinary circumstances."

determination in favor of "No Flights" over the Park. A restraining order would also be the appropriate opportunity to demonstrate deliberate conspiracy by the agencies to defraud the court[14]. I am hoping that this will not be necessary.

My solution to this seemingly hopeless argumentative entanglement is for the FAA to decide in favor of Alternative 1, "No Action." This will satisfy the court, which doesn't seem to care how the FAA decides any particular choice of outcomes for any particular park. Environmentalists, of course, will challenge the decision, but the FAA can justify its choice of action on the basis of "clean hands," avoiding the possibility of wrath of the Court if SWS sues for a decision against the FAA. This strategy will buy all parties more time in which to make a well-considered finding. The FAA has already engaged in a similar procedure in Hawaii, re. HAVO., so precedent has been set, which SWS believes the Court will honor.

In closing, it is the opinion of Southwest Safaris that the agencies (FAA and NPS) have not fairly and openly presented the operations of Southwest Safaris to the Pueblo tribes, which have expressed strong opposition to the company's air tours. Furthermore, indirectly and unknowingly, through the FAA's own arguments in letters to the ACHP concerning HAVO, the FAA has agreed in theory with the fact that Southwest Safaris' air tours are producing no harm to the Park, or to the Tribes, or to the environment. The FAA's own sound study (White Report) provides proof. Moreover, in the opinion of SWS, the agencies (FAA and NPS) made a grievous mistake by counseling the Tribes to strenuously object to the overflights, without presenting the Tribes with the obvious observation of de minimis impact. Correcting this error with the Tribes might well prove to be a greater problem for the agencies than convincing the Court not to grant a petition of SWS for injunction. In any case, under the circumstances, a decision by the FAA in favor of Alternative 1 for BAND would be the equivalent of the agency's decision in favor of Alternative 4 for HAVO.

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[14] Southwest Safaris alleges that the FAA and NPS (the agencies) withheld critical information from the U.S. Court of Appeals, District of Columbia Circuit, when challenged by the Court to justify failure to comply with NPATMA in a timely manner. See letter of SWS to Volpe National Transportation Systems Center, August 7, 2023, sections "Legal and Logical Analysis", page 17, and "Historical Analysis", page 35.

Southwest Safaris alleges that the FAA failed to inform the court that the agencies knowingly and deliberately ignored mandate of Congress that the agencies conduct pertinent (defined by reason to mean "current, comprehensive, relevant, accurate, and science-based") sound studies at National Parks and Monuments before implementation of respective ATMPs. By not complying with Section 808, the agencies have ignored Act of Congress, disregarded Primacy of Law, failed to perform due diligence, abused power of agency discretion, and deprived air tour operators of due process/civil rights.

Moreover, Southwest Safaris alleges that the agencies used the Court to force the FAA to do what the agencies could not have accomplished on their own, "forcing" the agencies to ignore Section 808 … because the Court allowed no time to comply … and "compelling" the FAA and NPS to disrespect the Will of Congress … by dismantling the air tour industry in the interest of expediency without first performing pertinent noise studies … neither of which duplicitous acts the FAA could have accomplished alone by deconstruction of law.

It is the hope of Southwest Safaris that this matter of decision can be put to rest without the intervention of the Court. Ultimately, SWS submits, force of agency will not prevail over reason of law, referring to the relationship between NPATMA, NEPA, and NHPA.

Thank you for your continued consideration.

Sincerely,

Bruce Adams

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Ms. Judith Walker
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration
Washington, DC

October 1, 2023 — 7th Response to Request for Concurrence on Sec. 106 Draft BAND ATMP

Dear Ms. Walker:

This is my SEVENTH letter of response to your request for evaluation of the FAA's proposed finding of "no adverse effects" from implementation of Alternative 2 of the Bandelier National Monument (BAND) Air Tour Management Plan (ATMP). This option would prohibit air tours from operating over BAND (or "the Park"). I am writing under permission of "continuing consultation." You were confused by some of the points I raised when we last talked and asked if maybe I could clarify them. I appreciate the opportunity.

In our phone consultation of September 26, 2023, we covered some important items of difference between the FAA and Southwest Safaris (SWS). Unfortunately, there were many more to which we were not able to get. I would encourage you to carefully read my last letter of September 25, as it explains and amplifies many of the arguments I have made before, but in light of new letters and memos composed by the FAA of which I just recently became aware. The letter, which you had not had time to read when we spoke, will help us, I believe.

Please consider this letter to be a continuance of my Sept. 25 letter. I will resume where our phone conversation left off.

Errors re. Controlling Legal Authority

I wish to restate and summarize, in abbreviated explication, the argument I am making with regards to the theory of Primacy of Law.

The principle of Primacy of Law directs the order of application of laws. In general (exceptions always exist), where multiple laws affect a result, course of action, or determination, the laws must be satisfied in accordance with the most controlling to the least. Sometimes laws must be complied with in parallel, being of equal weight and application. In this case, the laws would be applied simultaneously, each law being complied with in accordance with its own vertical hierocracy of stipulations. This is known as simple legal logic.

At other times, where complex legal logic is involved, multiple applications of law must be complied with vertically. In this situation, one law activates another in "if … then … else" fashion.[1] In this case, the demands of the greater law control the application of the lesser law. Statutes that call into effect other statutes become the greater law, that is, the controlling legal authority. The controlling statute becomes the gatekeeper of decision, determining when and how the next level of law must be employed. The controlling statute must be implemented before the controlled statutes can be activated; controlled statues cannot be implemented on their own, unless the controlling statute contains exception clauses allowing to that effect.

The latter situation applies to the creation and implementation of Air Tour Management Plans (ATMPs). Congress enacted the National Parks Air Tour Management Plan of 2000 (NPATMA, or "the Act") in order to authorize the creation of ATMPs. Terms and conditions of the plans were established in the Act. The Act is very complicated, calling for certain steps of implementation to be performed in a prescribed order and fashion.

NPATMA calls into effect the application of the National Environmental Policy Act (NEPA). Without NPATMA, NEPA would have no application to the undertaking, the purpose of NEPA being environmental analysis of the proposed ATMP. Until the process of creating an ATMP is

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[1] NPATMA, technically speaking, is somewhat difficult to understand and apply because it is predicted upon a hypothetical syllogism. Its implementation is contingent upon a disguised conditional argument. Statements of conditional argument make up a loosely defined family of deductive arguments that have an if–then statement … that is, a conditional … as a premise. The conditional has the standard form **If P then Q**. When an If…Then...Else statement is encountered, the condition is tested first. If the condition is True, the statements following Then are executed. If the condition is False, each IF statement (if there are any) is evaluated in order and the result is redirected.

In the case of NPATMA, the "if any" clause announces the conditional. In other words, NPATMA actually reads: "If it is true that circumstances exist whereby air tours produce an adverse impact on persons and property on the ground, then corrective measures must be employed." NEPA is called into effect, which subsequently works with NPATMA to call NHPA into play. NEPA and NHPA are activated, but are limited to the terms and conditions of NPATMA regarding sound studies. If the conditional is false … meaning that air tours cannot be shown to produce adverse impacts on persons and property on the ground … then the "else" determination of "no change" is made regarding implementation of the ATMP, and NEPA and MHPA are considered dormant in effect. NEPA and NHPA are dependent on NPATMA as the controlling legal authority regarding their activation and implementation.

commenced, NEPA lies dormant. Once cleared by NPATMA to initiate an ATMP (i.e., a federal undertaking), however, NEPA, in turn, in conjunction with NPATMA, calls into effect the National Historic Preservation Act (NHPA).[2] So, in the present instance, the ATMP processes is initiated by NPATMA; that Act triggers NEPA, which in turn starts NHPA. Without NEPA, NHPA would have little authority re. ATMPs, as NEPA's Environmental Analysis confirms the "if any" determination of NPATMA. NHPA cannot *initially* act on its own as stand-alone legislation used to create actions affecting ATMPs, any more than NEPA can.

In this sense, NPATMA "controls" NEPA and NHPA. Both NEPA and NHPA are valid laws which must be applied in their own right. However, the way they are applied is directed by the controlling legal authority, in this case, NPATMA. NPATMA controls the manner in which NEPA and NHPA achieve their directed purposes.

NPATMA has a prime directive and a secondary related directive, both derived from the stated objective of the Act. The relevant statute, 49 USC §40128(b)(1)(B), stipulates:

> Objective.-The objective of any air tour management plan shall be to develop acceptable and effective measures to mitigate or prevent the significant adverse impacts, **if any**, of commercial air tour operations upon the natural and cultural resources, visitor experiences, and tribal lands. (Emphasis added.)

The first objective of NPATMA, one that *must* be fulfilled, is to determine if any significant adverse impacts from air tours at a particular park affect persons and property on the ground. The interjection of the "if any" wording is not a casual remark. The "if any" question must be satisfied before the Act can be employed to affect a determination as to the type of ATMP that will be employed for any particular park. Only after the "if any" question is resolved can NPATMA make such a determination and empower NEPA and NHPA. If there are no significant adverse impacts from air tours at a given park, then NPATMA (and, therefore, NEPA and NHPA) has no power to direct an ATMP to curtail or eliminate air tours over that park, there being no reason to do so. In this case, the ATMP for the respective park must make a determination of "No Change" in the way current air tours are being conducted. This is the logical application of the stated Will of Congress.[3]

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[2] NHPA is activated in a two-step process. First, by NPATMA when the Act determines that the "if any" clause justifies proceeding with an ATMP. The "if" condition is tested by implementation of sound studies based on "reasonable scientific methods" and "pertinent" data. Second, after satisfying this test (calling into play an "undertaking") and after the implementation of NEPA, the Environmental Analysis prepared by NEPA must support a determination that adverse impact from air tours could be inflicted on environmentally sensitive cultural properties by air tours. Without such a NEPA finding, Section 106 investigation is "effectively" stopped (negated) for lack of concurrence. Without NEPA, a NHPA decision would still have "force of presence," but not "effect." The law gets complicated.

[3] See my letter of August 7, 2023, page 2, *Statement of Hon. John J. Duncan, Jr., a Representative in Congress from the State of Tennessee*.

The secondary objective of NPATMA … there being more objectives, but they must be addressed in prescribed order … is to stipulate the type and manner of methodology that will be used to assess the "if any" question. To this end, NPATMA calls into effect Section 808 of the Act.

Section 808 of the Act stipulates that:

> *Any methodology* adopted by a Federal agency to assess air tour noise in any unit of the national park system (including the Grand Canyon and Alaska) *shall* be based on *reasonable scientific methods*. [Emphasis added.]

Section 808 of the Act *must* be employed in order to satisfy the "if any" question. Without answering the "if any" question, the Act cannot go forward… meaning that an ATMP cannot be introduced for lack of cause (program decision). In this case, The "if" component of the "if … then … else" syllogism would not have been satisfied, causing the Act to freeze like a computer program.[4] Again, I argue, without first complying with Section 808, the Act has power only to prohibit all flights over all parks; NEPA and NHPA cannot otherwise be activated to make a decision contrary to "no change" or, in case the legal syllogism (see note 1) fails entirely, "no flights," the default logic.

Moreover, NPATMA makes it mandatory under NEPA to use "reasonable scientific methods" for investigation of noise impacts on units of the National Park Service (NPS). No other methodology will suffice. The "*shall*" clause of Section 808 controls NEPA, because NEPA is concerned with the environmental analysis of any undertaking. Section 808 negates the power of NEPA's §§1502.21, .23, which would otherwise exonerate the FAA from performing any disciplined current sound studies at all.[5] Under NPATMA, science-based sound studies must provide the measure of need for corrective action to mitigate or prevent alleged adverse impacts of air tours. Because NPATMA controls the application of NEPA, and NEPA assists NPATMA to call NHPA into effect, and because NHPA is silent on the subject of sound studies, the "*shall*" demand of Section 808 is the controlling legal authority for noise studies for all three statutes (NPATMA, NEPA, and NHPA).

The FAA has failed to comply with the noise study requirements of NPATMA, which mandates using "reasonable scientific methodology" and "pertinent" data[6] **before** either NEPA or NHPA can be activated.

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[4] In this situation, no flights would be allowed over any park for lack of ATMP authorization of same.

[5] See my letter dated September 25, 2023, page 3, top, *6th Response to Request for Concurrence on Sec.106.* In that letter, I argue that "Section 808 negates any authority of NEPA's 43 CFR §1502.21 … wherein NEPA excuses incomplete or unavailable information and allows theoretical approaches or research methods instead of science-based studies … and §1502.23 … wherein NEPA allows agencies to make use of existing data and resources instead of pertinent, scientifically-researched data. NPATMA makes it mandatory to conduct sound studies, based on 'reasonable scientific methods.' This agency-specific power of Act by itself asserts the authority of NPATMA over NEPA."

[6] In Southwest Safaris' letter to Volpe of August 7, 2023, on page 17, SWS defined "pertinent" sound-study data to mean "current, comprehensive, relevant, accurate, and science-based."

Because NEPA has not yet been called into effect by NPATMA, the latter statute having been restrained by NPATMA, the draft BAND ATMP proposed finding under NEPA of "no flights" (Alternative 2), is premature and must be withdrawn by the FAA. And because NHPA has not been called into effect by NPATMA and NEPA combined, Section 106 is also ineffective in the present circumstance. Neither NAPA nor NEPA may be reintroduced until the FAA complies in full with Section 808. So, without first conducting scientifically-based sound studies, using pertinent data, the FAA has no authority under Section 106 of NHPA to ask for concurrence with the facts (namely, "no adverse effect") in support of Alternative 2, "No Flights."

NPATMA is based on the mandate for inductive reasoning. NHPA is based on the requirement for deductive assertion. Under the former, all allegations and conclusions must be documented by "reasonable scientific methods;" under the latter, mere allegations of adverse effect are considered by the Advisory Committee on Historic Property (ACHP) to evidence potential impact, requiring efforts by the FAA to mitigate or prevent. Without NPATMA controlling the output of NHPA, therefore, the two statutes are in conflict, which is a violation of the principle of Continuity of Law[7], which the FAA, I allege, is trying to exploit.[8] I assert that NPHA is applicable to ATMPs, but Section 106 does not stand alone. After being implemented by NEPA, NHPA can make allegations of adverse impact from air tours on persons and property on the ground, but all such allegations must be substantiated by science as to existence in fact, per NPATMA's Section 808, not potential of effect, re. 39 CFR §800.5(a)(1) and §800.5(a)(2)(V).

This logic is consistent with the principle of Primacy of Law.

The FAA undoubtedly will rejoin that the principle of Continuity of Law cannot be used under Section 106, because under Sec 106 the FAA is not making a determination requiring activation of NHPA, just stating a fact, that there can be no adverse effects from air tours on a park if no air tours are allowed over the park. I make the following counter-rejoinder.

In the first place, the FAA's observation … that there can be "no adverse effect" to BAND if all air tours are prohibited … is useless and absurd and serves no purpose but to obstruct objection to the FAA's pending finding under NEPA in favor of Alternative 2, "No Flights."

In the second place, to actually address the FAA's rejoinder, the agency is making an academic distinction without a legal difference. The effect of the proposed finding by the FAA is to give Section 106 the power to prejudice the outcome of a decision under NHPA such that the ultimate decision for Alternative 2 is a predetermined certainty. To ask for concurrence to the finding of "no adverse impact" constitutes abuse of administrative action and denial of due process,

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[7] The principle of Continuity of Law means that one law cannot horizontally or vertically contradict another.

[8] The FAA's implementation of ATMPs violates the principle of Continuity of Law, wherein the FAA incorrectly uses one law (NHPA) to "horizontally" contradict another (NPATMA), arguably claiming that the two laws have equal authority. In fact, the statutes, considered by themselves, are incompatible. Under NHPA, no sound studies are required to assess an undertaking; under NPATMA, the sound studies must not only be conducted, they must be performed using "reasonable scientific methods" and "pertinent" data. Moreover, the FAA incorrectly claims, under authority of NEPA, that the agency is not required to conduct actual current sound studies. The FAA is everywhere violating the principle of Continuity of Law, picking and choosing which law best suits its purpose.

because the contrived "statement of fact" controls the outcome of the determination for Alternative 2 as the preferred option, there being no negative consequence to the decision and, therefore, no defense against it. This artful employment of sophistry is contrary to theory of American law, whereby a defendant is innocent until proven guilty. Under the FAA's application of law, there is no way an ATO can ever disprove a negative allegation, that taking away the right of operation cannot have adverse impact on those the operation might affect. For example, using this logic, that taking away a person's civil rights will have no adverse impact on other citizens whose actions the first citizen might affect, Americans would have no rights at all, and there would be no Constitution. The logic of the FAA's Request for Concurrence" to a finding of "no adverse impact" is legally absurd and an afront to logic.

I allege, therefore, that the FAA has taken a misdirected approach to the ATMP process, by assuming that the three statutes (NPATMA, NEPA and NHPA) all run parallel with one another and have equal power of decision and effect. This miscalculation of legal process has led to a breakdown in Reason of Law[9] and from there to the collapse of Rule of Law[10] and from there to an irreconcilable difference between the FAA and Southwest Safaris. I believe that the dispute over theories of jurisprudence can only be resolve by the courts at this point. The FAA has too much invested in the misdirected ATMP process to reverse course on its own.

SIDEBAR

Starting with NPATMA and ending with Section 106, I allege that the FAA has rejected the principle of Primacy of Law in order to deprive ATOs of due process. By holding to the theory that implementation of ATMPs involves three parallel and equal laws, not one vertical arrangement, the FAA can make negative allegations regarding air tours without having to prove the assertions using "reasonable scientific methods" based on "pertinent" data. By so doing, the FAA denies ATO access to the only right of defense they have under NPATMA, sound studies. Under NEPA, considered by itself, the FAA is not required to conduct sound studies. Also, under NHPA, mere accusations serve as evidence of adverse impact. To add insult to injury, the FAA tries to force ATO under Sec. 106 to concur with a logically loaded determination that forbidding all air tours over a park cannot adversely affect the park, itself, forcing ATOs to testify against themselves. In fact, the whole FAA legal construct is anti-Constitutional, especially Section 106. Without the requirement for sound studies, the entire ATMP initiative assumes that an ATO is guilty until proven innocent. Proof of innocence is made nearly impossible by the FAA's not allowing ATOs to present verbal argument "on the record" to a review board and by having no independent decision-making board to which to appeal the logic of the ATO's case.

[9] Reason of Law refers to theories of jurisprudence that are generally accepted as being logical, applicable, fair, consistent, and necessary for a fair determination.

[10] The FAA, I allege, has conflated NPATMA, NEPA, and NHPA so that the agency can pick whatever law it wants in effort to accomplish the implementation of ATMPs as fast as possible, in order to satisfy a writ of mandamus from the U.S. Court of Appeals, District of Columbia Circuit. The result has been compounding legal chaos, reckless destruction of small businesses, and denial of due process to air tour operators.

The requirement for ATOs to present written arguments only (disallowing verbal objection) against an ATMP to the very board (the ATMP Team) that will likely render a decision against them is unreasonable at best and obstructive of due-process at worst. Most ATOs are not able to create formal legal argument, lacking the time and financial means to do so. There needs to be a way for them to present verbal legal disagreement with NEPA, just as there is with NHPA through the process of consulting. There also needs to be an independent board of review for NEPA-related determinations, just as the ACHP acts as a review board for agency decisions under Section 106.

I now turn my objections to matters of operational an environmental concern under NHPA.

Errors re. Finding of Adverse Effect

I would like to add a few observations to my recent arguments concerning adverse effects under Section 106.

NHPA concerns itself with questions of adverse impact such as would affect a historic property's qualification for listing on the National Historic Register. Several additional comments come to mind beyond those of my September 25 letter.

The FAA asserts that Bandelier National Monument, itself, is an historic property, based on the density of historic sites in the Monument.[11] This observation is only partially true. Most of the sites no longer qualify for inclusion because of diminishment of physical properties, lack of current use, change in qualifications necessary for current listing, and lack of justification in the first place.[12]

With regards to the last item, qualification for listing on the National Register, the FAA claims under Section 106 that the historic sites at BAND are threatened because, under NHPA, it is enough to claim adverse effects by merely alleging the actual or possible diminishment of the integrity of "setting, . . . feeling, or association" of a park's historic resources per 36 CFR §800.5(a)(1). And under NHPA, the FAA claims, it is sufficient to simply allege that air tours within a park either result in or have the potential to result in an introduction of "visual, atmospheric or audible elements that diminish the integrity of a property's significant historic features" per 36 CFR §800.5(a)(2)(v). In the case of Hawaii's HAVO, however, the FAA disagrees with both assessments in a like circumstance.

On page 3 of Ms. Julie Marks (Executive Director of the FAA office of Environment and Energy) letter to the Advisory Committee on Historic Properties (ACHP), the FAA makes a very interesting remark:

[11] On line 219 of the draft BAND ATMP, the FAA says that the Park "is considered a traditional cultural property in its entirety."

[12] See my letter of August 11, 2023, "Fourth Response to Request for Concurrence on Sec. 106" re. BAND ATMP in which I discuss in detail the lack of qualifications concerning historic sites at BAND listed in the National Register.

> Air tours have been operating over Hawai'i Volcanoes National Park for more than 40 years and were operating when most of the historic properties in the APE were determined eligible for or listed on the National Register. Most historic properties in the APE were not determined eligible in an ideal setting devoid of air traffic or modern visual and noise intrusions. The ATMP, which reduces existing air tours over the Park, will therefore not diminish the integrity of the historic properties in the APE.

Apparently, in HAVO, under ideal circumstances "devoid of air traffic or modern visual and noise intrusions,' most historic properties in the HAVO APE were not deemed eligible for listing on the National Register. Why the historic properties were not deemed qualified for listing we are not told, but we can surmise from the context of the paragraph. It is highly probable that the properties attempted inclusion merely for reasons of "setting, . . . feeling, or association" with a park's historic resources per 36 CFR §800.5(a)(1), and for reasons of "visual, atmospheric, and audible elements" per 36 CFR §800.5(a)(2)(v), as discussed above. They were undoubtedly excluded from listing because the existence of air tours over the sites predated application for admission to the National Register, so the properties could not claim uniqueness of pristine physical environment as basis for inclusion in the National Register.

At any rate, the same argument applies at BAND. Air tours have been conducted over the canyons west of the Rio Grande ever since the 1920's. The tours were originally conducted in bi-planes and have been conducted ever since. The general environment for BAND, including air tours, has not changed over 100 years. The FAA cannot claim that the introduction of air tours by the current ATO in 1974 has impacted the historic sites in any way so as to degrade their qualification for listing in the National Register any more than was the case when originally entered into the NR. History, itself, negates the claim that air tours are now suddenly causing an adverse effect on BAND's historic properties… such as to "alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's locaton…setting…feeling, or association" … relative to the day of original application for listing. See 36 CFR §800.5(a)(1). My argument is consistent with that of the FAA at HAVO.

Moreover, the FAA's claims regarding the number of cultural sites existing in the APE is highly exaggerated. In Attachment C, page 15, of the FAA's April 20, 2023, "Request for Concurrence," the FAA claims that:

> "The district [BAND Archeological and Historic District] contains 32 contributing buildings, 90 contributing structures, and 2,974 contributing sites. . . The number include the archaeological sites that exit within the boundary nominated to the National Register in 1970 [well after air tours had commenced in the 1920's].

The FAA, itself, refutes the quantity of contributing sites alluded to above. On page 7 of the same document, the FAA states:

> There are thousands of additional below-ground archaeological sites within the [BAND] APE; however, these below-ground archaeological resources are not further described in this letter because feeling and setting are not characteristics that make

> these properties eligible for listing on the National Register and there is no potential for the undertaking to affect these resources.

The above citation appears to be talking about the same sites listed in Exhibit C. The FAA seems to be admitting to my remarks in my August 14 letter, in which I said that very few of the historic BAND sites listed in the National Register would qualify today. If my observations are correct, this is an amazing confession which undermines the FAA's whole Section 106 argument and its NEPA-related assertions for adverse impact re. the draft BAND ATMP. At the very least, the statement means that the FAA is just throwing numbers around without any factual basis, so its arguments relating to significant adverse impact on historic properties carry no credibility at all. This lack of factual argument largely negates the FAA's main argument for air tours violating sacred and cultural space.[13]

The significance of the above remarks carries over into the NEPA side of the ATMP argument. If there are only a few historic sites worthy of admission to the National Register, then the FAA's arguments in the draft BAND ATMP … that the number of sacred sites that deserve protection is so great as to disallow all flights over the Park … can be summarily dismissed as ill-founded.

Assuming that there are only a dozen active sites in the BAND APE that actually deserve protection, and further assuming that most of these sites lie in the northern half of the Monument, then it would be very easy to pick routes that would have minimum impact on cultural sites. If there are 33,676 acres in the Park,[14] and only 12 sacred historic sites that need protection, then there would be 2,806 acres per site of open space, which could easily be navigated without violating the concept of "sacred airspace."[15] In any case, the southern end of the Park would be almost entirely open.

Another related comment deserves mention. Agencies are supposed to have first-hand experience with the historic properties they are talking about. NHPA's 36 CFR 800.4(b)(2) addresses this topic. Section 106 regulation requires "an appropriate level of field investigation, taking into account the number of alternatives under consideration, the magnitude of the undertaking and its likely effects, and the views of the SHPO/THPO and any other consulting parties." In the FAA's April 20, 2023, Request for Concurrence, there is no mention of the FAA ever having conducted any level of field investigation. Had the FAA walked the Park, it would

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[13] Elsewhere, it would appear that the FAA actually agrees with my numbers and argument. In section 2.1 of the draft Environmental Analysis for the BAND ATMP, the FAA says: "The dense cultural landscape is comprised of over 3,000 ancestral sites, dozens of actively used shrines and sacred sites, and includes diverse ecosystems across an elevation gradient of nearly 5,000 ft." Of the 3,000 ancestral sites supposedly listed on the National Register, only two dozen, the FAA claims, are in active use today, at most.

[14] See draft BAND ATMP, line 42.

[15] See my letter of August 11, 2023, *4th Response to Request for concurrence on Sec. 106,* page 4. There, I state that 36 CFR §60.4, concerning Criteria for Evaluation re. inclusion in the National Register, "attaches no vertical column of airspace to any historic property. Therefore, cultural and ceremonial sites have no claim of trespass or intrusion of presence by persons or machines passing overhead either by foot or wing. This largely discounts the rest of the FAA's Section 106 objections to air tours over the Park." The FAA 's remarks, referred to on the bottom of page 8 of this letter … that the archaeological sites have no "characteristics that make these properties eligible for listing on the National Register… affirms my conclusion.

have been immediately obvious that the extraordinary claims of 3,000 cultural and religious sites were preposterous. The FAA never conducted any field studies or investigations, so the number of possible historic sites in the Park is questionable, at best. Moreover, Southwest Safaris, which regularly flies the park and makes observations of same, should have been considered a consulting party. SWS never received any request for consulting regarding the existence of claimed historic properties, or SWS would have informed the FAA that the properties do not exist except in collective memory.

Before any action under a "special purpose law" can begin, including that of Section 106, all of the requirements under that law must first be satisfied. Until this condition is met, requiring that the FAA conduct the necessary level of field investigations, including science-b sound studies utilizing "pertinent" data, the FAA must withdraw its "Request for Concurrence" under Section 106 until the studies have been completed.

Finally, in the FAA's Request for Concurrence of "no adverse effects" from banning air tours over BAND, the FAA makes the following remark at the bottom of page 7:

> The elimination of air tours within the ATMP planning area will reduce maximum noise levels at sites directly below commercial air tour routes compared to existing conditions. All historic properties within the APE would experience a reduction in noise from air tours.

Southwest Safaris takes particular exception to this finding.[16] It is not true that elimination of air tours within the ATMP planning area will reduce noise effects to historic properties.

In my letters of August 11 and 14, 2023, I stated to the contrary, that eliminating direct flights across the Park would actually increase the noise impact on all historic properties within the APE by a factor of 300%. During phone consultation that occurred on September 25, you asked me to show you the math involved in my computation of a three-fold increase for the noise created by circling BAND as opposed to flying over the Park in a straight line.

The formula for the circumference of a circle is C= πD, where D is the diameter. My computation calculates flying half way around the circle to circumnavigate the Park, which would be πD/2. Instead of cruising at 132 knots, flying to the west of BAND will require a steep climb, reducing my speed in climb to 80 mph, or 61% of cruise. Flying west, I would normally encounter a headwind of at least 10 knots, which by itself will reduce my ground speed by 8%, meaning that my round speed will be 92% of normal, just accounting for the wind. During the climb, my climb power (manifold pressure), and therefore noise, will be increased by 20%. The propeller RPM will also be increased to maximum allowable, further increasing the noise from my engine by an additional 20%. So here is the math: 3.1416/2/.61/.92(1.2)(1.2)=4.03. The calculation shows that my total increase in noise immediately outside the circumference of the Park will be four times that of a flight straight across the park, represented by the radius of the circle. I discounted the figure by 25% just to be conservative. My total claimed increase in

[16] See my letters of August 11, 2023, "4th Response to Request for Concurrence on Sec 106," page 5, and of August 14, "5th Response to Request for Concurrence on Sec 106, page 2.

noise exposure for the park, therefore, is a threefold increase in noise. That is significant. Because the prevailing wind at BAND is out of the west, this noise increase will be blown over the full extent of the park. On the other hand, by allowing SWS to continue to fly over the eastern and southern half of the Park for the majority of routes, the noise is mostly blown away from the Park.

On page 9 of the FAA's Request for Concurrence, the FAA makes the statement that:

> It is unlikely that the operator would continue to conduct commercial air tours of the Park by flying along the perimeter of the ATMP planning area because it is difficult to see the predominant features of the Park from outside the ATMP planning area. Since the operator cannot fly on the north side of the Park due to restricted air space, it is unlikely there would be new or different impacts in that area. Flights at or above 5,000 ft. AGL are unlikely due to the Park's elevation and safety requirements for unpressurized aircraft flying over 10,000 ft. MSL for more than 30 minutes. If air tours are conducted at or above 5,000 ft. AGL over the ATMP planning area, the increase in altitude would likely decrease impacts on ground level resources as compared to current conditions because the noise would be dispersed over a larger geographical area. Noise from air tours conducted at or above 5,000 ft. AGL would be audible for a longer period, but at lower intensity. Similarly, aircraft are transitory elements in a scene and visual impacts tend to be relatively short, especially at higher altitudes.

In rejoinder, Southwest Safaris claims that every Section 106-related assumption the FAA makes here is incorrect. In interest of brevity, I will only briefly comment on each of the errors.

First, if denied access to the Park, Southwest Safaris will definitely fly the circumference of the circle defined by the Los Alamos restricted area and the Park. SWS needs to cross the Park to get to more interesting geologic formations on the south and west sides. This fact means that the minimal noise that would have been generated over the southern and least sensitive areas of the Park, will be intensified (see math computations above) and transferred to the Communities of Los Alamos, the National Lab, and to the entirely of BAND, which adverse impact SWS has ardently tried to avoid. Second, flying the circumference will highlight the western views of the Park as well as the Jemez Mountains, so the route will have some advantages that might even lead to selling more air tours. Third, there is no need to fly above 10,000 feet on the west side of the Park, so flight above ground level will actually be substantially lower than if SWS were allowed to cross over the southern end of the Park. Flying around the Park to the west will increase the noise blown over the Park, not decrease it. The reality is that noise generated from air tours conducted on the west side of the Park would be audible for a longer period and at a higher intensity than lower flights (AGL) crossing BAND over the lower-altitude (MSL) middle and southern portions of the Park, where the landscape, itself, serves to block both noise propagation and aircraft noticeability.

Southwest Safaris has been conducting air tours across BAND for 49 years. During that time, this company has received no complaints of noise or aircraft presence from the FAA, the NPS, or from the Tribes. This is an amazing record, probably unique in all of the National Park Service. SWS is mystified as to why the NPS would want to throw out the research and methodology developed by the company when the results of prohibiting air tours over the park are going to

produce no net gain for anyone. Reducing zero noise/visual impact for Alternative 1, "No Change," to zero noise/visual impact for Alternative 2, "No Flights Allowed," makes no sense and denies the community of all the unique advantages of educational and "transformative experience" that air tours offer without adverse impact, a win/win combination for everyone. Southwest Safaris argues that its air tours across BAND fully meet all of the "if any" challenge of NPATMA and, therefore, that Section 106 of NHPA should never have been "effectuated" in the first place. Southwest Safaris claims that, under NPATMA, SWS is fully exonerated from accusations of abuse of Native Americans and diminishment of the value of historic properties as demonstrated by law, reason, and operation.

For all these reasons, Southwest Safaris alleges that the FAA, re. the draft BAND ATMP, has violated NPATMA, 49 USC §40128(b)(2), by relying on false facts and inconclusive evidence provided by NEPA's EA and NHPA's finding of "no adverse effect," causing the agency to reject a finding of "no significant impact" from air tours under Section 102 of NEPA, 42 USC 4332 (referring to the environmental impact statement attached to the draft BAND ATMP).

Southwest Safaris further alleges, re. the draft BAND ATMP, that the FAA has violated NHPA, 36 CFR §800.5, by prematurely proposing a decision of "no adverse effect" in its "Request for Concurrence" on a pending Sec. 106 determination and by improperly arriving at that decision contrary to reason, fact, and law.

Finally, Southwest alleges, re. the draft BAND ATMP, that the FAA has additionally, and most significantly, violated NPTMA, the controlling legal authority for NEPA and NHPA, by not complying with 49 USC §40128.808. This failure to comply led directly to the FAA's errors affecting the NEPA and NHPA decisions.

Southwest Safaris fears that the above matters of law can only be settled by the courts.[17]

Thank you for your continued consideration.

Sincerely,

Bruce Adams

Bruce Adams

[17] My objections to FAA ATMP rulemaking procedure have particular relevance to a case now coming before the U.S. Supreme Court. Beginning with the current session, the court in Loper Bright Enterprises v. Raimondo will weigh whether to overturn a landmark ruling from 1984 that gave federal agencies leeway to broadly interpret the law when the statute is not clear. It might be prudent to delay any further motions and decisions regarding the draft BAND and Canyon de Chelly ATMPs until the Court renders an opinion on allowable latitude of agency discretion regarding acts of Congress.

Southwest Safaris argues that the FAA has no latitude of discretion re. sound studies required by NPATMA. SWS maintains that the Act is explicitly clear with respect to mandatory application of Section 808. The FAA disagrees, claiming wide latitude of interpretation of law. Southwest Safaris respectfully asks the agency to reconsider.

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Washington, DC

October 10, 2023

8th Response to Request for Concurrence on Sec. 106
Draft BAND ATMP

Dear Ms. Walker:

This is my eighth letter of response to your request for evaluation of the FAA's proposed finding of "no adverse effects" from implementation of Alternative 2 of the Bandelier National Monument (BAND, or "the Park") Air Tour Management Plan (ATMP). This option would prohibit air tours from operating over BAND. I am writing under permission of "continuing consultation."

Upon reviewing the notes I made from our phone consultation of September 26, 2023, I discovered that I left one of your questions unanswered. You wanted me to show where in the FAA's "Request for Concurrence" of April 20, 2023 ("Request," or "the Letter") the FAA says, "The mere presence of air tours over the Park imposes adverse effects on cultural properties within the APE." I will address this question.

I assert that the FAA, in its above referenced Letter, made so many insinuations as to the allegedly inherent and unavoidable adverse effects of air tours … alluding, directly and indirectly, to the supposed fact that the mere presence of air tours over BAND ("the Park") is physically intrusive, spiritually offensive, and detrimental to cultural properties and traditional tribal ceremonies … as to have the equivalent effect of a direct statement of same.

The FAA starts its Request for Concurrence with an ***Introduction***. The last sentence of the introduction sets the background circumstances and underlying logic for the entire Request. The FAA states:

> Many commenters expressed opposition to the draft ATMP due to impacts to the cultural landscape. Commenters also referenced the sacred importance of the Park to tribal culture. Since the publication of the draft ATMP, and in response to objections from the public and tribes to continuing air tours at existing conditions, the agencies changed the draft ATMP to eliminate air tours within the planning area (see description of undertaking below).

The objections of the five Tribes referenced in the Letter … no other objections were presented or described… were to alleged but not substantiated future impacts involving "TCPs, ancestral sites, and shrines;" "sacred and cultural landscapes;" "sacred presence of the Park;" "traditional and ceremonial practices;" and violation of "tribal culture." No references were made by the Tribes to specific, documented, adverse impacts of noise or record of complaints of documented visual intrusions. The comments were all directed to the potential for adverse impact, not the actuality of it. Mentions of actual noise created over the Park were nonexistent. References to objectionable observation of physical aircraft was purely conjectural. Clearly, the commentors were complaining *no*t about the past and present reality of air tours over the Park, because the Tribes had never expressed any specific complaints of record, but to the general concept of air tours being allowed to fly over the Park in the future. Tribal complaints were aimed at potential adverse effects based purely on deductive assumptions as to the worst-case nature of air tours. Potential adverse impact is the same as theoretical adverse impact, which constitute a construct of the mind, not physical reality. Constructs of the mind equate with arguments of "mere presence." This thought paradigm is the essence of the complaints from tribal consulting parties.

The FAA took the tribal complaints of potential and suppositional adverse effects so seriously, in fact endorsing the theory of "mere presence,"[1] that the agency withdrew the first ATMP for BAND and replaced it with a second that forbids all air tours over the park ... consistent with the theory of "mere presence," the premise of which is completely intolerant of air tours under any circumstances. The FAA's Letter of Request endorses the "mere presence" argument by never disagreeing with the tribal allegations, and by acquiescing to the reissue of the draft BAND ATMP by issuing a proposed decision of "no adverse effect" which the FAA will use in support of said reissuance, and by tacitly endorsing the "mere presence" argument as the primary condition leading up to the Reguest for Concurrence, and by alluding to the "mere presence" argument throughout the Letter, implying that the "mere presence" argument is a statement of fact and a standard of decision. The Request for Concurrence is actually a request (demand), made in support of the draft BAND ATMP, that the ATO admit that the only way to eliminate the supposed innate adverse effects associated with air tours is to eliminate air tour overflights altogether, predicated on the circular theory of "mere presence."

[1]The theory of "mere presence" is brought forward by parties opposed to the conduct of air tours in any form or manner over units of the National Park Service. The theory of "mere presence" states that air tours, by definition, impose adverse impacts on persons and property on the ground, including religious and cultural sites and events, and that there is no way to lessen the impact of same, invasion of privacy in particular. According to this theory, all Air Tour Management Plans must completely ban all air tours of all types to eliminate any possibility for adverse effects in the future. The extremist theory asserts that any Plan that does not ban all air tours does not address "the problem" of air tours at all.

The Letter continues with a ***Description of the Undertaking***. The purpose of this section appears to be documentation of the fact that Southwest Safaris is conducting said air tours over the Park. All that remains to show ATO guilt for human-rights violation is to provide the evidence that the ATO's overflights are actually producing direct adverse impact on cultural properties.

The FAA provided the "evidence of guilt" in its ***Summary of Section 106 Consultation with Tribes***. In this section the FAA discusses letters from five Tribes in which the Native Americans present a litany of Section 106 objections to air tours over BAND, all based on assumed noise and visual impacts that are never documented but which allegedly *might* inflict irreversible damage on religious and cultural tribal values sometime in the future. The flights are said to "violate sacred landscape," "affect spiritual domain and presence," constitute "sensory intrusions," commit trespass of "cultural properties," and disrupt "the maintenance and revitalization of their [Indian] cultural knowledge, histories, and practices." These are all Section 106 allegations … vague and obtuse, wherein mere contentions substitute for evidence of fact … that the FAA is clearly aiming at Southwest Safaris (SWS), using the Tribes as a foil, to justify the "request" (demand) by the agency that SWS admit its own "guilt." All the allegations have, at their base, the assumption that air tours are innately damaging to the purpose and values of the Park by virtue of the air tours "mere presence." Otherwise, outside the allegation of adverse impact by "mere presence," the arguments of the Tribes have no substance for lack of evidence and specificity.

The FAA never says in its Request for Concurrence that the agency rejects the theory of "mere presence" that the Tribes were relying on. To the contrary, the Tribes were bringing forward objections taken straight out of the Section 106 regulations, 39 CFR §800.5(a)(1) in particular. The FAA was so moved by and sympathetic with the arguments that, as previously stated, the agency withdrew the original draft ATMP and issued a second that clearly was based on the theory of "mere presence" to support the statement that no flights over the park could possibly adversely impact the Park, for lack or presence. The FAA uses the theory of "mere presence" to support the agency's theory of "no presence,"[2] with no facts to confirm either. In other letters, Southwest Safaris has provided detailed argument that the FAA theory of "no presence" is false and misleading, based on actual facts.

I allege that the FAA was not entertaining a discussion of tribal accusations of air tours merely to record the concerns of the various Tribes for the record. If that were the case, the FAA would have disavowed under Section 106 any credence of the tribal concerns in the present setting. The real reason the FAA presented the arguments was to set the background reasoning for "inditing" the ATO for violation of human rights by merely offering air tours of any kind. The FAA abuses the authority of Section 106 by indirectly, but forcefully, bringing these allegations forward by means of the misguided and misdirected Request for Concurrence. The result is abuse of administrative process.

[2] The FAA's Theory of No Presence encapsulates the FAA double-negative syllogism, that "no air tours allowed over a National Park will have no adverse effect on the Park."

To sum up the complaints of the Tribes, the FAA says:

> They [the Tribes] consider the entire landscape of the Pajarito Plateau to be sacred and believe air tours are ***inappropriate*** and adversely impact the cultural landscape and TCPs throughout." (Emphasis added.)

The FAA, itself, goes to great effort *not* to make this kind of statement in reference to its own assertions, *but clearly endorses* the argument of "mere presence," nonetheless, by not expressly stating in the Letter that such allegations are not allowed under either Section 106 or the National Parks Air Tour Management Act (NPATMA, or "the Act").[3] Instead, the FAA gives credence to the allegations by including the tribal letters in the Request for Concurrence, where the presence of the tribal letters is entirely unnecessary to make a simple statement: namely, that the disallowance of air tours over Band cannot possibly cause adverse impact on the Park because there will be no air tours. The presence of the Tribes' letters is overtly prejudicial to the logic for the Request in support for the outcome of the undertaking … an ATMP which will ban all air tours over the Park. The presence of the letters unfairly predetermines the outcome of the Sec 106 process, all the letters being wrongly predicated on the "mere presence" argument.

In its ***Identification of Historic Properties*** section, the FAA says:

> The FAA is specifically considering whether air tours could affect the use of TCPs associated with cultural practices, customs or beliefs that continue to be held or practiced today. In so doing, the FAA has taken into consideration the views of consulting parties, past planning, research and studies, the magnitude and nature of the undertaking, the degree of Federal involvement, the nature and extent of potential effects on historic properties, and the likely nature of historic properties within the APE in accordance with 36 CFR 800.4(b)(1).

Obviously, the FAA does agree in this instance that air tours do adversely affect cultural sites and religious practices, otherwise the FAA would not have discarded ATMP #1 for ATMP #2 and would not have gone to the above-mentioned work of "taking into consideration" all the facts that would reinforce the conclusion that "the mere presence" of air tours is negatively impactful. The FAA does not have to overtly state that the "mere presence" of air tours is averse to the interest of the Park and to the Tribes whose interest the Park protects; the FAA's bias is everywhere apparent.

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[3] In contrast to the alleged, de facto, pro "mere presence" position of the FAA at BAND, the FAA specifically disallows arguments of "mere presence" at HAVO in the FAA's letter of September 12, 2023 to the ACHP (composed by Ms. Julie Marks), wherein the agency contests an ACHP decision. The FAA states on page 4:

> Though its reasoning is not clear, the ACHP seems to assume that air tour operations under existing conditions have an adverse effect on historic properties.3 Therefore, the FAA's undertaking must completely ban air tours to remove the adverse effect, and any action that does less than a total ban does not address the adverse effect of air tours. That view goes beyond the authority of the Section 106 process and its implementing regulations.

The FAA argues from both sides of the fence respecting "mere presence" theory; "pro" with reference to BAND and "con" in the case of HAVO.

In its ***Assessment of Effects*** paragraph, the FAA compounded the insinuation of adverse effects emanating from the "mere presence" of air tours. The agency said:

> The FAA, in coordination with the NPS, focused the [its] assessment of effects on the potential for adverse effects from the introduction of audible or visual elements that could diminish the integrity of the property's significant historic features.

The FAA states as a fact that there could be "potential for adverse effects" from the presence of air tours. The agency incorrectly conflates "potential" with "actual," implying yet again that the "mere presence" of air tours over a park is averse to the interests of the park, especially in regards to noise or visual notice. The FAA's negative insinuations towards air tours, based on "mere presence," go on and on.

If my rejoinder seems repetitive in this response to the FAA's opening question, it is because the FAA's underlying argument in favor of theory of "mere presence" comes to the surface over and over and needs to be exposed and countered each time.

Under the section of the Letter titled ***Assessment of Noise Effects,*** the FAA says:

> To assess the potential for the introduction of audible elements, including changes in the character of aircraft noise, the agencies considered whether there would be a change in the annual number, daily frequency, routes, or altitudes of commercial air tours, as well as the type of aircraft used to conduct those tours. The level of commercial air tour activity under the ATMP [whereby all air tours in the Park would be eliminated] is expected to improve the protection of cultural resources within the APE.

In the first sentence of this section, the FAA artfully insinuates the "mere presence" argument by prejudicing the reader to believe that the presence of air tours in the Park might well be excessive. The clear implication is that the "mere presence" of air tours is currently impacting the Park with harmful "audible elements" of undefined nature, including "changes in the character of aircraft noise," whatever that means. The FAA alludes to the annual number, daily frequency, routes, and altitude of commercial air tours as though they are all excessive by virtue of existence. The FAA fails to mention that the annual number of air tours over the Park is only 126, approximately two per week; that the routes carefully avoid the populated parts of the Park; and that there have been no recorded complaints against the presence of the air tours in 49 years. The above notwithstanding, the last sentence quoted above directly insinuates that eliminating the air tours would "improve" noise conditions in the Park, thereby stating that those conditions need improving because of the inherent noise propagation of all air tours, reinforcing the "mere presence" assertion.

The bias of the Letter just gets worse in the ***Assessment of Visual Effects*** section. Here the FAA states:

> Recognizing that some types of historic properties may be affected by visual effects of commercial air tours, the agencies considered the potential for the introduction of visual elements that could alter the characteristics of a historic property that qualify it for inclusion in the National Register.

The FAA is stating that "some type" (whatever that means) of historic properties are definitely affected by the mere presence of air tours. The agency's argument is that even the sight of an aircraft in such unidentified places could be so offensive to the Tribes as to destroy the characteristics of the property that make it eligible for inclusion in the National Registry. The FAA equates the "visual effects of commercial air tours" with the alleged adverse effects of an air tour. The clause, "visual elements that could alter the characteristics of a historic property," translates to mean "adverse elements generated by the mere presence of air tours." The close association in meaning is unmistakable.

In the Letter, the FAA's presentation of air tour noise and physical presence is artfully loaded against the ATO. The assumption in the FAA's Request for Concurrence, I allege, is that all air tours by definition create impactful noise and have harmful visual impact on "cultural landscapes," so the "mere presence" of air tours over the Park is harmful to human and natural environments. Verbally, during consulting conversations between the FAA and the ATO, the FAA has maintained that it does not take this position, but the Letter speaks otherwise. The FAA's implied arguments against all air tours at BAND concentrate only on the possible adverse impacts of air tour noise, never considering the possibility that existing air tours might have no acoustic or visual impact on the Park in the first place. The FAA's letter of Request for Concurrence contains one artfully concealed allegation after another, using the Tribes' letters as a foil, never offering any proof to justify any claim. Lacking proof for claim, the FAA has only the "mere presence" argument to fall back on, because it requires no evidence. That is, all of the tribal allegations against the ATO are enumerated in detail, in support of the "mere presence argument; but, predictably, none of the possible ameliorating facts are ever considered, such as the low existing ambient sound level in the Park even including the presence of air tours. The FAA chooses this tactic because the "mere presence" argument does not require that relevant facts be considered.

In the ***Finding of No Adverse Effect Criteria*** section of the Letter, the FAA states that the agency's Finding of No Adverse Effect is consistent with 36 CFR §800.5(a). The FAA fails to acknowledge that §800.5(a)(2) only gives examples of adverse effects, not definitions. Moreover, the "mere presence" of a potential cause of adverse effect is nowhere allowed or alluded to under §800.5(a) as being a defining condition for recognition of adverse effects.

To review and sum up my allegations so far, the "mere presence" of a potential causal force is inadmissible argument under Section 106 and NPATMA. Only the potential for causal effects is allowable. The FAA is aware of this subtle distinction, so carefully avoids the explicit mention of the "mere presence of air tours" thesis. However, the FAA's Request for Concurrence everywhere alludes to the unstated principle that "fact of presence equates to force of effect," meaning that the mere presence of a force … in this case, an air tour … denotes that the force will necessarily be applied … portending that air tours will necessarily inflict adverse effects. The presence of the argument for "mere presence" is so obvious as to not need explication. In this case, The FAA has a clear duty to explicitly state that the "mere presence" contention is inapplicable to the determination of "No Adverse Effect." Failure to so state hopelessly prejudices the discussion in favor of a decision for "No Adverse Effect," which in turn will be used to justify a decision for the preferred Alternative 2, "No Flights Permitted." The intent of the Request for Concurrence is to create a logical syllogism that the ATO will not be able break,

thus forcing him to abandon his defense before it can begin. This tactic denies the ATO due process.

I repeat the premise of this letter. Although the FAA has not overtly stated that "the mere presence of air tours over a park is averse to the purpose and values of the park," the agency has built that assumption everywhere into its arguments of favor of "No Adverse Effect."

The Request for Concurrence is, in fact, a disguised inditement that the FAA wants the ATO to endorse. The Letter is a request (demand) that the ATO convict himself of human rights abuse and flagrantly violates due process. If the ATO agrees that imposition of Alternative 2 of the draft BAND ATMP would have "no adverse effect," he loses his defense for right of operation, which necessarily must argue to the contrary. If the ATO declines to engage in pointless argument against a flawed and self-fulfilling syllogism pointing towards "no adverse effect," the FAA will decide against him, the ATO having made no argument to the contrary. If the ATO argues against the finding of "no adverse effect," his arguments are thrown out for not being relevant to Section 106, but to NEPA. Section 106 language is built into the entirety of the agencies' draft BAND ATMP and EA, so the distinction between Sec 106 and NEPA argument is very difficult, if not impossible, to delineate and untangle. This makes defense by the ATMP against a decision in favor of "no air tours allowed" extremely difficult, constituting obstruction of argument which, of course, in not allowed in a court of law.

The FAA's double-negative syllogism, that "no air tours can inflict no adverse effects on a park"[4] is inappropriate as a Section 106 argument. NAPA's §500.5(a)(1) makes no reference to contorted arguments of logic being substantive measures for determining adverse effects or the lack of them. Adverse effects, or the lack of them, under NPATMA, have to be demonstrated in terms of real-world allegations, not abusive sophistry. It may or may not be true that disallowing an action means that there can be no direct impact from actions that do not exist. The FAA double-negative Theory of No Presence, however, is outside the scope of NPATMA, which demands science-based proof of argument, not elimination of defense of same by means of play on logic. Therefore, the FAA's Request for Currence is not founded on statutory authority, but distorts the purpose and means of Section 106 inquiry by bringing debate relating to operations, environment, and law it to a premature halt. If the Request has any validity at all, it would be under NEPA … where there is no constraint on arguments and observations relating to environmental assessment … which is where the FAA's Theory of No Presence really belongs.

Actually, the whole of the FAA's intent for its Request for Concurrence under Section 106 is unallowable under NPATMA. The FAA asserts that its Theory of No Presence was <u>not</u> put forward to analyze air tour operations, but that the opposite is true, that the FAA is evaluating the effects of no air tours over the Park at all. This argument is, yet again, outside the scope of NPATMA, for reason of the "if any" phrase of the Objective section of NPATMA, 49 USC §40128(b)(1)(B). NPATMA requires that the decision for undertaking (implementation of an ATMP) be based on the testing of the "if any" condition by means of the Section 808 stipulation for science-based sound studies using "pertinent" data. The existence of the "if any" phrase in

[4] The more precise wording of the ATMP's choice number 2, "No Air Tours," would be, "The preferred Alternative of no air tours would have would have no adverse effect on historic properties within the Area of Potential Effect (the ATMP study area)." I have labeled this the FAA's Theory of No Presence; see also Footnote #2.

NPATMA proves that the criteria for decision under NPATMA (versus NHPA) must be "current conditions" which include the presence air tours so that the "if any test can be performed, not a condition of "no air tours" in which case no tests could be performed.

NPATMA is grounded on assessing the effects of air tours predicated on "existing conditions" for basis of decision. The FAA actually agrees with this statement.[5] Existing conditions assume the presence of air tours over a park. In the case of BAND, air tours have been conducted for over 100 years. The FAA errs in trying to argue outside the parameters of the controlling legal authority (NPATMA) by asserting that the new standard of decision at BAND, as opposed to other parks such as HAVO, is now no air tours at all. The FAA asserts that it has the right to change the terms and conditions of NPATMA by arguing on a park-by-park basis under NHPA, instead, which the agency wrongly claims has equal authority in the present case with NPATMA, which sets the ATMP conditions for all parks. By so asserting, the FAA not only makes legal errors of decision, but denies Southwest Safaris the right to argue in terms of "existing conditions" under NPATMA, saying that all such arguments are irrelevant to the new standard of decision under NHPA and therefore inadmissible. In other words, the FAA is trying to make an end run around NPATMA, to say that Section 106 actually controls the terms of argument, not the Act. I assert that this creative tactic has no legal authority.

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[5] See FAA letter to ACHP, dated July 24, 2023, "Baseline Conditions" section, page 9, requesting that the ACHP review the FAA's finding of "No Adverse Effect" for Hawaii Volcano National Park. Here the FAA (Ms. Judith Walker) seeks concurrence that the agency's decision is allowable under Section 106 of NHPA. In the letter, the FAA makes an emphatic summary of argument re. HAVO that directly applies to BAND:

> For these reasons, ***the FAA's use of existing conditions*** as the baseline against which to measure the impacts of its undertaking ***is appropriate***. The FAA's finding that the undertaking would not diminish the characteristics of any historic properties located within the APE but instead would represent a reduction in audible and visual effects on historic properties when compared to existing conditions is supported and consistent with the ACHP's regulations implementing Section 106 of the NHPA. (Emphasis added.)

The opinion of Ms. Walker is buttressed by that of Ms. Julie Marks, Executive Director of the FAA's office of Environment and Energy. Writing to the ACHP in support of the arguments presented by Ms. Walker, Ms. Marks states, September 12, 2023, on pages 4 & 5:

> As the FAA explained in its request to the ACHP for an opinion on this finding, neither the National Parks Air Tour Management Act (NPATMA) nor the National Historic Preservation Act (NHPA) require the effects of the undertaking to be measured against a condition under which no air tours are occurring. . .Furthermore, neither NPATMA nor NHPA require the agency to assess the effects of the undertaking assuming that the existing conditions already have an adverse effect…The FAA correctly measured the effects of the ATMP against the existing condition of commercial air tours over the Park, making no assumptions about the existing conditions, and the proposed finding of no adverse effect is appropriate…After careful consideration of the ACHP's advisory opinion, the FAA is confirming its finding that the ATMP at Hawai'i Volcanoes National Park would have no adverse effect on historic properties within the APE.

Based on these authoritative arguments, the FAA reasons against itself at BAND, contrary to the requirement for consistency of law.

In summary, the FAA unfairly uses the Request for Concurrence to artfully accuse the ATO of numerous Section 106 violations. As I have said, this was done by inserting a full elaboration of the Tribes' complaints without ever disavowing the basis of the Tribes' allegations, which comes down to the Theory of Mere Presence. The FAA not only never explicitly disassociates itself with respect to the tribal letters, but the FAA never overtly distanced itself from the theory with respect to general logic being used to arrive at the FAA's Theory of No Presence at large. Moreover, the FAA unfairly allows introduction of Sec. 106 arguments by the tribes, but disallows the ATO to defend itself under the same regulations and thereby cuts off debate.

The Letter of Request amounts to an accusation of undefined, amorphous, "cultural guilt" and a further assumption that the air tour operator (ATO) is guilty until proven innocent. The FAA makes it difficult for the ATO to defend himself because it is impossible to disprove a double-negative (that no flights will cause no adverse impact) and because every time the ATO raises objections to Section 106 assertions, he is told that the complaints relate to NEPA, instead, and will not be heard under Section 106. The FAA states that presentation of verbal arguments will not be allowed "on the record" with respect to both NEPA and NHPA, disadvantaging small business that do not have the finances to afford legal counsel and argument in briefs.

I hold that the FAA's Request for Concurrence is legally defective because: (1) it is premature, Section 808 of NPATMA having not been complied with to test the "if any" challenge of the Objectives section of the Act; (2) because it is, subtly but in fact, predicated on the Theory of Mere Presence, which is outside the scope of NPATMA; (3) because it is based on unallowable logic of argument relating to baseline conditions of "no air tours," also outside the scope of NPATMA; (4) because it unfairly prejudices the ultimate decision of the FAA in favor of Alternative 2, "no air tours allowed" in violation of the Will of Congress; and (5) because it cannot withstand the operational and environmental counter-claims of Southwest Safaris, i.e., that prohibiting air tours over the Park will actually have increased adverse effect on historic properties compared with current conditions, which is the standard of decision.

My theory of Primacy of Law which I have made elsewhere to the FAA, is consistent with my above assertions. NPATMA, in fact, controls Section 106 of NHPA in the present instance. As I have argued in my letter to the FAA of October 1, 2023, NPATMA does not allow deductive arguments against air tours in general, but only inductive conclusions founded on science-based studies incorporating "pertinent" data. Allegations based on Section 106 assertions, wherein no evidence is necessary to bring forward accusations of adverse air tour impacts, are completely impermissible under NPATMA. The FAA makes said direct and indirect accusations against Southwest Safaris throughout its Request.

I now return to the opening question the FAA asked of me at the outset of this letter and request remedy of grievance based on my answer thereto. Because the FAA's Request for Concurrence is based on the Theory of Mere Presence, and because NPATMA disallows this argument, and because NPATMA is the controlling legal authority for all matters affecting implementation of Air Tour Management Plans, and furthermore because of the unconstitutionality of the FAA's Request for Concurrence … leaving the 5th Amendment screaming to be heard … Southwest Safaris respectfully petitions the FAA under Section 106 to withdraw said Request for Concurrence for reasons of law, due process, and consistency of argument.

Southwest requests the opportunity for continued consultation to resolve these matters, if possible.

Thank you for your continued consideration.

Sincerely,

Bruce Adams

U.S. Department of Transportation
Federal Aviation Administration

United States Department of Transportation
FEDERAL AVIATION ADMINISTRATION
Office of Policy, International Affairs & Environment
Office of Environment and Energy

NATIONAL PARKS AIR TOUR MANAGEMENT PROGRAM

November 7, 2023

Re: Continuing Consultation under Section 106 of the National Historic Preservation Act for the development of an Air Tour Management Plan for Bandelier National Monument

Bruce M. Adams
Southwest Safaris
712 Felipe Place
Santa Fe, NM 87505

Dear Bruce M. Adams:

The Federal Aviation Administration (FAA) and National Park Service (NPS) (together the agencies) are in receipt of Southwest Safaris' nine letters in response to the Finding of No Adverse Effect under Section 106 of the National Historic Preservation Act (NHPA) for Bandelier National Monument (the Park). In these letters, Southwest Safaris objected to the finding and expressed concerns with the Section 106 process as well as concerns regarding compliance with the National Parks Air Tour Management Act (NPATMA) and the National Environmental Policy Act (NEPA). This letter is in response to Southwest Safaris' letters dated May 19, 2023 (two letters with this date, one received May 25, 2023); May 31, 2023; June 6, 2023; June 9, 2023; August 11, 2023; August 14, 2023; September 25, 2023; October 1, 2023; and October 10, 2023, and addresses the issues raised regarding the Section 106 process and the assessment of effects of the undertaking for the Park.

Comment Summary

In compliance with 36 C.F.R. § 800(c)(5)(2), the FAA elected to hold two virtual meetings with you, representing Southwest Safaris, to understand the basis of Southwest Safaris' objections related to the Section 106 process. The objecting party meetings were held on August 10, 2023, and September 26, 2023.

After each of the objecting party meetings, Southwest Safaris submitted comments specifically pertaining to the Section 106 process in letters dated August 11, 2023; August 14, 2023; September 25, 2023; October 1, 2023; and October 10, 2023. Specific responses to the challenges raised in your letters are enclosed (Attachment 1). Those comments related to the Section 106 process and the assessment of effects of the undertaking are summarized below:

- Southwest Safaris argues that the NPATMA is the controlling law and therefore should direct how the FAA complies with the NHPA and the Section 106 regulations.
- Southwest Safaris challenged how the FAA identified historic properties under Section 106.
- Southwest Safaris challenged whether the identified properties in the APE were appropriately listed on the National Register of Historic Places (National Register).
- Southwest Safaris argued that aircraft noise and visual impacts do not have an adverse effect on persons and historic properties on the ground.
- Southwest Safaris challenged whether the noise modelling used to assess the effects of the undertaking in the Section 106 process was based on science.

Overview of Section 106 Process and Identification of Historic Properties

Section 106 of the NHPA requires federal agencies to consider the effects of the projects they carry out, approve, or fund on historic properties (undertakings). The Section 106 review ensures that preservation values are factored into federal agency planning and decisions. Federal agencies are responsible for initiating Section 106 review of their undertakings, most of which takes place among the agency, state, and consulting parties, including tribal nations. This is true even where, as here, the undertaking is required by another federal law.

To successfully comply with the NHPA and its implementing regulations for Section 106 review, federal agencies must generally follow a four-step process (further described in Attachment 2):

1. **Initiate the Section106 process**. This includes determining the undertaking; identifying the appropriate State or Tribal Historic Preservation Officer (SHPO or THPO), consulting parties including tribal nations, and developing plans to involve the public in the process.
2. **Identify historic properties**. This step requires consultation with the SHPO/THPO and consulting parties to determine the geographic area(s) within which an undertaking may directly or indirectly cause changes in the character or use of historic properties or the area of potential effects (APE). This step also includes consultation with the SHPO/THPO and consulting parties to identify historic properties in the APE that may be affected by the project and determining whether they are listed, or are eligible for listing, in the National Register of Historic Places (National Register).
3. **Assess effects**. This step requires the federal agency to assess the effect of the undertaking on historic properties within the APE, applying the standards in the Section 106 regulations. If the agency finds that the undertaking would have no adverse effect on historic properties within the APE and the consulting parties do not object, the Section 106 process is concluded. If consulting parties object to the finding, the agency may continue consultation or request an opinion from the Advisory Council on Historic Preservation (ACHP). Once the ACHP provides an opinion the agency must consider it in determining whether to affirm the finding or change it. If the agency affirms the finding, then it must show the ACHP and the consulting parties how it considered the ACHP's opinion. Once this is done the Section 106 process is concluded. If the agency changes its finding to that of adverse effect, then it moves to resolving the adverse effect step.
4. **Resolve adverse effects**. If the agency finds that the undertaking would have an adverse effect on historic properties in the APE, then the agency is required to notify the ACHP and resolve the

adverse effect through consultation. The Section 106 process concludes when the agency and the relevant SHPO/THPO (and the ACHP in some cases) reach agreement.

The Applicable Law

Southwest Safaris argues that the NPATMA is the controlling statute when developing and implementing an ATMP. Specifically Southwest Safaris states that "NPATMA is the controlling legal authority for ATMPS, not NEPA and not the NHPA." (Southwest Safaris letter dated August 14, 2023). The FAA agrees. However, Southwest Safaris erroneously believes that if NPATMA is the controlling statute then no other statute or regulation can apply to the development and implementation of an ATMP or that the agency must apply NPATMA's provisions to the other statutes. With respect to the NHPA, any federal action that meets the definition of an undertaking under the NHPA and Section 106 regulations trigger compliance with Section 106 of the NHPA. The development and implementation of an ATMP meets the definition of an undertaking triggering the Section 106 process. Thus, under Section 106 of the NHPA, federal agencies must consider the impact of their actions on historic properties. So, while NPATMA governs how the FAA and NPS develop and implement ATMPs, if the development and implementation of an ATMP meets the definition of an undertaking, the FAA and the NPS must also comply with the Section 106 process under the NHPA and consider the effect of the undertaking on historic properties. Compliance with NPATMA does not preclude compliance with other federal statutes and regulations. Put differently, the agencies must comply with both NPATMA and Section 106 of the NHPA. Compliance with other applicable statutes and regulations does not mean that the agencies are not fully complying with NPATMA.

Historic Property Identification

Southwest Safaris alleges that the FAA relied on hearsay not backed by data to identify properties within the APE. The FAA complied with 36 C.F.R. § 800.4(a) in identifying historic properties within the APE. The provision states in part that "in consultation with the SHPO/THPO the agency official shall… [r]eview existing information on historic properties within the [APE], including any data concerning historic properties not yet identified." The agency is also directed to "[g]ather information from any Indian tribe…pursuant to 36 C.F.R. § 800.3(f) to assist in identifying properties including those located off tribal lands, which may be of religious and cultural significance to them…" 36 C.F.R. 800.4(a)(4). In its efforts to identify historic properties, the FAA gathered information on historic properties within the APE using information provided by the New Mexico Preservation Division (SHPO), information gathered from the National Register, and verbal and written information received from tribes and other consulting parties through the Section 106 consultation process. Additionally, data was gathered from the NPS, including the NPS foundation document (2015), the National Register Nomination Forms (1966, 1971-updated 2014), and the 2015 study titled "Bandelier National Monument Cultural Landscape Report for CCC National Historic Landmark Historic District" that lists cultural surveys and excavations performed within the National Historic Landmark from 1933 through the present. The FAA's consideration of written or orally provided tribal information is appropriate. Furthermore, the standard for determining the sufficiency of the agency's efforts to identify historic properties is not hearsay, but whether the agency made "a reasonable and good faith effort" to conduct appropriate identification efforts, "which may include… consultation and oral history interviews." The FAA, in accordance with Section 106, considered input from Tribes and made a good faith effort to identify historic properties within the APE for this Park.

Southwest Safaris also challenges whether some of the properties considered eligible for or listed on the National Register are appropriately considered, expressing specific concern regarding the historic

properties that were identified through consultation under the Section 106 process for this Park. The National Register, the official list of the Nation's historic places, is maintained by the Secretary of the Interior and based on eligibility criteria and through processes set forth in 36 C.F.R. Part 60. The historic properties that must be considered in complying with Section 106 of the NHPA include properties listed in the National Register, or eligible for such listing (meaning properties that are not listed but that meet the eligibility criteria in 36 C.F.R. § 60.4). 54 U.S.C. §§ 306108, 300308. It is important to note that the NHPA allows historic properties with cultural and religious significance to tribes to be listed or to be deemed eligible for listing in the National Register, even if their locations are restricted to the public. *See* 54 U.S.C. § 302706, 307103. In accordance with the NHPA and the ACHP's implementing regulations, the FAA identified properties within the APE that are listed on the National Register as well as properties that are eligible for listing on the National Register but have not been formally listed. Though Southwest Safaris contends that listed properties should not be included on the National Register, it does not dispute that the properties identified as listed are, in fact, on the National Register. In identifying properties that are eligible for listing (but not formally listed), the FAA considered, among other things, information provided by consulting parties, including tribes. As noted above, this is reasonable and an appropriate means of identifying historic properties and is also consistent with the ACHP's regulations. The FAA's identification efforts and consideration of the historic properties identified in the APE are appropriate.

Assessment of Effects

Southwest Safaris raises three main issues that relate to how the FAA assessed the effects of the undertaking. First, it appears that Southwest Safaris misunderstands that the proposed finding of no adverse effect applies to the undertaking and not air tour operations in general. Second, Southwest Safaris alleges that aircraft noise and visual impacts from aircraft do not have an adverse effect on people or historic properties on the ground. Third, Southwest Safaris alleges that the noise modelling was not based on science.

The undertaking for this Park is the implementation of the prohibition of air tours within the ATMP planning area, which includes the Park boundary and areas outside the Park but within ½ mile of its boundary below 5,000 feet above ground level (referred to as the ATMP planning area). The FAA assessed the effects of the prohibition of air tours on historic properties identified within the APE and found that the undertaking would not have an adverse effect on those properties. The FAA did not assess the effects of air tour operations generally. In assessing the effects of the undertaking, the FAA compared implementing the undertaking with existing conditions. The FAA focused on whether the undertaking would "alter any characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials workmanship, feeling or association." 36 C.F.R. § 800.5(a)(1). The FAA found that the undertaking (prohibiting air tours) would not have an adverse effect on historic properties within the APE. Contrary to Southwest Safaris' allegation, in assessing the effect of the undertaking on historic properties, the FAA did not determine that aircraft noise and visual impacts from aircraft in general have an adverse effect on people or historic properties.

Finally, Southwest Safaris challenges whether the noise analysis used to assess the effects of the undertaking was based on science. The agencies' assessment of air tour noise within the ATMP planning area was based on reasonable scientific methods. The FAA's AEDT, Version 3e (Lee et al., 2022) which was relied on by the agencies to model the noise impacts of air tours within the ATMP planning area, is the FAA-approved computer program for modeling noise, as listed under Appendix A of FAA's Part 150

Airport Noise Compatibility Planning (14 C.F.R. sec. A150.103(a)). The FAA's requirements for aircraft noise modeling are defined in FAA Order 1050.1F, Environmental Impacts: Policies and Procedures, and in FAR 14 C.F.R. Part 150, Airport Noise Compatibility Planning. Noise modeling conducted for the draft ATMP and draft Environmental Assessment (EA) was consistent with these FAA requirements. Additional information about noise modeling can be found in Appendix F of the EA, Noise Technical Analysis. AEDT dynamically models aircraft performance in space and time.

Specific responses to detailed challenges raised in your letters are enclosed (Attachment 1). Please be advised that the responses solely address the issues or concerns raised related to the Section 106 process. All other substantive concerns raised in the letters are addressed through responses to the public comments on the NEPA and ATMP documents. Since we were unable to resolve your objection to the proposed finding of no adverse effect for the undertaking at the Park, the agencies will be requesting an opinion from the ACHP in accordance with 36 C.F.R. § 800.5(c)(2). If you have any questions or concerns regarding this correspondence, please do not hesitate to contact me at (202) 267–4185 or Judith.Walker@faa.gov, copying ATMPTeam@dot.gov.

Best regards,

Judith Walker
Federal Preservation Officer
Senior Environmental Policy Analyst
Environmental Policy Division (AEE-400)
Federal Aviation Administration

Enclosures

Attachment 1 – FAA response to Southwest Safaris Comments
Attachment 2 – A Citizen's Guide to Section 106 Review
Attachment 3 – Traditional Knowledge and the Section 106 Process: Information for Federal Agencies and Other Participants
Attachment 4 – National Register Bulletin 36: Guidelines for Evaluating and Registering Archeological Properties

ATTACHMENT 1

RESPONSE TO SOUTHWEST SAFARIS COMMENTS

The following table provides an overview of Southwest Safaris' comments related to the Section 106 process for the development of an Air Tour Management Plan (ATMP) for Bandelier National Monument (the Park) and the Federal Aviation Administration's (FAA) responses to those comments.

Correspondence	Summary of Comments	Response
August 11, 2023; Reiterated in September 25, October 12 and October 10, 2023, letters.	"FAA's list of historic properties (LHP) pertaining to the draft BAND ATMP relies on hearsay. I allege that the FAA has compiled its LHP from five sources: (1) the NPS, (2) the New Mexico Preservation Division, (3) the National Register, (4) verbal testimonies with the Pueblo tribes (the tribes) through process of Section 106 consultation, and (5) from lists compiled by the tribes following consultation."	This is correct. The Section 106 process requires the FAA to gather information on historic properties within the APE using the resources listed above. The NHPA allows agencies to gather historic property data from background research, consultation with SHPOs/THPOs, interested parties and tribes, using oral history interviews, sample field investigation (usually for projects with physical effects or ground-disturbance), and field survey (usually for projects with ground disturbance or physical effects). Hearsay is an evidentiary rule that does not apply to the Section 106 consultation process.

Correspondence	Summary of Comments	Response
August 11, 2023	"The FAA gives no details relative to the data." … "The data was recorded into the State records in 1971 and has not been updated since…"	Data was gathered from the NPS, including the park's foundation document (2015), National Register Nomination Forms (1966, 1971-updated 2014), and the 2015 study titled "Bandelier National Monument Cultural Landscape Report for CCC National Historic Landmark Historic District," which lists cultural surveys and excavations performed within the National Historic Landmark from 1933 through the present. The updated 2014 Bandelier National Monument Archaeological and Historic District National Register Nomination Form was used to identify specific archaeological sites. It states that there are 3,096 cultural resources within the District, including 2,974 archaeological sites. The Nomination Form also states that "Currently 78% of the park has been surveyed for archaeological sites (this is 90% of the surveyable area) …The archaeological sites are present in all parts of the park". The number of sites was determined based on archaeological surveys, not by a number given to the FAA by tribes. Furthermore, not all the identified archaeological sites may be of significance to all tribes. Some tribes may hold fewer sites to be significant, some may hold more sites significant.

Correspondence	Summary of Comments	Response
August 11, 2023	"For most of the cultural and religious sites, the only record of their one-time presence is recorded in the National Registry, not in the active minds of the tribes. Records of these sites is important for religious and historic reasons, but if there is not proof of their use in current practice, these sites have already relinquished their claim on current land use. This is consistent with tribal practices of most Indian cultures."	Tribes often maintain records of their own cultural and religious sites. The NHPA allows agencies to gather historic property data from tribes based on what they have in their records or what they tell us about their cultural and religious sites – unless publicly identified, frequently the only entities aware of these sites are tribal members. The NHPA also allows historic properties with cultural and religious significance to tribes to be listed or deemed eligible for listing in the National Register, even if their locations are restricted to the public. Traditional cultural properties (also known as TCPs) are considered by the NPS's National Register program to be a type of significance rather than a property type. Property types are limited to those specified in the NHPA and the National Register regulations (districts, buildings, structures, sites, and objects). TCPs can and often do embrace one or more of these property types. It is important to note that the size of such properties or the potential challenges in the management of them should not be considered in the evaluation of their significance. Many assume that archaeologists can identify, through archaeological surveys, those properties that are of significance to tribes or Native Hawaiian organizations. However, unless an archaeologist has been specifically authorized or permitted by a tribe or Native Hawaiian Organization to speak on the Tribe's or Organization's behalf or has been determined by that entity to be qualified to conduct such surveys, it should not be assumed that the archaeologist possesses the appropriate expertise to determine what properties are or are not of religious and cultural significance to a Tribe or Native Hawaiian organization. The appropriate individual to make such a determination is the representative designated by the tribe or Native Hawaiian organization for this purpose. Efforts to identify these types of properties may include site visits and interviews with tribal elders or cultural experts.

Correspondence	Summary of Comments	Response
August 11, 2023; Reiterated in September 25, October 12 and October 10, 2023, letters.	"The FAA is simply taking the word of the tribes and State and Federal agencies for approximate numbers, but provides no field data to support the claim."	Tribes have their own way of generating, transmitting, and protecting information that is important to them. Tribal members possess special knowledge and expertise that enables them to identify places of religious and cultural significance to their tribes. Tribes may discuss these important places with the federal agency during the Section 106 review process. Under Section 106, if tribes identify specific places that are listed or are eligible for listing in the National Register, agencies must consider the effects of their projects on these places. The NHPA, 54 U.S.C. § 302706, clarifies that properties of religious and cultural importance to an Indian Tribe or Native Hawaiian organization may be determined eligible for inclusion on the National Register. Therefore, these properties must be considered in the Section 106 review process. Furthermore, the Section 106 regulations state that the agency official shall acknowledge that tribes possess special expertise in assessing the National Register eligibility of historic properties that may possess religious and cultural significance to them (36 C.F.R. § 800.4(c)(1)). Special expertise, at times, may also be referred to as traditional knowledge, traditional cultural knowledge or indigenous knowledge, or traditional ecological knowledge. See: Attachment 3 - "Traditional Knowledge and the Section 106 Process: Information for Federal Agencies and Other Participants"

Correspondence	Summary of Comments	Response
August 11, 2023	"The FAA claims in Attachment C that 2,974 'contributing sites' exist. The agency never defines what 'contributing sites' means. There is no way of knowing how many of these are archaeological sites of cultural and ceremonial significance today."	A contributing site, building, structure, or object adds to the historical associations, historic architectural qualities, or archeological values for which a property is significant. A contributing resource has the following characteristics: it was present during the period of time that the property achieved its significance; it relates to the documented significance of the property; and it possesses historical integrity or is capable of yielding important information relevant to the significance of the property. See: Attachment 4 - National Register Bulletin 36. The National Register-listed "Bandelier National Monument Archaeological and Historic District" has 3,096 contributing sites of which 2,974 are archaeological sites. The National Register-eligible "Bandelier National Monument Traditional Cultural Properties" include the National Register listed "Bandelier National Monument Archaeological and Historic District." As a whole, the "Bandelier National Monument Traditional Cultural Properties" contains thousands of contributing archaeological sites, which have significance expanding beyond those under Criterion D (information potential). Note that while each of these districts contains thousands of contributing features, the assessment of effects is to the historic property – i.e., the district.
August 11, 2023	"Under §60.4, which sets forth the "Criteria for Evaluation" of historic sites, "Ordinary cemeteries, birthplaces, or graves of historical figures … shall not be considered eligible for the National Register." This would apply to Native Americans, too."	None of the historic properties listed in Attachment C of the Finding of Effects letter are considered cemeteries, birthplaces, or graves of historical figures.
August 11, 2023	"[C]onsiderations of airspace surrounding historic properties is not relevant to the National Registry's "Criteria for Evaluation." §60.4 makes no mention of "viewsheds" being a part of a historic property's intrinsic value. "Diminishment of viewshed" is a concept foreign to the Criteria for Evaluation and not a factor of relevance when determining adverse impact of aircraft presence."	Setting is the physical environment of a historic property. Setting includes elements such as topographic features, open space, viewshed, landscape, vegetation, and artificial features. See: Attachment 4 - "Setting" and "Aspects, or Qualities, of Integrity" in National Register Bulletin 36

Correspondence	Summary of Comments	Response
August 11, 2023	"Because the individual historic properties in question do not properly belong on the National Registry, and because they have no claim to special religious set-aside, and because they serve no commemorative purpose of exceptional significance, and because they have no sacred space above them, it is not possible for the presence air tours to have an adverse impact on non-existing "historic properties" in the "Area of Potential Effect.""	All the properties that were evaluated for effects, which are listed in Attachment C of the Finding of Effects letter, are either listed in the National Register or are eligible for listing in the National Register. The agencies are not assessing the effects of the presence of air tours over these sites, but the effects of the implementation of the ATMP, which prohibits air tours from flying over historic properties in the ATMP planning area or APE.
August 11, 2023	"It is not true, however, that denying Park overflights will have a positive effect (decrease) noise in the overall APE. The air tour operator at BAND will simply be forced to fly the perimeter of the Park on the west, south, and east sides, increasing the total noise impact on the APE by a factor of three, especially impacting wilderness areas. The impact of noise will only partially be diminished by distance (10%), but the time exposure will be increased by 300% in high power-settings. The net gain to the park from disallowing direct overflights (transportation routes) will be significantly negative, defeating the purpose of Alternative 2."	Flights already take place in these areas based on the routes reported by the air tour operator (Southwest Safaris) and listed on Southwest Safaris' website. Due to the low levels of air tours over the park, it is not reasonably foreseeable that displacement of flights to the perimeter would result in increased impacts. The agencies noted that they sought to include areas where any historic property present could be affected by noise from or sight of commercial air tours that may take place under any of the selectable draft alternatives, including those over the Park or those that are reasonably foreseeable to take place adjacent to the ATMP planning area. The FAA considered the number and altitude of commercial air tours over historic properties in these areas to further assess the potential for visual effects and any incremental change in, or elimination of, noise levels that may result in alteration of the characteristics of historic properties qualifying them for listing in the National Register

Correspondence	Summary of Comments	Response
August 11, 2023; Reiterated in September 25, October 12 and October 10, 2023, letters.	"The FAA's methods for assessing air tour noise at BAND are not based on "reasonable scientific methods." The FAA errs by using Noise Modeling at BAND to determine the presence of aircraft noise instead of scientific field tests to measure actual (not theoretical) noise. Noise modeling is not science, it is technology, prone to many errors."	The assessment of air tour noise within the ATMP planning area was based on reasonable scientific methods. Although noise measurements can be a useful tool to help understand current conditions, measurements cannot be used to compare alternatives that do not yet exist. Modeling is used to provide a consistent (apples-to-apples) basis for comparing alternatives. Note that the noise modeling showed that there are low noise levels currently occurring over the park, which will be further reduced by the removal of air tours.
August 14, 2023	"Paradoxically, it is true that all historic properties within the APE will experience significantly greater noise impact by eliminating all air tours over the Park. Eliminating all air tours over the park will only heighten noise everywhere in the Park, by causing tour aircraft circumnavigating the APE to climb over varied terrain on all sides, using full power, at high altitude, for three-times the period of time required to simply transit the park in a straight line on a carefully chosen route, at lower altitude, with lower power settings."	Flights outside of the ATMP planning area already take place based on the routes reported by the air tour operator and listed on his website. Due to the low levels of air tours over the park, it is not reasonably foreseeable that displacement of flights to the perimeter would result in increased impacts.

Correspondence	Summary of Comments	Response
August 14, 2023	"When it is mentioned, it is only in passing. "Natural canyon Settings," "spectacular and unobstructed views," and "the unique feeling that the district conveys" are only mentioned in three of the four listings, and generally towards the end of the descriptions of "Significant Characteristics." These adjectival musings are descriptive and accurate but not determinant qualities of the property, applying to the properties surrounding the listed sites, but not to the specific properties, themselves. "Historic properties" are not allowed by the statute to make a possessive claim on surrounding properties, such as to prevent them from being changed over time to "preserve" the authenticity of original listing. Under §60.4, there is no mention of associative powers of distant landscapes having any affect on a local property. Therefore, I maintain my observation that most of the archaeological listings on the BAND Resister are of historic value, but are founded on tradition, lore, professional opinion, and hearsay, not documentable current field research and qualification."	Cultural landscapes can be historic properties that show evidence of human interaction with the physical environment. The components of park cultural landscapes include human-modified ecosystems such as forests, prairies, rivers, and shores; as well as constructed works, such as mounds, terraces, structures, and gardens. The Park includes several cultural landscapes, such as Frijoles Canyon, Bandelier National Monument CCC NHL Historic District Cultural Landscape, Ancestral Pueblo, and Tsankawi. See: Bandelier National Monument Cultural Landscape Report for CCC National Historic Landmark Historic District 524718 (nps.gov)
August 14, 2023	"Alternative 1, the "no change" option, clearly satisfies all objections of the FAA, NPS, and the tribes, and is therefore the obvious choice for objective minds."	Noted. Alternative 1 in the environmental assessment (the no action alternative) is not a selectable alternative because NPS determined that air tours at or above current levels on the current routes result in unacceptable impacts to the Park's cultural resources under the NPS 2006 Management Policies § 1.4.7.1, and do not meet the purpose and need for the ATMP.

ATTACHMENT 2
A CITIZEN'S GUIDE TO SECTION 106 REVIEW

ADVISORY COUNCIL ON HISTORIC PRESERVATION

Protecting Historic Properties:

A CITIZEN'S GUIDE TO SECTION 106 REVIEW

WWW.ACHP.GOV

Preserving America's Heritage

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COVER PHOTOS:

Clockwise, from top left: Historic Downtown Louisville, Kentucky; Section 106 consultation at Medicine Lake, California; bighorn sheep petroglyph in Nine Mile Canyon, Utah (photo courtesy Jerry D. Spangler); Worthington Farm, Monocacy Battlefield National Historic Landmark, Maryland (photo courtesy Maryland State Highway Administration).

About the ACHP

The mission of the Advisory Council on Historic Preservation (ACHP) is to promote the preservation, enhancement, and productive use of the nation's historic resources and advise the President and Congress on national historic preservation policy.

The ACHP, an independent federal agency, also provides a forum for influencing federal activities, programs, and policies that affect historic properties. In addition, the ACHP has a key role in carrying out the Preserve America program.

The 23-member council is supported by a professional staff in Washington, D.C. For more information contact:

Advisory Council on Historic Preservation
1100 Pennsylvania Avenue, NW, Suite 803
Washington, D.C. 20004
(202) 606-8503
www.achp.gov

Introduction

Proud of your heritage? Value the places that reflect your community's history? You should know about Section 106 review, an important tool you can use to influence federal decisions regarding historic properties. By law, you have a voice when a project involving federal action, approval, or funding may affect properties that qualify for the National Register of Historic Places, the nation's official list of historic properties.

This guide from the Advisory Council on Historic Preservation (ACHP), the agency charged with historic preservation leadership within federal government, explains how your voice can be heard.

Each year, the federal government is involved with many projects that affect historic properties. For example, the Federal Highway Administration works with states on road improvements, the Department of Housing and Urban Development grants funds to cities to rebuild communities, and the General Services Administration builds and leases federal office space.

Agencies like the Forest Service, the National Park Service, the Bureau of Land Management, the Department of Veterans Affairs, and the Department of Defense make decisions daily about the management of federal buildings, parks, forests, and lands. These decisions may affect historic properties, including those that are of traditional religious and cultural significance to federally recognized Indian tribes and Native Hawaiian organizations.

Projects with less obvious federal involvement can also have repercussions on historic properties. For example, the construction of a boat dock or a housing development that affects wetlands may also impact fragile archaeological sites and require a U.S. Army Corps of Engineers permit. Likewise, the construction of a cellular tower may require a license from the Federal Communications Commission and might compromise historic or culturally significant landscapes or properties valued by Indian tribes or Native Hawaiian organizations for traditional religious and cultural practices.

These and other projects with federal involvement can harm historic properties. The Section 106 review process gives you the opportunity to alert the federal government to the historic properties you value and influence decisions about projects that affect them.

Public Involvement Matters

Dust from vehicles may affect historic sites in Nine Mile Canyon, Utah. (photo courtesy Jerry D. Spangler, Colorado Plateau Archaeological Alliance)

What is Section 106 Review?

In the National Historic Preservation Act of 1966 (NHPA), Congress established a comprehensive program to preserve the historical and cultural foundations of the nation as a living part of community life. Section 106 of the NHPA is crucial to that program because it requires consideration of historic preservation in the multitude of projects with federal involvement that take place across the nation every day.

Section 106 requires federal agencies to consider the effects of projects they carry out, approve, or fund on historic properties. Additionally, federal agencies must provide the ACHP an opportunity to comment on such projects prior to the agency's decision on them.

Section 106 review encourages, but does not mandate, preservation. Sometimes there is no way for a needed project to proceed without harming historic properties. Section 106 review does ensure that preservation values are factored into federal agency planning and decisions. Because of Section 106, federal agencies must assume responsibility for the consequences of the projects they carry out, approve, or fund on historic properties and be publicly accountable for their decisions.

Conservation

The National Soldiers Monument (1877) at Dayton (Ohio) National Cemetery was cleaned and conserved in 2009 as part of a program funded by the American Recovery and Reinvestment Act. (photo courtesy Department of Veterans Affairs)

Understanding Section 106 Review

Regulations issued by the ACHP spell out the Section 106 review process, specifying actions federal agencies must take to meet their legal obligations. The regulations are published in the Code of Federal Regulations at 36 CFR Part 800, "Protection of Historic Properties," and can be found on the ACHP's Web site at **www.achp.gov**.

Federal agencies are responsible for initiating Section 106 review, most of which takes place between the agency and state and tribal or Native Hawaiian organization officials. Appointed by the governor, the State Historic Preservation Officer (SHPO) coordinates the state's historic preservation program and consults with agencies during Section 106 review.

Agencies also consult with officials of federally recognized Indian tribes when the projects have the potential to affect historic properties on tribal lands or historic properties of significance to such tribes located off tribal lands. Some tribes have officially designated Tribal Historic Preservation Officers (THPOs), while others designate representatives to consult with agencies as needed. In Hawaii, agencies consult with Native Hawaiian organizations (NHOs) when historic properties of religious and cultural significance to them may be affected.

To successfully complete Section 106 review, federal agencies must do the following:

- gather information to decide which properties in the area that may be affected by the project are listed, or are eligible for listing, in the National Register of Historic Places (referred to as "historic properties");
- determine how those historic properties might be affected;
- explore measures to avoid or reduce harm ("adverse effect") to historic properties; and
- reach agreement with the SHPO/THPO (and the ACHP in some cases) on such measures to resolve any adverse effects or, failing that, obtain advisory comments from the ACHP, which are sent to the head of the agency.

What are Historic Properties?

In the Section 106 process, a historic property is a prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places. This term includes artifacts, records, and remains that are related to and located within these National Register properties. The term also includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization, so long as that property also meets the criteria for listing in the National Register.

The National Register of Historic Places

The National Register of Historic Places is the nation's official list of properties recognized for their significance in American history, architecture, archaeology, engineering, and culture. It is administered by the National Park Service, which is part of the Department of the Interior. The Secretary of the Interior has established the criteria for evaluating the eligibility of properties for the National Register. In short, the property must be significant, be of a certain age, and have integrity:

- **Significance.** Is the property associated with events, activities, or developments that were important in the past? With the lives of people who were historically important? With distinctive architectural history, landscape history, or engineering achievements? Does it have the potential to yield important information through archaeological investigation about our past?
- **Age and Integrity**. Is the property old enough to be considered historic (generally at least 50 years old) and does it still look much the way it did in the past?

During a Section 106 review, the federal agency evaluates properties against the National Register criteria and seeks the consensus of the SHPO/THPO/tribe regarding eligibility. A historic property need not be formally listed in the National Register in order to be considered under the Section 106 process. Simply coming to a consensus determination that a property is eligible for listing is adequate to move forward with Section 106 review. (For more information, visit the National Register Web site at **www.cr.nps.gov/nr**).

When historic properties may be harmed, Section 106 review usually ends with a legally binding agreement that establishes how the federal agency will avoid, minimize, or mitigate the adverse effects. In the very few cases where this does not occur, the ACHP issues advisory comments to the head of the agency who must then consider these comments in making a final decision about whether the project will proceed.

Section 106 reviews ensure federal agencies fully consider historic preservation issues and the views of the public during project planning. Section 106 reviews do not mandate the approval or denial of projects.

SECTION 106: WHAT IS AN ADVERSE EFFECT?

If a project may alter characteristics that qualify a specific property for inclusion in the National Register in a manner that would diminish the integrity of the property, that project is considered to have an adverse effect. Integrity is the ability of a property to convey its significance, based on its location, design, setting, materials, workmanship, feeling, and association.

Adverse effects can be direct or indirect and include the following:

- physical destruction or damage
- alteration inconsistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties
- relocation of the property
- change in the character of the property's use or setting
- introduction of incompatible visual, atmospheric, or audible elements
- neglect and deterioration
- transfer, lease, or sale of a historic property out of federal control without adequate preservation restrictions

Determining Federal Involvement

If you are concerned about a proposed project and wondering whether Section 106 applies, you should first determine whether the federal government is involved. Will a federal agency fund or carry out the project? Is a federal permit, license, or approval needed? Section 106 applies only if a federal agency is carrying out the project, approving it, or funding it, so confirming federal involvement is critical.

Historic

Falls of Clyde, in Honolulu, Hawaii, is the last surviving iron-hulled, four-masted full rigged ship, and the only remaining sail-driven oil tanker. (photo courtesy Bishop Museum Maritime Center)

IS THERE FEDERAL INVOLVEMENT? CONSIDER THE POSSIBILITIES:

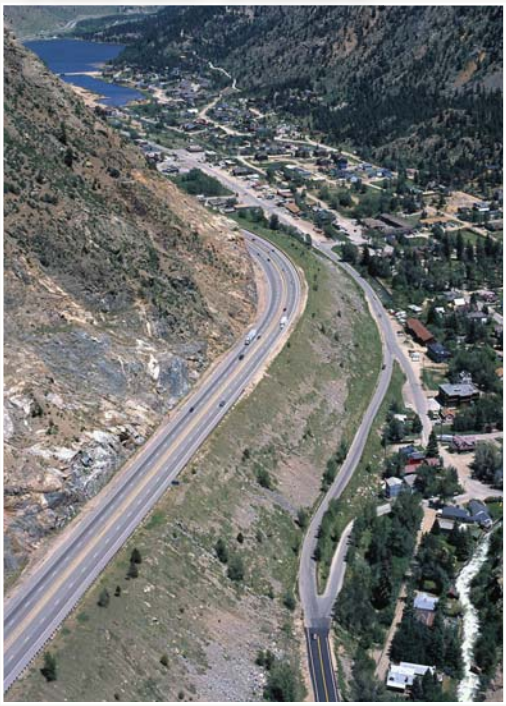
Is a federally owned or federally controlled property involved, such as a military base, park, forest, office building, post office, or courthouse? Is the agency proposing a project on its land, or would it have to provide a right-of-way or other approval to a private company for a project such as a pipeline or mine?

Is the project receiving federal funds, grants, or loans? If it is a transportation project, frequent sources of funds are the Federal Highway Administration, the Federal Transit Administration, and the Federal Railroad Administration. Many local government projects receive funds from the Department of Housing and Urban Development. The Federal Emergency Management Agency provides funds for disaster relief.

Does the project require a federal permit, license, or other approval? Often housing developments impact wetlands, so a U.S. Army Corps of Engineers permit may be required. Airport projects frequently require approvals from the Federal Aviation Administration.

Many communications activities, including cellular tower construction, are licensed by the Federal Communications Commission. Hydropower and pipeline development requires approval from the Federal Energy Regulatory Commission. Creation of new bank branches must be approved by the Federal Deposit Insurance Corporation.

Federal Funds



Interstate 70 at the Georgetown-Silver Plume National Historic Landmark, Colorado (photo courtesy J.F. Sato & Associates)

Sometimes federal involvement is obvious. Often, involvement is not immediately apparent. If you have a question, contact the project sponsor to obtain additional information and to inquire about federal involvement. All federal agencies have Web sites. Many list regional or local contacts and information on major projects. The SHPO/THPO/tribe, state or local planning commissions, or statewide historic preservation organizations may also have project information.

Once you have identified the responsible federal agency, write to the agency to request a project description and inquire about the status of project planning. Ask how the agency plans to comply with Section 106, and voice your concerns. Keep the SHPO/THPO/tribe advised of your interest and contacts with the federal agency.

MONITORING FEDERAL ACTIONS

The sooner you learn about proposed projects with federal involvement, the greater your chance of influencing the outcome of Section 106 review.

Learn more about the history of your neighborhood, city, or state. Join a local or statewide preservation, historical, or archaeological organization. These organizations are often the ones first contacted by federal agencies when projects commence.

If there is a clearinghouse that distributes information about local, state, tribal, and federal projects, make sure you or your organization is on its mailing list.

Make the SHPO/THPO/tribe aware of your interest.

Become more involved in state and local decision making. Ask about the applicability of Section 106 to projects under state, tribal, or local review. Does your state, tribe, or community have preservation laws in place? If so, become knowledgeable about and active in the implementation of these laws.

Review the local newspaper for notices about projects being reviewed under other federal statutes, especially the National Environmental Policy Act (NEPA). Under NEPA, a federal agency must determine if its proposed major actions will significantly impact the environment. Usually, if an agency is preparing an Environmental Impact Statement under NEPA, it must also complete a Section 106 review for the project.

Working with Federal Agencies

Throughout the Section 106 review process, federal agencies must consider the views of the public. This is particularly important when an agency is trying to identify historic properties that might be affected by a project and is considering ways to avoid, minimize, or mitigate harm to them.

Agencies must give the public a chance to learn about the project and provide their views. How agencies publicize projects depends on the nature and complexity of the particular project and the agency's public involvement procedures.

Public meetings are often noted in local newspapers and on television and radio. A daily government publication, the *Federal Register* (available at many public libraries and online at **www.gpoaccess.gov/fr/index.html**), has notices concerning projects, including those being reviewed under NEPA. Federal agencies often use NEPA for purposes of public outreach under Section 106 review.

Federal agencies also frequently contact local museums and historical societies directly to learn about historic properties and community concerns. In addition, organizations like the National Trust for Historic Preservation (NTHP) are actively engaged in a number of Section 106 consultations on projects around the country. The NTHP is a private, non-profit membership organization dedicated to saving historic places and revitalizing America's communities. Organizations like the NTHP and your state and local historical societies and preservation interest groups can be valuable sources of information. Let them know of your interest.

When the agency provides you with information, let the agency know if you disagree with its findings regarding what properties are eligible for the National Register of Historic Places or how the proposed project may affect them. Tell the agency—in writing—about any important properties that you think have been overlooked or incorrectly evaluated. Be sure to provide documentation to support your views.

When the federal agency releases information about project alternatives under consideration, make it aware of the options you believe would be most beneficial. To support alternatives that would preserve historic properties, be prepared to discuss costs and how well your preferred alternatives would meet project needs. Sharing success stories about the treatment or reuse of similar resources can also be helpful.

Applicants for federal assistance or permits, and their consultants, often undertake research and analyses on behalf of a federal agency. Be prepared to make your interests and views known to them, as well. But remember the federal agency is ultimately responsible for completing Section 106 review, so make sure you also convey your concerns directly to it.

Learn About the Project

Hangar 1, a historic dirigible hangar at Moffett Field at NASA Ames Research Center, California

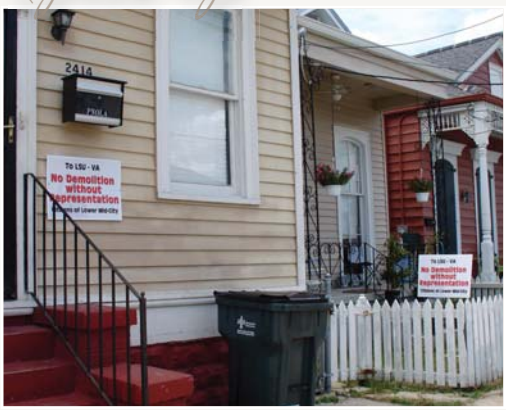
Influencing Project Outcomes

In addition to seeking the views of the public, federal agencies must actively consult with certain organizations and individuals during review. This interactive consultation is at the heart of Section 106 review.

Consultation does not mandate a specific outcome. Rather, it is the process of seeking, discussing, and considering the views of consulting parties about how project effects on historic properties should be handled.

To influence project outcomes, you may work through the consulting parties, particularly those who represent your interests. For instance, if you live within the local jurisdiction where a project is taking place, make sure to express your views on historic preservation issues to the local government officials who participate in consultation.

Speak Up



Residents in the Lower Mid-City Historic District in New Orleans express their opinions about the proposed acquisition and demolition of their properties for the planned new Department of Veterans Affairs and Louisiana State University medical centers which would replace the facilities damaged as a result of Hurricane Katrina.

You or your organization may want to take a more active role in Section 106 review, especially if you have a legal or economic interest in the project or the affected properties. You might also have an interest in the effects of the project as an individual, a business owner, or a member of a neighborhood association, preservation group, or other organization. Under these circumstances, you or your organization may write to the federal agency asking to become a consulting party.

WHO ARE CONSULTING PARTIES?

The following parties are entitled to participate as consulting parties during Section 106 review:

- Advisory Council on Historic Preservation;
- State Historic Preservation Officers;
- Federally recognized Indian tribes/THPOs;
- Native Hawaiian organizations;
- Local governments; and
- Applicants for federal assistance, permits, licenses, and other approvals.

Other individuals and organizations with a demonstrated interest in the project may participate in Section 106 review as consulting parties "due to the nature of their legal or economic relation to the undertaking or affected properties, or their concern with the undertaking's effects on historic properties." Their participation is subject to approval by the responsible federal agency.

When requesting consulting party status, explain in a letter to the federal agency why you believe your participation would be important to successful resolution. Since the SHPO/THPO or tribe will assist the federal agency in deciding who will participate in the consultation, be sure to provide the SHPO/THPO or tribe with a copy of your letter. Make sure to emphasize your relationship with the project and demonstrate how your connection will inform the agency's decision making.

If you are denied consulting party status, you may ask the ACHP to review the denial and make recommendations to the federal agency regarding your participation. However, the federal agency makes the ultimate decision on the matter.

Consulting party status entitles you to share your views, receive and review pertinent information, offer ideas, and consider possible solutions together with the federal agency and other consulting parties. It is up to you to decide how actively you want to participate in consultation.

Get Involved

Section 106 consultation with an Indian tribe

MAKING THE MOST OF CONSULTATION

Consultation will vary depending on the federal agency's planning process and the nature of the project and its effects.

Often consultation involves participants with a wide variety of concerns and goals. While the focus of some may be preservation, the focus of others may be time, cost, and the purpose to be served by the project.

Effective consultation occurs when you:

- keep an open mind;
- state your interests clearly;
- acknowledge that others have legitimate interests, and seek to understand and accommodate them;
- consider a wide range of options;
- identify shared goals and seek options that allow mutual gain; and
- bring forward solutions that meet the agency's needs.

Creative ideas about alternatives—not complaints—are the hallmarks of effective consultation.

How the ACHP Can Help

Under Section 106 review, most harmful effects are addressed successfully by the federal agency and the consulting parties without participation by the ACHP. So, your first points of contact should always be the federal agency and/or the SHPO/THPO.

When there is significant public controversy, or if the project will have substantial effects on important historic properties, the ACHP may elect to participate directly in the consultation. The ACHP may also get involved if important policy questions are raised, procedural problems arise, or if there are issues of concern to Indian tribes or Native Hawaiian organizations.

Whether or not the ACHP becomes involved in consultation, you may contact the ACHP to express your views or to request guidance, advice, or technical assistance. Regardless of the scale of the project or the magnitude of its effects, the ACHP is available to assist with dispute resolution and advise on the Section 106 review process.

If you cannot resolve disagreements with the federal agency regarding which historic properties are affected by a project or how they will be impacted, contact the ACHP. The ACHP may then advise the federal agency to reconsider its findings.

Collecting Comments

A panel of ACHP members listen to comments during a public meeting.

CONTACTING THE ACHP: A CHECKLIST

When you contact the ACHP, try to have the following information available:

- the name of the responsible federal agency and how it is involved;
- a description of the project;
- the historic properties involved; and
- a clear statement of your concerns about the project and its effect on historic properties.

If you suspect federal involvement but have been unable to verify it, or if you believe the federal agency or one of the other participants in review has not fulfilled its responsibilities under the Section 106 regulations, you can ask the ACHP to investigate. In either case, be as specific as possible.

When Agencies Don't Follow the Rules

A federal agency must conclude Section 106 review before making a decision to approve a project, or fund or issue a permit that may affect a historic property. Agencies should not make obligations or take other actions that would preclude consideration of the full range of alternatives to avoid or minimize harm to historic properties before Section 106 review is complete.

If the agency acts without properly completing Section 106 review, the ACHP can issue a finding that the agency has prevented meaningful review of the project. This means that, in the ACHP's opinion, the agency has failed to comply with Section 106 and therefore has not met the requirements of federal law.

A vigilant public helps ensure federal agencies comply fully with Section 106. In response to requests, the ACHP can investigate questionable actions and advise agencies to take corrective action. As a last resort, preservation groups or individuals can litigate in order to enforce Section 106.

If you are involved in a project and it seems to be getting off track, contact the agency to voice your concern. Call the SHPO or THPO to make sure they understand the issue. Call the ACHP if you feel your concerns have not been heard.

Following Through

Stay Informed

Milton Madison Bridge over the Ohio River between Kentucky and Indiana (photo courtesy Wilbur Smith Associates/Michael Baker Engineers)

After agreements are signed, the public may still play a role in the Section 106 process by keeping abreast of the agreements that were signed and making sure they are properly carried out. The public may also request status reports from the agency.

Designed to accommodate project needs and historic values, Section 106 review relies on strong public participation. Section 106 review provides the public with an opportunity to influence how projects with federal involvement affect historic properties. By keeping informed of federal involvement, participating in consultation, and knowing when and whom to ask for help, you can play an active role in deciding the future of historic properties in your community.

Section 106 review gives you a chance to weigh in when projects with federal involvement may affect historic properties you care about. Seize that chance, and make a difference!

Contact Information

Advisory Council on Historic Preservation

Office of Federal Agency Programs
1100 Pennsylvania Avenue, NW, Suite 803
Washington, D.C. 20004
Phone: (202) 606-8503
Fax: (202) 606-8647
E-mail: achp@achp.gov
Web site: www.achp.gov

The ACHP's Web site includes more information about working with Section 106 and contact information for federal agencies, SHPOs, and THPOs.

National Association of Tribal Historic Preservation Officers

P.O. Box 19189
Washington, D.C. 20036-9189
Phone: (202) 628-8476
Fax: (202) 628-2241
E-mail: info@nathpo.org
Web site: www.nathpo.org

National Conference of State Historic Preservation Officers

444 North Capitol Street, NW, Suite 342
Washington, D.C. 20001
Phone: (202) 624-5465
Fax: (202) 624-5419
Web site: www.ncshpo.org
For the SHPO in your state, see www.ncshpo.org/find/index.htm

National Park Service

Heritage Preservation Services
1849 C Street, NW (2255)
Washington, D.C. 20240
E-mail: NPS_HPS-info@nps.gov
Web site: www.nps.gov/history/hps

National Register of Historic Places
1201 Eye Street, NW (2280)
Washington, D.C. 20005
Phone: (202) 354-2211
Fax: (202) 371-6447
E-mail: nr_info@nps.gov
Web site: www.nps.gov/history/nr

National Trust for Historic Preservation

1785 Massachusetts Avenue, NW
Washington, D.C. 20036-2117
Phone: (800) 944-6847 or (202) 588-6000
Fax: (202) 588-6038
Web site: www.preservationnation.org

The National Trust has regional offices in San Francisco, Denver, Fort Worth, Chicago, Boston, and Charleston, as well as field offices in Philadelphia and Washington, D.C.

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Web site: www.oha.org

Beneath the Surface

Ohio Department of Transportation workers made an unanticipated archaeological discovery while working just north of Chillicothe along state Route 104. It is a remnant of an Ohio & Erie Canal viaduct. (photo courtesy Bruce W. Aument, Staff Archaeologist, ODOT/Office of Environmental Services)

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ATTACHMENT 3
TRADITIONAL KNOWLEDGE AND THE SECTION 106 PROCESS:
INFORMATION FOR FEDERAL AGENCIES AND OTHER PARTICIPANTS

Traditional Knowledge and the Section 106 Process: Information for Federal Agencies and Other Participants

Introduction

The Section 106 review process requires federal agencies to consider the impacts of undertakings they carry out, license, or assist on properties determined eligible for the National Register of Historic Places, including those with religious and cultural significance to Indian tribes and Native Hawaiian organizations (NHOs). Understanding how the significance of historic properties of cultural and religious significance to Indian tribes and NHOs is determined and effects to them are resolved, in consultation with Indian tribes and NHOs, is crucial to successful Section 106 reviews. The purpose of this paper is to explain the important role traditional knowledge can play in meeting these requirements.

Key Concepts

Although the term "traditional knowledge" (TK) is not defined in the National Historic Preservation Act (NHPA) or its implementing regulations, its role in the Section 106 process is necessitated by the requirement, at 36 CFR Section 800.4, that agency officials "acknowledge that Indian tribes and Native Hawaiian organizations (NHOs) possess **special expertise** in assessing the eligibility of historic properties that may possess **religious and cultural significance** to them." Traditional knowledge is an integral part of that special expertise. The Advisory Council on Historic Preservation (ACHP) applies the term "traditional knowledge," for purposes of Section 106, to the information or knowledge held by Indian tribes and NHOs and used for identifying, evaluating, assessing, and resolving adverse effects to historic properties of religious and cultural significance to them.

The NHPA clarifies that properties of religious and cultural significance to Indian tribes and NHOs may be eligible for the National Register of Historic Places. It also requires federal agencies, in carrying out the Section 106 review process, to consult with Indian tribes and NHOs when historic properties of religious and cultural significance to them may be affected by a federal undertaking. The ACHP's regulations implementing Section 106, 36 CFR Part 800, in turn, require federal agencies to consult with Indian tribes and NHOs throughout the Section 106 review process.

This paper focuses on traditional knowledge of Indian tribes and NHOs and its role in the Section 106 process. For purposes of this paper and out of respect, Native Hawaiians will be referred to as *kanaka maoli* unless the legal rights of NHOs are being discussed. The term "Native Hawaiian organization" refers to certain groups who have the right to participate in the Section 106 review process. *Kanaka maoli* is the Hawaiian word, roughly translated as "the people" or "true people." It should also be noted that the actual name of each Indian tribe should be used to address the tribe in the consultation process.

This paper includes appendices with examples of how *kanaka maoli,* Indian tribes, intertribal organizations, federal and state agencies, and international bodies explain and address traditional knowledge. The tribal information was generously provided by tribal representatives and the Hawaiian information from *kanaka maoli* to help educate others about the importance of traditional knowledge and

its place in their worlds. The information is presented as it was submitted to the ACHP. The ACHP acknowledges that sharing and discussing traditional knowledge can be sensitive and is grateful to all those who helped draft this paper and provided information for the appendices. The appendices will be updated as additional information is provided to the ACHP.

Traditional Knowledge

It is important to understand at the outset that traditional knowledge is frequently used by Indian tribes and *kanaka maoli* to identify historic properties of religious and cultural significance to them in the Section 106 review process. While there is no singular federal definition or understanding of traditional knowledge, the concept of traditional knowledge is recognized by a number of federal agencies in the context of environmental reviews and in carrying out land management and restoration. In these contexts, it is often referred to as traditional ecological knowledge or TEK. It may also be referred to as indigenous knowledge or traditional cultural knowledge. For the purposes of Section 106, the term "traditional knowledge" is inclusive of all these terms, and it informs the body of knowledge referred to in the Section 106 regulations as "special expertise."

Traditional Knowledge in the Section 106 Process

While indigenous oral histories and traditions that inform traditional knowledge have, in the past, been treated as mythology, stories, or folklore by some people who are not indigenous and therefore lacking validity, this is not the case for traditional knowledge which is both valid and an accepted form of information acknowledged by federal law. For example, oral tradition is one of 10 lines of evidence used to demonstrate cultural affiliation in the Native American Graves Protection and Repatriation Act (NAGPRA). The federal acknowledgement process (25 CFR Part 83) also often integrates tribal knowledge as part of the evidence collected to demonstrate continuity of Indian tribes and their social and political interactions over time. That said, the ACHP is not suggesting that traditional knowledge is only legitimized when specifically identified in federal law or regulation; rather, the ACHP points to these examples to illustrate the ongoing practice of the federal government to recognize traditional knowledge as valuable information.

The inclusion of traditional knowledge in the Section 106 process is a critical component in the identification and evaluation of historic properties. In fact, the Section 106 regulations at 36 CFR § 800.4(c)(1) require federal agencies to acknowledge the special expertise of Indian tribes and NHOs in evaluating and, by extension, identifying historic properties of religious and cultural significance to them. Including Indian tribes or NHOs early on in project planning in addition to consulting with them at every step of the process as required in the regulations, will help provide federal agencies with the information necessary to carry out the Section 106 process. It should also be noted that the regulations acknowledge that the passage of time, changing perceptions of significance, or incomplete prior evaluations may require the reevaluation of project areas for the presence of historic properties (36 CFR § 800.4(c)(1)). This is a particularly important consideration in planning for identification, because past identification and evaluation efforts may not have included the traditional knowledge held by Indian tribes and NHOs.

Indian tribes or their designated representatives and NHOs and *kanaka maoli* are the experts about their respective cultures and thus are the experts in the identification and evaluation of historic properties of religious and cultural significance to them. Federal agencies are not the experts on what constitutes traditional knowledge. It must also be understood that historic properties are unique to each Indian tribe or NHO and may have tangible or intangible characteristics that could include both natural and human-made elements. Each Indian tribe or NHO may have their own information about a specific place that differs from that of another tribe or NHO, because each has a unique culture and history. In many cases, different tribes or NHOs may have different views or beliefs about the same place. The fact that each may

hold different traditional knowledge about the same place does not invalidate that knowledge. Additional outreach and consultation may be required for a federal agency to engage with multiple tribes to better understand a single place; such additional efforts enrich the process and better inform decision making.

In planning for Section 106 consultation, federal agencies should recognize that it may take time for Indian tribes or NHOs to produce traditional knowledge because such knowledge is not usually documented in databases or written files and may in fact be dispersed in different locations and among more than one person. In some cases, the very act of writing down traditional knowledge can cause harm to the practices and places with which it is related. Sometimes, such information or permission to share such information needs to be obtained from knowledgeable community members, elders, preservation boards, cultural committees, and/or elder advisory boards of an Indian tribe or NHO. Doing so may take time. Indian tribes and NHOs may also have protocols that dictate if, how, and/or when they can divulge or discuss information about properties of religious and cultural significance. For example, there may be times during the year when it is forbidden to speak about certain places or their use. Such protocols or prohibitions should be considered in the Section 106 process and project planning and may require a fair degree of flexibility and creativity in decision making. Therefore, working with Indian tribes and NHOs early in the Section 106 process makes sense in order to accommodate protocols and information gathering.

In addition, the Section 106 regulations require federal agencies to conduct consultation in a manner that respects tribal sovereignty and recognizes the nation-to-nation relationship that exists between Indian tribes and the federal government. The regulations further remind the agency official to take into account and address any tribal or NHO concerns about confidentiality pursuant to 36 CFR § 800.11(c). Therefore, federal agencies must treat access to and use of traditional knowledge as part of the nation-to-nation interaction and be guided by tribal protocols about traditional knowledge.

The National Congress of American Indians (NCAI), an intertribal organization, states that "traditional knowledge should also only be accessed through the government-to-government process that respects the sovereign right of each Tribe to determine its appropriate process with its tradition holders for access…in those cases where traditional knowledge may be shared by the tribes, measures need to be developed to ensure that it is used appropriately, that tribes are protected in policy and law against its misuse and that the tribes are able to determine and receive benefits from its use."[1]

Traditional knowledge can provide information that greatly enhances a federal agency's ability to make historic preservation decisions that respect, value, and take into account historic properties of religious and cultural significance to Indian tribes or NHOs. The integration of traditional knowledge into project planning can also help ensure identification and evaluation efforts meet the regulatory requirement that the federal agency carry out a reasonable and good faith effort. The demonstration of respect for traditional knowledge can show the Indian tribe or NHO that the agency takes its responsibilities seriously and recognizes values and practices of the Indian tribe or NHO.

Traditional Knowledge in the U.N. Declaration on the Rights of Indigenous Peoples

In 2013, the ACHP formally adopted a plan to support the U.N. Declaration on the Rights of Indigenous Peoples (Declaration). The plan includes a commitment to incorporate the principles and aspirations in ACHP's work regarding tribal and *kanaka maoli* historic preservation. Therefore, it is important to briefly discuss what the Declaration says about traditional knowledge and its relationship to this information paper.

[1] The National Congress of American Indians Resolution #REN-13-035

While the U.S. acknowledges tribal self-determination in federal statute, regulation, and executive actions, it bears noting that Article 3 of the Declaration states that indigenous peoples have the right to self-determination. In this context, the ACHP recognizes that this inherent right is the underpinning for any discussion about potential sharing of traditional knowledge by Indian tribes and *kanaka maoli* and uses of it by federal agencies. The following articles provide further clarity about the rights of indigenous peoples as it relates to their traditions and knowledge.

Article 12 of the Declaration proclaims the right of indigenous peoples "to manifest, practice, develop and teach their spiritual and religious traditions, customs and ceremonies; the right to maintain, protect, and have access to privacy to their religious and cultural sites; the right to the use and control of their ceremonial objects; and the right to the repatriation of their human remains."

Article 15 explains that "indigenous peoples have the right to the dignity and diversity of their cultures, traditions, histories and aspirations which shall be appropriately reflected in education and public information and that states (national governments) shall take effective measures to promote understanding among indigenous peoples and others."

Article 19 is particularly relevant to the use and integration of traditional knowledge in Section 106 decision making. It states that governments "shall consult and cooperate in good faith with the indigenous peoples concerned through their own representative institutions in order to obtain their free, prior and informed consent before adopting and implementing legislative and administrative measures that may affect them." In requesting traditional knowledge, federal agencies should be respectful of an Indian tribe's or NHO's authority to disclose or withhold such information. If such information is shared by an Indian tribe or *kanaka maoli*, the federal agency should obtain permission regarding how and when it is used. The NHPA does not require any Indian tribe or NHO to provide federal agencies with traditional knowledge simply because it may be valuable information in the context of Section 106 decisions. Traditional knowledge belongs to the people who hold it.

Finally, Article 31 states that "indigenous peoples have the right to maintain, control, protect and develop their cultural heritage, traditional knowledge and traditional cultural expressions, as well as the manifestations of their sciences, technologies and cultures, including human and genetic resources, seeds, medicines, knowledge of the properties of fauna and flora, oral traditions, literatures, designs, sports and traditional games and visual and performing arts. They also have the right to maintain, control, protect and develop their intellectual property over such cultural heritage, traditional knowledge, and traditional cultural expressions." Working with indigenous peoples, governments "shall take effective measures to recognize and protect the exercise of these rights."

Accordingly, in the context of the Section 106 process, when a federal agency is working with and respectful of an Indian tribe's or NHO's special expertise, its actions align with these principles in the Declaration.

Conclusion

The ACHP has provided this information to help inform federal agencies of their obligation to incorporate traditional knowledge into their Section 106 decision making.

Traditional knowledge is a valuable source of information that federal agencies must recognize and incorporate into the Section 106 process to determine whether an undertaking would affect a historic property of religious and cultural significance to an Indian tribe or NHO and, if so, how to resolve such effects. When a federal agency engages a traditional knowledge consultant, such as a tribal or *kanaka maoli* specialist, traditional practitioner, or tribal or *kanaka maoli* archaeologist, to inform its

identification and evaluation efforts, the agency should compensate that subject matter expert just as other subject matter experts would be compensated for their particular and specific knowledge and skills. It has long been recognized that archaeologists, historic architects, and architectural historians, among others, possess the knowledge and expertise to assist federal agencies in meeting their Section 106 responsibilities. It has also long been the practice to compensate them for their services when employed by a federal agency. The same recognition of the knowledge and expertise that tribal and *kanaka maoli* preservation and traditional practitioners possess is long overdue, and compensation for the employment of such consultants is appropriate to assist applicants and federal agencies in the Section 106 process.

Although traditional knowledge and non-Native scientific knowledge may arise from different cultural traditions, they are often compatible when integrated appropriately. The ACHP believes that both Native and non-Native ways of knowing are important to a full understanding of historic properties that must be considered in the Section 106 review process. Listening to indigenous perspectives, even when they differ, and taking traditional knowledge into account are vital to achieving informed decisions about historic properties.

Acknowledgements

The ACHP wishes to thank the many tribal and *kanaka maoli* partners who helped frame and contributed to this paper. They spent many hours in discussions with ACHP staff, edited the main text, and shared information for the appendices. Their participation in this effort has enriched the content and given it greater meaning.

April 2021

The Appendices

It is helpful for federal agencies and others to be aware of how Indian tribes and NHOs/*kanaka maoli*, intertribal organizations, various international bodies, as well as some governmental agencies have characterized traditional knowledge. The following is only a sampling of such sources; therefore, it is important to note that these examples are not universal but rather represent the views and understandings only of the referenced source.

Common throughout the definitions included here is the reality that traditional knowledge is reflective of and often tied to local landscapes as understood through the local community. Regardless of how expansive or specific the traditional knowledge is, an important takeaway is that traditional knowledge is both held by and verified through the Indian tribe or NHO providing such information; federal agencies are not the authority on what constitutes traditional knowledge. As noted previously, the ACHP considers traditional knowledge to be the information held by Indian tribes and NHOs and is the special expertise they bring to the Section 106 process.

Appendix A:
Traditional Knowledge as Explained by *Kanaka Maoli*

Kaleo Paik, Indigenous First Nation

Our sacred places were chosen and structures erected for specific purposes. The purpose and what it served was carried down through traditional knowledge via oral history or practices that have continued over time. Therefore the term traditional knowledge can only be defined through the lens of that indigenous culture and not through the filters of a process which undermines the very indigenous wisdom by vetting it through a science that is not well suited to understand or help make the final decision in regards to our sites.

Excerpt Provided by Kua'aina Ulu Auamo (KUA)

Hawaiian view of natural resources
Hawaiian world view emerged from many generations of life in this archipelago, and while beliefs are diverse, several key beliefs are common across the islands. One of these common beliefs holds that native species are ancestors to humans. This imposes familial responsibilities on people, and engenders respect and care for native plants and animals. Many native species are also viewed as physical manifestations of akua (gods), linking natural and supernatural worlds, and removing them from the mundane world, and requiring the attention devoted to sacred matters. Native species and ecosystems are further viewed as an inherent part of place, and cannot be separated from the cultural sense of place. To many Hawaiians, the natural world is in an ongoing reciprocal relationship with people that requires dedication and effort to maintain. Hawaiian cultural identity, knowledge, and practice are rooted in this reciprocal relationship with the land -- and the health of one depends upon the health of the other.

Traditional knowledge
Traditional Hawaiian knowledge encompasses a broad scope, including knowledge of native species diversity, knowledge of ecological processes and patterns, and knowledge of management of land and sea. Such knowledge was originally transmitted purely in an oral, trans-generational manner, and remains embodied in the names of species and places, and in oli (chants), moʻolelo (stories), and ʻōlelo noʻeau (proverbs). There recently has been a development of explorations on the process of Hawaiian inquiry: on how traditional knowledge is gathered, assessed, and promulgated. This “Hawaiian Science” is comparable to conventional “Western Science” in terms of observation, manipulation, testing, and promulgation of knowledge. An example of this kind of exploration in the Papakū Makawalu inquiry method promises to create a multi-tiered training approach in traditional knowledge that honors and reinstates ancient knowledge, but is valid and applicable for modern times.

Hawaiian values
The values of Hawaiian people are broad-ranging, encompassing all aspects of human interactions with each other and with their environment. This paper does not intend to cover all values, but points out that many of these values align very well with the cause of conservation. For example:

ʻike: knowledge and deep understanding is highly valued, and essential for survival and producing abundance;

hoʻomau: perseverance, continuity and training ensures long term success and perpetuation of life;

kānāwai: rules dictate appropriate behavior for places and resources, mitigating abuse, waste and overuse;

laulima: pooling of resources and efforts is characteristic of familial coordination and cooperation which extends to nature;

lōkahi: interdependence between all beings is necessary for survival, and the balance of uses is a desirable condition;

Appendix B:
TRADITIONAL KNOWLEDGE AS EXPLAINED BY INDIAN TRIBES

Confederated Salish and Kootenai Tribes

Cultural resources are precious Tribal resources. They encompass the Tribes' elders, languages, cultural traditions, and cultural sites. They include the fish, wildlife and plants native to the region and land forms and landmarks. Tribal elders and the languages are perhaps the most vital of these resources because they teach and communicate the histories and traditional lifestyles of the Tribes. The traditions depend on land based cultural resources, the topic of this chapter. These land-based resources include native fish and wildlife and their habitats, food and medicinal plants and the areas where they grow, prehistoric and historical use sites, and other land areas where Tribal members currently practice cultural traditions.

Hunting, fishing, plant harvesting, hide-tanning, food and medicine preparation, singing, dancing, praying, feasting, storytelling and practicing ceremonies are examples of age-old traditions that rely on the land and the community of life it supports.

Although each of the Tribes on the Reservation possess distinctive beliefs and practices, the people share one important similarity: Tribal people value the Earth—its air, water and land— as the foundation of Indian culture. In the words of the Flathead Culture Committee,

> *The Earth is our historian, it is made of our ancestors' bones. It provides us with nourishment, medicine and comfort. It is the source of our independence; it is our Mother. We do not dominate Her, but harmonize with Her.*

The Tribes believe everything in nature is embodied with a spirit. The spirits are woven tightly together to form a sacred whole (the Earth). Changes, even subtle changes that affect one part of this web affect other parts.

Protecting land-based cultural resources is essential if the Tribes are to sustain Tribal cultures. This is one of the most important goals of Tribal natural resource management on the Reservation. It is also a goal that the Tribes have for Tribal aboriginal territories managed by other entities.[2]

Traditional Indigenous Knowledge – John Brown, Narragansett Indian Tribe

Traditional indigenous knowledge is what Indian tribes and Native Hawaiians bring to the Section 106 process in identifying, evaluating and determining effects to historic properties of religious and cultural significance to them. In simple terms, it is their way of knowing about these places.

Each culture has its unique way of knowing things, of viewing the world, of expressing their views and ideas. Different cultures can look at the same object, place, or living thing but may have very different knowledge about it or even have similar knowledge but express that knowledge differently. For example, a non-Native woman might look at a maple tree and think of it as a tree and source of maple syrup. A Native woman might look at the same tree and see it as a spirit being or source of medicine or power. In historic preservation, an archaeologist might examine a site and see its potential to yield archeological information about the past while a Native person might know it as a place of power and spiritual

[2] CONFEDERATED SALISH & KOOTENAI TRIBES - COMPREHENSIVE RESOURCES PLAN

significance. An archaeologist might have to use technology and dig into the site to obtain the information while a Native person might see certain clues on the surface that indicate the type of place it is without having to physically disturb the site. The archaeologist obtained his or her knowledge through a non-Native education system and practice while the Native person might have obtained his or her knowledge through a system of learning specific to that culture. The content of such learning may also have been very different than that passed down to the archaeologist.

Traditional Knowledge is a non-linear expression that considers math, sciences, history, psychology, structural engineering and religion all at once from multiple vectors.

We are looking at the same reality; Traditional Knowledge simply expresses reality differently.
So, what is needed is a translation process so that two or more parties can communicate, come to an understanding and reach common ground.

CONCEPTUALIZING TRADITIONAL KNOWLEDGE: Tejon Indian Tribe

Traditional Knowledge ("TK") is the deep generational wisdom gleaned via indigenous peoples' symbiotic relationship with their super/natural environments over millennia of sustainable coexistence with those environments. Therefore, TK can include agricultural, anthropological, astronomical, biological, cultural, ecological, geological, historical, mathematical, medical, pharmacological, philosophical, spiritual and various other types of modern academic data, which are typically commingled by most aboriginal societies into a holistic and interdisciplinary 'science' or TK. While the ontological value of TK is derived from its persistence through the millennia (via, e.g., traditional practices, oral histories, cosmologies, etc.), its epistemological value is derived from the epigenetic and ethnolinguistic access that is *only* available to the aboriginal society maintaining a particular TK. Consequently, the ability to document, implement, interpret, transmit and/or otherwise utilize TK is *only* possible with the *proactive* participation of the indigenous keeper(s) of the TK. The Tejon Indian Tribe acknowledges that each aboriginal society maintains a discrete TK; thereby, making it impossible to provide a universal definition for TK. However, it is not implausible for multiple TKs to align, either partially or wholly, along the aforementioned principles.

TRADITIONAL KNOWLEDGE: Cheyenne River Sioux Tribe

The Cheyenne River Sioux Tribe realizes the principles established by the Department of the Interior in National Register Bulletin 38, "Guidelines for Evaluating and Documenting Traditional Cultural Properties." This document states: "A traditional cultural property, then can be defined generally as one that is eligible for inclusion in the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community."

Site descriptions embodying a lifeway which has been ancestrally communicated through oral tradition, when transmitted to a professional of non-native descent, has typically been diminished as knowledge that is *incidental information or addendum* that is relevant but not essential to determine a site's significance or eligibility to the National Register of Historic Places. Eligibility criterion determination measures are not inclusive of those Native attested descriptive tangible or intangible values of a site's content. This condition prompts the non-native communities of researchers to seek to determine validation by scientific weights, measures, research of non-native theses and dissertations, and lastly, replication. In previous projects where Oceti Sakowin TCS have disclosed site information has led to traditional knowledge being appropriated without Oceti Sakowin permission. Perceptions engendered by the non-native researcher

becomes an erroneous depiction that is cited and compounded by citation and reference over time. Essentially, Oceti Sakowin knowledge is not a commodity that an academic degree can validate, or be owned via non-native scholarly research objectives and thereby be discounted of historical/cultural relevance.

Susanville Indian Rancheria
Melany L Johnson, THPO/NAGPRA Coordinator

Traditional Ecological Knowledge, TEK, when I first heard of this term I didn't know what it was and thought to myself I need to ponder this. TEK refers to the aboriginal, indigenous, Native form of knowledge, practice, and belief. It is passed down from generation to generation, culturally. It's the relationship of us, as living human beings and our environment; which is also living.

TEK is controversial in management and science. Science uses data based on research and experimentation. We as Native Americans know the cultural knowledge as it has been passed down from Great Grandparents to Grandparents to parents to children, to grandchildren. It's the Circle of Life. It is how we survived for thousands of years, even in hostile environments. We are the experts.

We suffered a *DISCONNECT* when our California homelands were invaded by Europeans, pioneers, and the 49er's. While it's true that we suffered Genocide, we are here today because our Great Grandparents were lucky enough, cleaver enough to stay alive. But, they had to sacrifice so much for us to be here, right now, right at this moment.

For me, my language was forbidden, my Grandma wanted us to be assimilated…But, she took us out in the woods and in the meadows to gather foods and medicine. We know how to take care of the plants, what to do to make them come back again next year. We know how to make acorn soup and jellies. We know how to gather basket materials and how to burn. We know the places of importance, medicine places, food sources, roots, Sacred areas.

Everything is related, everything is connected, Mother Earth, Water, Air, the four legged, the two legged, the winged, the trees, our food. We are all connected; we need to take care of our resources.

You must also understand, non-natives cannot do TEK. They can understand, they can be respectful…but it's not their job to sing, pray, give offering to our sites. That is our job.

Traditional Indigenous Knowledge
Sunshine Thomas-Bear, Winnebago Tribe of Nebraska

Traditional Knowledge (TK) to the Winnebago Tribe of Nebraska is a connection to all things. We are connected from the air we breathe, the ground we walk on, to the foods we grow, the animals and plants we share our earth with, the connectedness with all things our creator put on this earth. We grow and respect all of these things in our lifetime, knowing that one day we will return to the earth and the cycle of life will continue.

Although colonization and the genocide of our people has taken its toll, loss of lands, culture, language and family structure, through TK we continue to learn, grow and become what our ancestors wanted for us. We are, our ancestor's prayers; answered. The battle to let go of the historical trauma of our people, learn from what we have left of TK, and form our culture and language from what we can reconstruct and reconnect with has and will be an ongoing battle but through TK we know where we come from, our oral

history, our lands our ancestors have walked on, finding our way back and knowing it is our place, here. Through perseverance and resistance, we continue to protect our culture, lands, and language, all of this possible through TK.

The Winnebago Tribe of Nebraska knows the battle for our lands and have suffered through the loss of our homelands and the split of our people and families due to removal. Finding our way back and protecting the lands we have left is extremely important to us. Unfortunately, we have to rely on a government that we know we cannot trust, that has not upheld their treaties with our people and learn to work with them to protect what little we have left.

Our people are aware that this form of knowledge, this blessing of being connected to everything is not a Western belief, nor can it be comprehended by many who are not Indigenous. There is a disconnect. Our people belong in all areas where decisions are being made, not only for our lands, but our culture, language, foods, children and people. No one can understand what we need and what our lands need but us. The world as a whole is not pieces to be broken up and to profit from, it is living and breathing and our people, all Indigenous people have a job to uphold, to protect our lands through our connection to all things.

Confederated Tribes of the Colville Reservation Tribal Historic Preservation Office

We have been called on to defend traditional information, knowledge, and places frequently in the last few years in relation to state, local, federal and international undertakings here in the Columbia Plateau. Our comments regarding TEK, Sacred Sites, places of religious and cultural significance, Indian trust assets, traditional foods' role in maintaining healthy minds and bodies, and the association between historic properties and ceremonial and ritual use is voluminous and compound. This is particularly true when determining areas of potential effect and cultural resource ties to natural resources, for example, the relationship between spirituality and full life cycle anadromous fish passage in the Upper Columbia River, or the importance of air and water quality to traditionally gathered food and medicinal plants. Each iteration of justifying Native American traditional practices in light of various undertakings and impacts is individualized and not easily condensed.

Appendix C:
TRADITIONAL KNOWLEDGE AS EXPLAINED BY INTERTRIBAL ORGANIZATIONS

Affiliated Tribes of Northwest Indians

The Affiliated Tribes of Northwest Indians (ATNI), an intertribal organization comprised of 57 tribes, passed Resolution #11-77 stating that traditional ecological knowledge is "…an accumulation of centuries of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission." ATNI's resolution includes significant statements regarding the need for the United States and its agencies to "recognize and respect Tribal traditions, ordinances and expectations regarding access to and respectful use of their traditional ecological knowledge."

National Congress of American Indians

The National Congress of American Indians (NCAI), an intertribal organization, addressed traditional knowledge in Resolution REN-13-035, "Request for Federal Government to Develop Guidance on Recognizing Tribal Sovereign Jurisdiction over Traditional Knowledge." The resolution explains that traditional knowledge is a core part of tribal identities and ways of life, is highly spiritual, and carries responsibilities for its appropriate uses. NCAI goes on to explain that traditional knowledge includes, but is not limited to, the use of medicinal plants, knowledge of traditional habitats, and that some traditional knowledge is so sacred that it cannot be shared outside of tribal societies and traditional holders. Finally, NCAI also explains that there is increasing acknowledgement that tribal traditional knowledge is equivalent to scientific knowledge in solving environmental problems.

Appendix D:
TRADITIONAL KNOWLEDGE AS EXPLAINED BY GOVERNMENT AGENCIES

U.S. Mission to the United Nations

In the 2019 U.S. Statement: UN Permanent Forum to the U.N. (PFII) Eighteenth Session Agenda Item 9: Traditional Knowledge: Generation, Transmission, and Protection, the U.S. Mission acknowledged the role of traditional knowledge in U.S. government decision making:

> "The United States engages and works with Indian tribes, Native Hawaiian organizations and other indigenous communities to support, share, utilize and protect traditional knowledge. We have a legal framework in place to incorporate traditional knowledge into U.S. government decision-making."

U.S. Bureau of Ocean Energy Management[3]

Traditional knowledge can be defined as a body of evolving practical knowledge based on observations and personal experience of indigenous residents over an extensive time period. It can be described as information based on the experiences of a people passed down from generation to generation. It includes extensive understanding of environmental interrelationships and can provide a framework for determining how resources are used and shared.

BOEM acknowledges that traditional knowledge is the following:

- Holistic
- Local and highly contextual
- Shared through kinship that promotes survival and well-being
- Dynamic rather than rigid
- Based on experience
- More than a collection of observations
- An important sociocultural component that anchors community values and can be part of a community's spiritual and cultural identity
- A framework that emphasizes a fundamental sense of unity in which people are viewed as part of the environment.

U.S. Fish and Wildlife Service

The U.S. Fish and Wildlife Service (FWS) discusses traditional knowledge in its fact sheet, *Traditional Ecological Knowledge for Application by Service Scientists* as follows:

> "Also called by other names including Indigenous Knowledge or Native Science, (hereafter, TEK) refers to the evolving knowledge acquired by indigenous and local peoples over hundreds or thousands of years through direct contact with the environment. This knowledge is specific to a location and includes the relationships between plants, animals, natural phenomena, landscapes and timing of events that are used for lifeways, including but not limited to hunting, fishing,

[3] https://www.boem.gov/about-boem/traditional-knowledge

> trapping, agriculture, and forestry. TEK is an accumulating body of knowledge, practice, and belief, evolving by adaptive processes and handed down through generations by cultural transmission, about the relationship of living beings (human and non-human) with one another and with the environment. It encompasses the world view of indigenous people which includes ecology, spirituality, human and animal relationships, and more."

National Park Service

The National Park Service (NPS) has a webpage devoted to traditional ecological knowledge and describes it as:

> "Traditional Ecological Knowledge (TEK) is the on-going accumulation of knowledge, practice and belief about relationships between living beings in a specific ecosystem that is acquired by indigenous people over hundreds or thousands of years through direct contact with the environment, handed down through generations, and used for life-sustaining ways. This knowledge includes the relationships between people, plants, animals, natural phenomena, landscapes, and timing of events for activities such as hunting, fishing, trapping, agriculture, and forestry. It encompasses the world view of a people, which includes ecology, spirituality, human and animal relationships, and more.
>
> TEK is also called other names, such as Indigenous Knowledge, Native Science."

State of California

AB-275 Native American cultural preservation (2020):

"Tribal traditional knowledge" means knowledge systems embedded and often safeguarded in the traditional culture of California Indian tribes and lineal descendants, including, but not limited to, knowledge about ancestral territories, cultural affiliation, traditional cultural properties and landscapes, culturescapes, traditional ceremonial and funerary practices, lifeways, customs and traditions, climate, material culture, and subsistence. Tribal traditional knowledge is expert opinion.

Appendix E:
TRADITIONAL KNOWLEDGE AS EXPLAINED BY INTERNATIONAL BODIES

The United Nations Educational, Scientific and Cultural Organization (UNESCO)

UNESCO defines traditional knowledge as "knowledge, innovations, and practices of indigenous and local communities around the world. Developed from experience gained over the centuries and adapted to the local culture and environment, traditional knowledge is transmitted orally from generation to generation. It tends to be collectively owned and takes the form of stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local language and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fisheries, health, horticulture, forestry and environmental management in general."[4]

UN Permanent Forum on Indigenous Issues: Study on the treatment of traditional knowledge in the framework of the United Nations Declaration on the Rights of Indigenous Peoples and the post-2015 development agenda 2/2/15

"Traditional knowledge also encompasses traditional cultural expression and manifestations of sciences, technologies and cultures, including knowledge of human and genetic resources, seeds, medicines, flora and fauna, as well as oral traditions, literatures, designs, traditional sports and games and visual and performing arts."

"In the WIPO context, traditional knowledge is considered to consist of traditional knowledge per se (techniques, practices, skills and innovations), traditional cultural expressions (the forms through which a traditional culture expresses itself, such as music, symbols or painting) and the genetic resources associated with traditional knowledge (such as medicinal plants or traditional crops)."

"Traditional knowledge is knowledge concerning the environment in which indigenous peoples live which is passed on from one generation to another in written and oral form on the basis of their own cultural codes. The knowledge is intangible, inalienable, imprescriptible and non-seizable. Traditional knowledge is a system of innovations and practices, and the only way of guaranteeing the survival of this knowledge and the associated best practices is to protect indigenous lands and ensure that both indigenous peoples and the biodiversity resources on their lands survive."

"Traditional knowledge refers to knowledge, innovations and practices of indigenous peoples around the world which is developed through experience gained over the centuries, adapted to the local culture and environment and passed on orally from generation to generation (see the Declaration of the Indigenous Women's Biodiversity Network). It tends to be collectively owned and takes the form of stories, songs, proverbs, cultural values, beliefs, rituals, laws and community rules, local language, art and agricultural practices, including the development of plant and animal species. It is sometimes referred to as oral tradition because it is transmitted orally but is also expressed through song, dance, paintings, sculptures or carvings. Traditional knowledge is mainly practical knowledge and covers areas such as agriculture, fishing, health, horticulture, forestry and environmental management (see www.cbd.int/traditional/intro.shtml). "

[4] Traditional knowledge | UNESCO UIS

UN Permanent Forum on Indigenous Issues: Report on the eighteenth session (22 April-3 May 2019)

"Self-determination is closely linked to the generation, transmission and protection of traditional knowledge, given that indigenous peoples have the right to determine their own conditions for safeguarding and developing their knowledge."

"Indigenous languages represent complex systems of knowledge that have been developed over thousands of years and are inextricably linked to lands, waters, territories and resources. Each indigenous language represents a unique framework for understanding the world in all its complexity and is a repository of traditional knowledge…"

"Indigenous languages are key to ensuring the continuation and transmission of culture, customs and history as part of the heritage and identity of indigenous peoples."

World Intellectual Property Organization

Traditional knowledge (TK) is knowledge, know-how, skills and practices that are developed, sustained and passed on from generation to generation within a community, often forming part of its cultural or spiritual identity.

While there is not yet an accepted definition of TK at the international level, it can be said that:
TK in a general sense embraces the content of knowledge itself as well as traditional cultural expressions, including distinctive signs and symbols associated with TK.

TK in the narrow sense refers to knowledge as such, in particular the knowledge resulting from intellectual activity in a traditional context, and includes know-how, practices, skills, and innovations.

Traditional knowledge can be found in a wide variety of contexts, including: agricultural, scientific, technical, ecological and medicinal knowledge as well as biodiversity-related knowledge.
(https://www.wipo.int/tk/en/tk/, 1/2020)

ATTACHMENT 4
NATIONAL REGISTER BULLETIN 36:
GUIDELINES FOR EVALUATING AND REGISTERING ARCHEOLOGICAL PROPERTIES

NATIONAL REGISTER BULLETIN

Technical information on the National Register of Historic Places: survey, evaluation, registration, and preservation of cultural resources

U.S. Department of the Interior
National Park Service
Cultural Resources

GUIDELINES FOR EVALUATING AND REGISTERING ARCHEOLOGICAL PROPERTIES

The mission of the Department of Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibility to tribes.

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations. The Park Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

This material is partially based on work conducted under a cooperative agreement between the National Conference of State Historic Preservation Officers and the U.S. Department of the Interior.

Cover photo:
Adolph Bandelier at Pecos National Historical Park, New Mexico, in 1880. Photo taken by George C. Bennett, Museum of New Mexico.

NATIONAL REGISTER BULLETIN

GUIDELINES FOR EVALUATING AND REGISTERING ARCHEOLOGICAL PROPERTIES

by
Barbara Little
Erika Martin Seibert

Jan Townsend
John H. Sprinkle, Jr.
John Knoerl

U.S. DEPARTMENT OF THE INTERIOR, NATIONAL PARK SERVICE
National Register, History and Education
2000

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The authors wish to thank all of the individuals who assisted in the development and review of this bulletin. Mr. Douglas Kupel, formerly a historian with Arizona State Parks, initially proposed the preparation of a historical archeology bulletin and drafted a paper on evaluating historical archeological properties. Although the historical archeology bulletin had been well-received as useful guidance, many archeologists and other preservationists requested that a bulletin be prepared that covered archeology in a more general way. For example, many of the participants in National Register workshops given in conjunction with the Society for American Archaeology annual meetings requested a broader bulletin.

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This bulletin has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. It was developed under the general editorship of Carol D. Shull, Keeper of the National Register of Historic Places and Chief of the National Historic Landmarks Survey. Beth L. Savage, architectural historian, National Register of Historic Places, is responsible for publications coordination. Sarah Dillard Pope, historian, National Register of Historic Places, provides editorial and technical support. Comments on this publication may be directed to Keeper, National Register of Historic Places, National Park Service, 1849 C Street, NW, NC400, Washington, D.C. 20240.

I. INTRODUCTION

WHAT IS ARCHEOLOGY?

Archeology is the study of past ways of life through material remains. Archeology is often combined with oral history and ethnography to generate multi-disciplinary or interdisciplinary studies of past lifeways and is usually categorized as a social science. In the United States it is considered one of the four fields of anthropology along with cultural, biological, and linguistic anthropology.

Archeologists have at least three connected over-arching goals. The first is to reconstruct sequences of societies and events in chronological order in local and regional contexts. The second is to reconstruct past lifeways, including the ways that people made a living (such as how they obtained and raised food as well as how they produced, distributed and consumed tools and other goods); the ways they used the landscape (such as the size and distribution of camps, villages, towns, and special places); and their interactions with other societies and within their own society (such as household structure, social organization, political organizations and relationships). The third is to achieve some understanding of how and why human societies have changed through time.

To pursue these goals, archeologists must assemble information from many individual sites. The synthesis of archeological research requires a great deal of time, but it is the accumulation and comparison of answers to many questions of seemingly local or short-term interest that allow questions of major anthropological significance to be addressed. For example, archeologists seek to understand the effects of environmental change and population pressure and the impact of human actions on the landscape. Such questions often require pieces of information from numerous small and large sites. Like most sciences, archeology is less involved with spectacular discoveries than with testing modest hypotheses about rather humble phenomena. The accumulated results of such tests provide the basis for large scale research. Thus, no one should be surprised at the fact that archeologists often work more on small, simple, ordinary, and seemingly common properties rather than the rare, big, impressive monuments.

WHAT IS AN ARCHEOLOGICAL PROPERTY?

As humans interact with their environment and with each other, they leave behind evidence of their actions. Derived from the common phrase "archeological site," the National Register defines an archeological property as the place or places where the remnants of a past culture survive in a physical context that allows for the interpretation of these remains. It is this physical evidence of the past and its patterning that is the archeologist's data base. The physical evidence, or archeological remains, usually takes

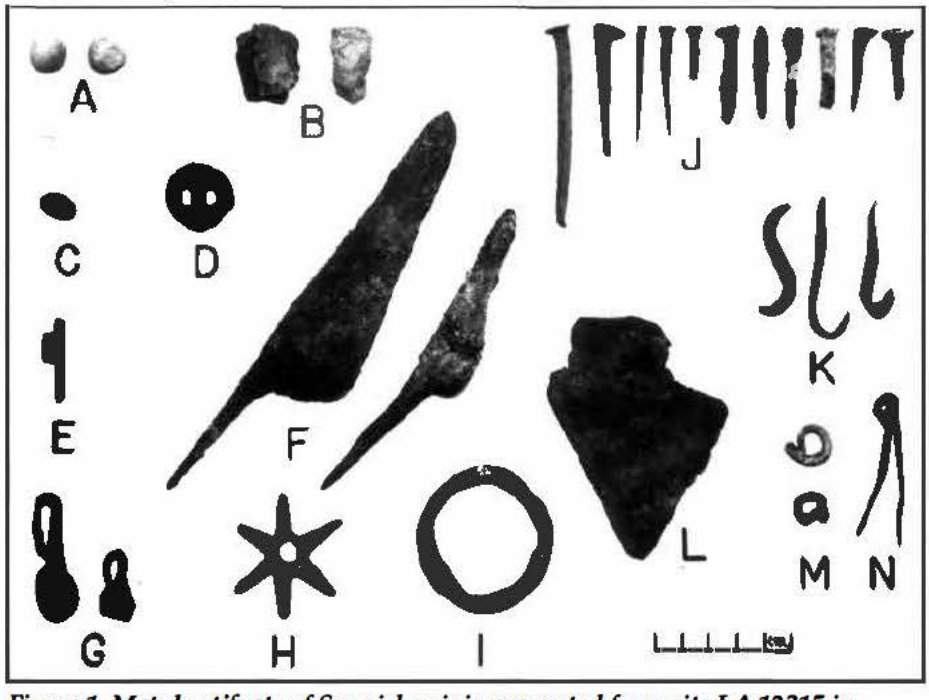


Figure 1. Metal artifacts of Spanish origin excavated from site LA 12315 in Bernalillo County, New Mexico, represent the physical remnants resulting from contact between the Spanish and Native American groups in the southwestern United States. (Museum of Albuquerque)

the form of artifacts (e.g., fragments of tools or ceramic vessels), features (e.g., remnants of walls, cooking hearths, or trash middens), and ecological evidence (e.g., pollens remaining from plants that were in the area when the activities occurred). Ecological remains of interest to archeologists are often referred to as "ecofacts." Things that are of archeological importance may be very subtle, that is, hard to see and record. It is not only artifacts themselves that are important but the locations of artifacts relative to one another, which is referred to as archeological context (not to be confused with historic contexts, discussed below).

In accordance with National Register terminology, an archeological property can be a district, site, building, structure, or object. However, archeological properties are most often sites and districts.

An archeological property may be "prehistoric" (pre-contact), "historic" (post-contact), or contain components from both periods. What is often termed ***prehistoric archeology*** studies the archeological remains of indigenous American societies as they existed before substantial contact with Europeans and resulting written records. The National Historic Preservation Act treats prehistory as a part of history for purposes of national policy; therefore the terms "historic," and, "historical," as used in this document, refer to both pre and post-contact periods. We use the term "pre-contact" instead of "prehistoric" in this bulletin unless we are directly quoting materials which use the term "prehistoric," quoting legislation or regulations, or unless we are referring to the language used in other bulletins.

The date of contact varied across the country. Therefore there is no single year that marks the transition from pre-contact to post-contact. It is important to use the periods of significance for a property to understand its chronological place in the history of what is now the

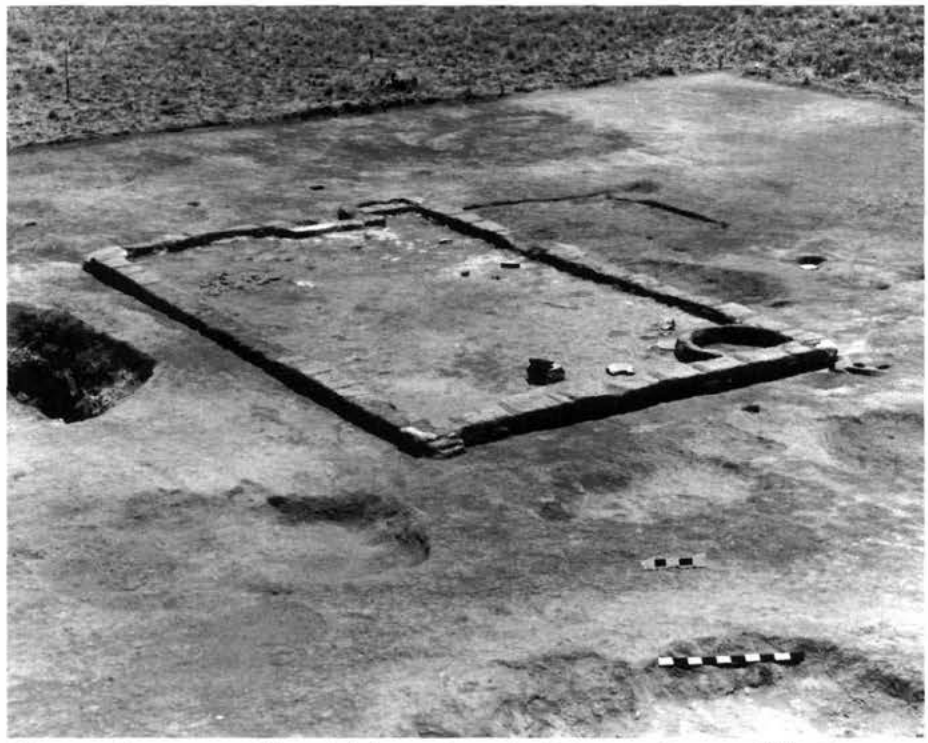


Figure 2. An excavated Spanish house from site LA 12315 in Bernalillo County, New Mexico, is an example of an archeological feature. (Museum of Albuquerque)

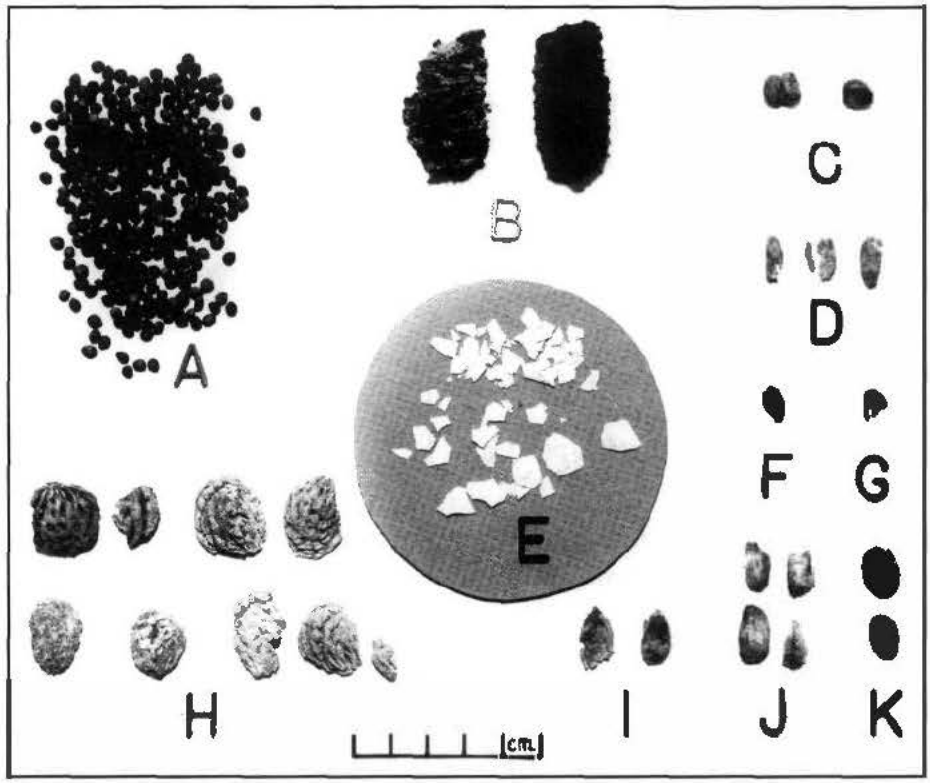


Figure 3: Ecofacts can include juniper berries, charred corn cobs, corn kernels, squash seeds, egg shell fragments, wild plant seeds, peach pits, gourd seeds, and domesticated beans. (Museum of Albuquerque)

United States. For example, between 1492 and 1495, Christopher Columbus landed on the island of Puerto Rico; Juan Ponce de Leon named and explored the Florida peninsula in 1513; the English labeled a portion of the Atlantic coastline (now North Carolina) as "Virginia" in 1584, and Jean Nicolet arrived in Wisconsin in 1634. In the western United States, Juan de Anza contacted the Native Americans of what is now inland Southern California in 1749, the year that Alexandria, Virginia, already a thriving port, was officially chartered; and Meriwether Lewis and William Clark first contacted the Native Americans of the northwest plains in 1805, several centuries after Columbus arrived in the New World. Thus, the boundary between the pre-contact and post-contact periods is individually defined from region to region. What constitutes contact between Native Americans and Europeans also varies. In most regions of the country, Native American groups experienced European contact through long-range trade and the diffusion of European diseases long before they had any direct, face-to-face interaction with Europeans.

Historical archeology is the archeology of sites and structures dating from time periods since significant contact between Native Americans and Europeans. Documentary records as well as oral traditions can be used to better understand these properties and their inhabitants. An integrated historical and archeological investigation will generally produce more information about a particular historic property (or activities associated with that property) than would have been gleaned through the separate study of either the archeological remains or the historical record alone. For reasons of consistency, we use the term "post-contact" instead of "historical," when referring to archeology, where appropriate, in this bulletin unless we are directly quoting materials which use the term "historical," quoting legislation or regulations, or unless we are referring to the language used in other bulletins.

Archeological properties also may include standing or intact buildings or structures that have a direct historical association with below-ground archeological remains. Historic places such as Mount Vernon, the home of George Washington, that are well-recognized for their historical and architectural importance often contain hidden archeological components.

Archeological remains can be terrestrial or underwater. Although it is common to think of underwater archeology as dealing exclusively with shipwrecks, there are many types of sites that are submerged. Some sites, for example, are submerged under the water of reservoirs.

Archeologists strive to better understand humankind and its history through the study of the physical remains that are left behind and the patterning of these remains. Even modern trash cans and landfills may be worthy of investigation (e.g., Rathje 1977, 1979). For the purposes of the National Register of Historic Places, however, archeological properties are at least 50 years old. An archeological property less than 50 years old may be listed in the National Register if the exceptional importance of the archeological remains can be demonstrated.

WHAT IS THE PURPOSE OF THIS BULLETIN?

The purpose of this bulletin is to assist in the documentation of archeological properties for the National Register. Across the United States, archeological properties are a finite and increasingly threatened cultural resource. Because archeological sites contain a unique source of information about the past, their study can often require a considerable investment of personnel and funding in background research, excavation, and curation. As the only official national listing of important archeological properties, the National Register is a valuable tool in the management and preservation of our increasingly rare archeological resources. Thus, National Register nominations should be prepared for archeological properties where the management or preservation of the property is anticipated or desirable. All archeologists should be well versed in the kinds and level of information needed to complete a National Register nomination form prior to conducting fieldwork.

In many ways, a National Register nomination often is similar to a synopsis of an archeological research report. Research summaries describe the physical environment of the site, sketch the cultural background for the project area, outline the history of previous investigations, detail the nature of the archeological record at the site, and elucidate the important scientific questions that were addressed by the study. National Register nominations contain components comparable to this ideal research report, with specific emphasis on the description of the site and its significance in understanding our past (See also, Sprinkle 1995).

This bulletin provides specific guidance on how to prepare National Register of Historic Places nomination forms for archeological properties. This guidance applies also to the preparation of the individual nominations that accompany multiple property National Register nominations. It also applies to Determination of Eligibility (DOE) documents. Although DOE documents need not be prepared on the standard nomination forms, use of the forms will ensure that all relevant information is included.

ARCHEOLOGY AND THE NATIONAL HISTORIC PRESERVATION ACT

Most archeology in the United States is done as a result of statute and regulation, particularly that of the National Historic Preservation Act of 1966, as amended (NHPA). Section 106 of the National Historic Preservation Act requires that Federal agencies take into account the effect their projects

have on properties listed in or eligible for listing in the National Register of Historic Places. As part of the process, the State Historic Preservation Officer (SHPO), Federal Preservation Officer (FPO) or Tribal Historic Preservation Officer (THPO) and the Advisory Council on Historic Preservation, where appropriate, must be afforded an opportunity to comment on the proposed project. It is the responsibility of the Federal Agency to comply with the Advisory Council's regulations, 36 CFR Part 800, to ensure that these cultural resources are considered in the Federal planning process.

The evaluation criteria for the National Register of Historic Places are used for the daily work of cultural resource management by every Federal agency to identify cultural resources that may be affected by Federal or Federally assisted projects. The criteria are applied far beyond the actual listing of sites in the Register; they are applied to nearly every potentially threatened site on Federal, much state land, and on private lands. Defining the research potential and other values of archeological sites and districts according to these criteria has affected the way the public, as well as the profession, regards the significance of archeology. There has been a great deal of discussion in the professional literature about the significance concept and its application to archeological properties. For an annotated bibliography see Briuer and Mathers (1997). See also Briuer and Mathers (1996) and Lees and Noble (1990a, 1990b). Different groups value properties for many different reasons. The importance of consultation with descendant and other concerned communities has been emphasized in much professional and scholarly literature (Dongoske et al. 2000; Stapp and Longenecker 2000; Epperson 1999; Blakey 1997; Blakey and LaRoche 1997; Swidler et al. 1997), encouraging professionals to promote communication among the social, scientific, and preservation communities about the significance concept, archeology, and cultural resource management in general.

Listing of a property in the National Register of Historic Places does not give the Federal government any control over a property, nor does it impose any financial obligations on the owners, or obligations to make the property accessible to the public, or interfere with an owner's right to alter, manage, or dispose of their property. Listing in the National Register provides recognition that a property is significant to the Nation, the State, or the community and assures that Federal agencies consider the historic values of the property in the planning for Federal or Federally assisted projects. In addition, listing in the National Register ensures that significant archeological resources become part of a national memory. Listing may influence the public's perception of archeological resources, and often influences a community's attitude toward its heritage (See also NPS 1994: viii, ix; Little 1999).

For more information about the Advisory Council's regulations and Section 106, see the website for the Advisory Council for Historic Preservation at www.achp.gov, or refer to the Federal Register/Vol. 64, No. 95.

WHO CAN PREPARE NOMINATIONS FOR ARCHEOLOGICAL PROPERTIES?

Anyone may prepare an archeological property nomination and submit it to the National Register through the appropriate SHPO, a FPO, or a THPO. At a minimum, the preparer(s) should have a first-hand knowledge of the relevant archeological and historical literature and of archeological resources similar to the property being nominated or have the assistance of persons who do.

In general, archeologists who meet the minimum qualifications for a professional in archeology have the knowledge or expertise needed to adequately describe and evaluate the significance of an archeological property. These qualifications include a graduate degree in archeology, anthropology, or a related field; field and analytical experience in North American archeology; at least one year of full-time supervisory experience in the study of archeological properties; and a demonstrated ability to carry research to completion. With guidance from a SHPO, FPO, or THPO or Federal agency or with training through paraprofessional certification programs or academic course work, avocational archeologists and others can acquire the knowledge needed to prepare archeological nominations. The minimum qualifications for an archeologist are outlined in the Professional Qualification Standards for Archeology in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716). Laws, regulations, standards, and conventions related to cultural resources can be found on the Internet at <www.cr.nps.gov/linklaws.htm>.

WHO CAN DETERMINE THE ELIGIBILITY OF ARCHEOLOGICAL PROPERTIES?

Section 106 of the National Historic Preservation Act (NHPA) requires Federal agencies to consider the impacts of their undertakings on properties included in or eligible for inclusion in the National Register of Historic Places. Regulations provide two ways to make eligibility evaluations. Formal determinations are made by the Keeper of the National Register at the request of the Federal agency official (36 CFR 63.2). More commonly, Federal agencies use the Consensus Determination of Eligibility (Consensus DOE) process provided by Section 800.4 of the Advisory Council on Historic Preservation's regulations. This allows Federal decision makers, in consultation with SHPOs, FPOs or THPOs, and other consulting parties to assess a property and, should they both agree that it meets the criteria for listing on the National Register of Historic Places, treat the property as eligible for purposes of compliance with Section 106 of the NHPA as implemented by the Council's regulations.

The use of the consensus process does not allow for a lower threshold for significance than the formal Determination of Eligibility or National Register listing procedures. Determination of Eligibility is a legally recognized finding that a property meets the criteria for listing in the National Register. Under Section 106, properties that are eligible are given the same legal status as properties formally listed in the National Register, requiring that the Federal agency official "take into account" the effects of an undertaking upon them. To qualify, a property must be found to meet one or more of the National Register criteria (See "Evaluating Archeological Properties Under the Criteria," in Section IV) either by the formal determination of the Keeper (36 CFR 63) or by the consensus process. It is essential to note that the same criteria, including concepts of significance and integrity, apply to properties determined eligible and those accepted by the Keeper for formal listing in the National Register. This means that a property determined eligible could be nominated to the National Register because it meets the same criteria, although nomination is not legally required.

WHEN SHOULD INFORMATION BE RESTRICTED FROM PUBLIC ACCESS?

Although the information in the National Register is part of the public record, Section 304 of the National Historic Preservation Act (NHPA), as amended in 1992 and Section 9(a) of the Archeological Resources Protection Act (ARPA) provide the legal authority for restricting information about archeological properties. The National Register bulletin *Guidelines for Restricting Information About Historic and Prehistoric Resources* specifies the legislative authority and provides procedural guidelines for restricting information in the National Register as well as in other inventories.

Section 304 (a) Authority to Withhold from Disclosure, reads as follows:

> The head of a Federal agency or other public official receiving grant assistance pursuant to this Act, after consultation with the Secretary, shall withhold from disclosure to the public, information about the location, character, or ownership of a historic resource if the Secretary and the agency determine that disclosure may — (1) cause a significant invasion of privacy; (2) risk harm to the historic resource; or (3) impede the use of a traditional religious site by practitioners.

In this context privacy refers to the privacy of individuals, as this term is defined by Federal law.

Archeological Resources Protection Act (ARPA) protects archeological resources on public lands and Indian lands. Section 9(a) permits the withholding from the public of information concerning the nature and location of any archeological resource unless such information does "not create a risk of harm to such resources or to the site at which such resources are located" [(9(a)(2)].

The full text of the relevant sections of these laws should be consulted.

Vandalism, artifact collecting (also called pot hunting, looting, relic hunting, bottle collecting, etc.) and removal of historic features or structures are all activities that diminish the integrity of an archeological site. In order to minimize the possibility that these activities will occur as a result of nominating the site to the National Register, the preparer or the appropriate Preservation Officer may ask that the specific location of the property be restricted. There is no need to prove that a particular site is at risk if other similar types of sites are endangered. Other kinds of information (e.g., the presence of human remains or marketable artifacts) may also be restricted. Restricted information other than location should be clearly marked as such on a separate continuation sheet and not in the body of the text. Locational information is provided in specific sections of the nomination and is deleted easily. For this reason, the preparer should ensure that locational information is indeed restricted to easily deleted parts of the text and not scattered throughout the description of the property.

If the property and its location are generally known, then locational information should not be restricted. Also, if all of the site information should be made available to those conducting research or, for example developing heritage tourism or education projects, then the information should not be restricted.

USING THE NATIONAL REGISTER

The National Register helps us understand and appreciate our heritage and what specific places mean in American history. National Register documentation is used by researchers, planners, teachers, tourism professionals, community advocates, property owners and the general public. National Register documentation is an important source of archeological information directly available to the general public. The National Register Information System (NRIS) is a data base that is available to anyone via the Internet as a link on the National Register Web Page: www.nr.nps.gov. It does not contain specific locational information for properties where this information is restricted. The NRIS facilitates research that is regional and comparative. Multiple property documentation, in particular, can provide excellent source material for both professional research and popular interpretation (See Appendix B of this bulletin).

The National Register's Teaching with Historic Places program develops lesson plans based on National Register documentation. These lesson plans are available to teachers and others via the Internet at <www.cr.nps.gov/nr/twhp>. National Register travel itineraries, *Discover Our Shared Heritage*, describe and link registered historic places. Travel itineraries are available on the Internet at www.cr.nps.gov/nr/travel and some are available in print.

Listing of resources promotes their preservation rather than destruction, thereby fostering stewardship of significant places. Planning is more efficiently done when information about properties that are recognized as significant is readily available in nominations. Unless properties are actually listed in the National Register, it is difficult for archeological sites—particularly those not readily apparent to the casual observer—to be fully appreciated by the public. However, the Section 106 process treats properties that are eligible for the National Register in the same manner as properties that are listed in the National Register for the purposes of managing archeological properties.

WHAT IF AN ARCHEOLOGICAL PROPERTY IS NATIONALLY SIGNIFICANT?

Archeological properties are nominated at the local, state, or national level of significance. The SHPO, THPO or the FPO make the recommendation as to level of significance based upon the documentation presented in the nomination. Most archeological sites are listed as significant at a statewide or local level. Note that "statewide" is checked for "regionally" significant properties. The preservation officer may check "nationally" significant if the significance of the property transcends regional significance.

The Secretary of the Interior can go a step further with national significance and designate a property as a National Historic Landmark (NHL). In order to make this determination, the Secretary applies the NHL Criteria and follows the procedures in 36 CFR, Part 65-National Historic Landmarks Program. The NHL Criteria set a stringent test for national significance, including high historical integrity. There are six NHL Criteria, however, archeological sites are evaluated generally under Criterion 6, which reads:

> (6) that have yielded information of major scientific importance by revealing new cultures, or by shedding light upon periods of occupation over large areas of the United States. Such sites are those which have yielded, or which may reasonably be expected to yield, data affecting theories, concepts and ideas to a major degree.

If a property appears to be nationally significant and qualify for designation as a National Historic Landmark, then Appendix V of *How to Complete the National Register Registration Form* should be consulted for additional guidelines on completing the National Register form and providing supplemental information. (Also see technical briefs on the NHL program: Grumet 1988; 1990.) In-depth guidance is provided in the National Register bulletin *How to Prepare National Historic Landmark Nominations* (For more information on ordering and viewing National Register Bulletins via the Internet, go to: www.cr.nps.gov/nr/publications).

WHAT OTHER NATIONAL REGISTER BULLETINS MAY BE HELPFUL?

Appendix A, of this bulletin lists the current National Register bulletins that provide guidance on nominating properties to the National Register. The primary bulletin for all individual and district nominations is *How to Complete the National Register Registration Form. How to Complete the National Register Multiple Property Documentation* outlines how to prepare a multiple property documentation form.

It is important to consult *How to Apply the National Register Criteria for Evaluation*, especially when evaluating archeological properties that may also be important for their association with historical events or broad patterns, significant persons, or significant architecture. *How to Establish Boundaries for National Register Properties* and in particular its appendix, *Definition of National Register Boundaries for Archeological Properties*, will be especially helpful. Those working with places of cultural value to local communities, Indian tribes, other indigenous groups, and minority groups will want to consult *Guidelines for Evaluating and Documenting Traditional Cultural Properties*. Other National Register Bulletins, especially those on particular resource types such as: *America's Historic Battlefields, Mining Sites*, and *Rural Historic Landscapes*, may also be useful.

In addition to the requirements described in this and other National Register bulletins, individual SHPOs, THPOs and FPOs may request additional information not required as part of a complete National Register form. Prior to budgeting for, or embarking upon, a nomination project, consult the appropriate Preservation Officer about additional requirements and the nomination review process.

WHAT OTHER NATIONAL PARK SERVICE GUIDANCE MAY BE HELPFUL?

National Park Service *Thematic Framework* (NPS 1996) www.cr.nps.gov/history/thematic.html

Archeological Assistance Program Technical Briefs www.cr.nps.gov/aad/aepubs.htm#briefs1):
#3: Archeology in the National Historic Landmarks Program. 1988, 1990. Robert S. Grumet.
#10: The National Historic Landmarks Program Theme Study and Preservation Planning. 1992. Robert S. Grumet.

Heritage Preservation Services (www2.cr.nps.gov): *Protecting Archeological Sites on Private Lands*. 1993. Susan L. Henry. Preservation Planning Branch, Interagency Resources Division, National Park Service.

Strategies for Protecting Archeological Sites on Private Lands. 2000. Susan L. Henry Renaud. Heritage Preservation Services, National Park Service. www2.cr.nps.gov/pad/strategies

II. HISTORIC CONTEXTS FOR ARCHEOLOGICAL EVALUATION

Historic contexts provide a basis for judging a property's significance and, ultimately, its eligibility under the Criteria. Historic contexts are those patterns, themes, or trends in history by which a specific occurrence, property, or site is understood and its historic meaning (and ultimately its significance) is made clear. Context discussion includes relevant information from what is often called a "culture history" or "historical and archeological background" section in archeological site reports. This bulletin addresses evaluation, but survey and identification goals also should be based on historic contexts.

A historic context is a body of thematically, geographically, and temporally linked information. For an archeological property, the historic context is the analytical framework within which the property's importance can be understood and to which an archeological study is likely to contribute important information.

A historic context is multidimensional; numerous contexts may be appropriate for an individual archeological property. For example, an architectural context would be applicable if one were nominating a property with a standing structure that is directly associated with the archeological deposits and is also an excellent example of an important architectural style that has been rarely documented.

Many factors influence the determination of which contexts are most important vis-a-vis a given archeological property. These factors include the type of property; the data sets and archeological patterning represented at the site; the region in which the property is located; the time period that the property was occupied or used; the history of the region where the site is located; the role that the property played in the historical development of the jurisdiction, state, and region in which it is located; the property's role in America's history; the information identified in the State historic preservation plan based upon work and research that has already been done; and the research interests and theoretical orientation of the archeologist.

Archeological properties can be associated with a variety of historic contexts, and these contexts will contain varying levels of refinement and sophistication. Only those contexts important to understanding and justifying the significance of the property must be discussed.

EXAMPLE: Through research one has learned that the well-preserved ruins of an eighteenth-century sugar factory are directly linked to the chartering and early economic development of a town in which they are located. The ruins also are the only surviving sugar factory ruins that illustrate the region's early maritime and international trade activities. In addition, research indicates that 100 years after its abandonment the sugar factory housed a state militia unit for a few weeks; this was the only other use of the property.

- To illustrate the sugar factory's significance, discuss the establishment and early economic development of the town and the maritime and international trade activities of the region at the time the factory was in operation. The association of the sugar factory with these activities, as well as the technology of sugar production, must be addressed.
- Assuming no historical importance associated with the militia's stay, however, it is unlikely that an archeological study of the property would contribute information important to understanding the state's military history. As a result, this aspect of the property's history need not be discussed as a context.
- If the use of the factory by the militia unit has a bearing on the integrity of the property, this should be noted in the descriptive text.

The discussion of historic contexts should be organized in a manner that best presents the context information for the given property. Document the supporting evidence for the significance criteria checked and for the information categories (Areas of Significance, Historic Function, Period of Significance, and Cultural Affiliation). If applicable, document Architectural Classification, Criteria Considerations, Significant Dates, Significant Person, and Architect/Builder. Each information category does not need to be discussed separately. Nevertheless, the reader should be able to see the link between the information presented in the discussion of historic contexts and that provided in the information categories. For example, if "Education" is entered under "Areas of Significance," the "Historic Context" discussion must include sufficient information to justify entering that category.

In addition, the information presented in the historic contexts and in other sections of the significance section must be interrelated. For example, a nomination that includes hypotheses on economic development among its important research questions should have a discussion of the property's, district's, or region's economic development in the historic context.

Major decisions about identifying, evaluating, registering, and treating historic properties are most reliably made in the context of other related properties. A historic context is an organizational format that groups information about related historic properties, based on a theme, geographic limits and chronological period. Contexts should identify gaps in data and knowledge to help determine what is significant information.

The National Register bulletin *How to Apply the National Register Criteria for Evaluation* states that, "...a property is not eligible if it cannot be related to a particular time period or cultural group and, as a result, lacks any historic context within which to evaluate the importance of the information to be gained." However, pre-contact sites which lack temporal diagnostics or radiocarbon dates may still be eligible within a context which defines important atemporal or non-cultural questions, such as those that concern site formation processes or archeological methodology. Therefore, sites of unknown age, or broadly defined age, may be found eligible within a research framework which specifies the important information potential of such sites.

Evaluation uses the historic context as the framework within which to apply the criteria for evaluation to specific properties or property types. Historic contexts are linked to actual historic properties through the concept of the property type. The following procedures should be included in creating a historic context:

1. Identify the concept, time period and geographic limits for the historic context;
2. Assemble existing information about the historic context;
3. Synthesize the information;
4. Define property types;
5. Identify further information needs.

All archeological sites have some potential to convey information about the past, however, not all of that information may be important to our understanding of the pre and post-contact periods of our history. The nature of important information is linked to the theories or paradigms that drive the study of past societies. It is important to realize that historic contexts, and therefore site significance, should be updated and changed to keep pace with current work in the discipline. As Nicholas Honerkamp (1988:5) writes:

> We ignore theory at our peril... It is very easy to become scientifically and/or humanistically superfluous if we do not continually redefine what is important and why it is important. If as archeologists we can identify questions that matter and then explain why they matter, a number of things then begin to fall into place. For

Further guidance may be found in the National Register bulletin *How to Complete the National Register Multiple Property Documentation Form*. For additional guidance, consult the National Park Service's Thematic Framework (1996). The Thematic Framework provides guidance on the development of historic contexts. Consideration of the main themes and associated topics will promote a framework that includes many levels of community and regional history. The framework is designed to assist in the development of historic contexts by guiding researchers to ask thorough questions about a property or region. The text of the Thematic Framework is available at www.cr.nps.gov/history/thematic.html. While the Thematic Framework may serve as a guide for developing contexts, please see, "Areas of Significance," in Section IV of this bulletin for guidance on determining the area of significance.

> instance, field methodologies and analysis routines become driven by solid research designs instead of existing in a theoretical vacuum and being applied in a mechanistic fashion; in the cultural resource management context, the "significance" concept becomes better defined and less slippery in its application…

To assist in the preparation of National Register nominations, all SHPOs have gathered information, such as county and state histories, cartographic sources, archeological and architectural site files, and management documents that foster the identification, evaluation, and preservation of cultural resources. These materials may include previously identified local, regional, or statewide historic contexts. The State, Tribal or Federal historic preservation office may be able to provide relevant historic contexts. In many cases, the "Areas of Significance" or the historic "Functions and Uses," listed in *How to Complete the National Register Registration Form* suggest appropriate historic contexts. Helpful information regarding historic contexts also may be found in multiple property National Register submissions for similar historic properties (see "Appendix B" of this bulletin). For discussion on evaluating archeological properties in context, please see "Evaluating Properties in Context" in Section IV.

III. HOW ARE ARCHEOLOGICAL PROPERTIES IDENTIFIED?

Proper identification of a historic property serves as the foundation for evaluation, a sound National Register nomination, and for subsequent planning protection, and management of the resource. When considering a property for listing in the National Register, the nomination preparer needs to be able to answer questions about the history of the property and its physical setting, the characteristics of the site's archeological record, and the boundaries of the property.

The identification of archeological properties generally involves background research, field survey, archeological testing and analysis, and evaluation of the results. Archeologists use a variety of information sources to reconstruct the history of a property including written documents, oral testimony, the presence and condition of surviving buildings, structures, landscapes, and objects, and the archeological record. Where the archeological record is well-known, the locations and types of sites may serve as the basis for predictive models for further site identification. Written documentary resources, oral history, and traditional knowledge may provide information about the people and activities that occurred at a site, and can enumerate aspects of the archeological property's use, abandonment and subsequent alteration. Extant buildings, structures, landscape features, and objects can provide important temporal and functional information upon which to base additional research.

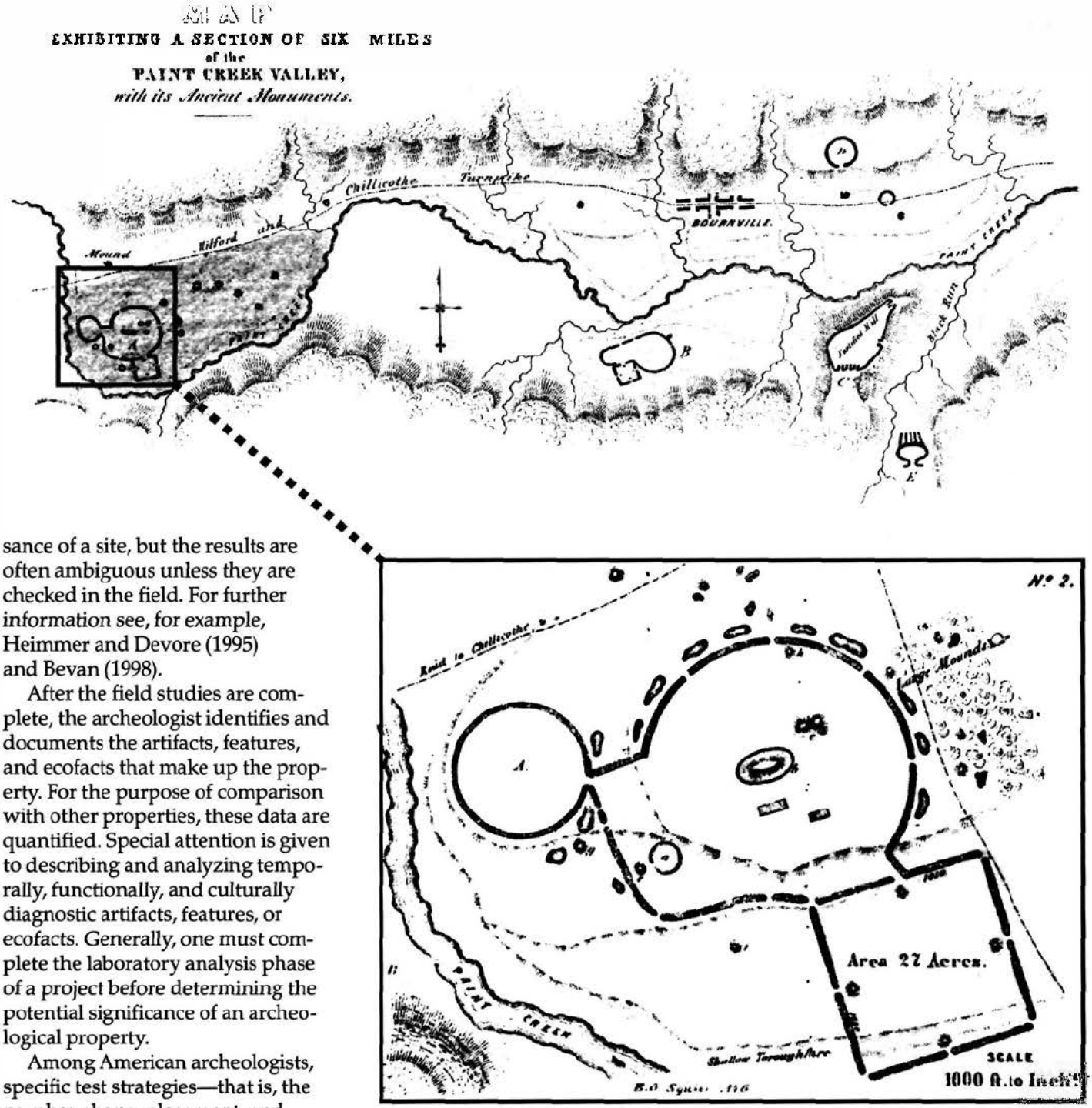
Generally background research should be completed prior to the field studies. This research may involve: examining primary sources of historical information (e.g., deeds and wills), secondary sources (e.g., local histories and genealogies), and historic cartographic sources; reviewing previous archeological research in similar areas, models that predict site distribution, and archeological, architectural, and historical site inventory files; and conducting informant interviews.

Information obtained only through archeological survey or test excavations may be needed for many archeological properties before a nomination can be prepared. The identification of archeological properties is discussed more thoroughly in the National Register bulletin *Guidelines for Local Surveys: A Basis for Preservation Planning,* especially Chapter 11, "Conducting the Survey," and Appendix 1, "Archeological Surveys." Also see The Secretary of Interior's Standards and Guidelines for Identification. Individual states or localities may have specific guidelines or permit requirements for archeological investigations. Contact your SHPO, THPO, or the FPO prior to beginning any archeological research project.

In order to identify the presence and location of a site, an archeologist generally begins by inspecting the ground surface or probing below the surface using soil cores or shovel tests. Artifacts and features are the most common indicators of archeological properties. Artifacts in the plow-disturbed soils of active and former agricultural fields can also demonstrate the location of archeological properties. Non-native plant species or spatial patterning of plants (such as clusters of daffodils, lilac bushes, or groupings of cedar trees) may signal the presence of an archeological property.

Archeologists usually identify the presence and extent of a site through excavation of randomly, systematically, or judgmentally placed test units. Test units are used to show the presence or absence of artifacts and features below the present ground surface. The fieldwork to determine the National Register eligibility of an archeological property should follow logically from the historic context used. For example, the context should provide important research questions and the data needed for an eligibility determination. Such data may include the horizontal and vertical extent of a site, chronology or periods of occupation/use, site type, site function, and internal configuration.

Increasingly, archeologists are using scientific instruments to identify subsurface archeological features. Remote sensing techniques, that include ground-penetrating radar (GPR), soil resistivity, and soil chemistry surveys, are often applied in conjunction with test excavations that confirm the presence of subsurface cultural remains (Thomas 1987). Such prospecting techniques are non-destructive and can provide rapid three-dimensional reconnais-



sance of a site, but the results are often ambiguous unless they are checked in the field. For further information see, for example, Heimmer and Devore (1995) and Bevan (1998).

After the field studies are complete, the archeologist identifies and documents the artifacts, features, and ecofacts that make up the property. For the purpose of comparison with other properties, these data are quantified. Special attention is given to describing and analyzing temporally, functionally, and culturally diagnostic artifacts, features, or ecofacts. Generally, one must complete the laboratory analysis phase of a project before determining the potential significance of an archeological property.

Among American archeologists, specific test strategies—that is, the number, shape, placement, and method of test excavations—are as diverse as the characteristics of the archeological record. Because of the impact on the quality of information recovered, the archeological field methods used are an important part of the description of any archeological research project.

Figures 4 and 5: Historic cartographic resources are an excellent source of information on a variety of archeological properties. These 1848 maps by Squire and Davis show earthen walls in the shape of a square, circle and semi-circle with mounds inside and outside of enclosures associated with the Hopewell from 300 B.C. to A.D. 500. The area is part of the Seip Earthworks and Dill Mounds District in Seip County, Ohio. (Ohio Historical Society, Seip Mound State Memorial)

IV. EVALUATING THE SIGNIFICANCE OF ARCHEOLOGICAL PROPERTIES

NATIONAL REGISTER CRITERIA

The quality of significance in American history, architecture, archeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, association, and:

A. that are associated with events that have made a significant contribution to the broad patterns of our history; or

B. that are associated with the lives of persons significant in our past; or

C. that embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction; or

D. that have yielded, or may be likely to yield, information important in prehistory or history.

A National Register property must meet at least one of the above National Register criteria; it may meet more than one. Each criterion that is checked on the nomination form must be fully justified. For example, if a Civil War battlefield qualifies under Criteria A and D, then both the battle and its importance and the important information that archeological investigations would likely yield need to be addressed.

Properties nominated to the National Register under Criteria A, B, or C often contain archeological deposits. For example, a nineteenth-century farmstead (including the main houses and outbuildings) that qualifies for listing under Criteria A, B, or C may have intact archeological deposits. In many cases, however, these deposits are undocumented. In such cases, the preparer should clearly note the potential for archeological deposits in the text of the nomination. Unless the significance of the property is justified under Criterion D, Criterion D should not be checked on the nomination form. Once additional studies are done to document the archeological information retained from the site, then the nomination form should be amended to add Criterion D.

In a case, such as that noted above, the archeological deposits need not relate to the significance of the documented standing structures. For example, the Henderson Hill Historic District in West Virginia is a large nineteenth-century farm complex eligible under A, B, C, and D. The archeological component of the farm itself has not been evaluated but three Woodland period mounds on the property are likely to yield important information. If additional documentation were to be added to demonstrate the information potential of the nineteenth-century archeological deposits, both significant contexts (the relevant, nineteenth-century historic context, and the Woodland period) should be justified.

CRITERIA CONSIDERATIONS

Unless certain special requirements (known as the criteria considerations) are met, moved properties; birthplaces; cemeteries; reconstructed buildings, structures, or objects; commemorative properties; and properties that have achieved significance within the past 50 years are not generally eligible for the National Register. The criteria considerations, or exceptions to these rules, are found in *How to Complete the National Register Registration Form* and *How to Apply the National Register Criteria for Evaluation.*

The National Register criteria considerations are:

A. A religious property may be eligible if it derives its primary significance from architectural or artistic distinction or historical importance.

B. A property removed from its original or historically significant location can be eligible if it is significant primarily for its architectural value or it is the surviving property most importantly associated with a historic person or event.

C. A birthplace or grave of a historical figure may be eligible if the person is of outstanding importance and if there is no other appropriate site or building directly associated with his or her productive life.

D. A cemetery may be eligible if it derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events.

E. A reconstructed property may be eligible when it is accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan and when no other building or structure with the same associations has survived.

F. A property primarily commemorative in intent can be eligible if design, age, tradition, or symbolic value has invested it with its own historic significance.

G. A property achieving significance within the last 50 years may be eligible if it is of exceptional importance

Note: if a property is an integral part of a district or site that meets the criteria, then **do not apply** the criteria considerations to the individual property. For example, a nomination for an archeological district consisting of archeological sites, some above-ground ruins, several standing structures, and two historically associated cemeteries need not address the criterion consideration for cemeteries because the two cemeteries are an integral part of the district. For more information on cemeteries and burial places, see the National Register bulletin *Guidelines for Evaluating and Registering Cemeteries and Burial Places*. A cemetery that is nominated under Criterion D for information potential does not need to meet Criteria Consideration D.

EVALUATING PROPERTIES IN CONTEXT

The National Register bulletin *How to Apply the National Register Criteria for Evaluation*, recommends the following sequence for evaluation:

1. Categorize the Property;
2. Determine which historic context(s) the property represents;
3. Determine whether the property is significant under the National Register Criteria;
4. Determine if the property represents a type usually excluded from the National Register.;
5. Determine whether the property retains integrity.

There are a few things to keep in mind when following this sequence. Historic contexts usually have been developed in some form for the identification of properties. It is possible, though, that the contexts will need to be further developed for evaluation. The assessment of integrity is the final step in the sequence and should not be used as an initial step with which to screen properties.

Since decisions regarding the evaluation of properties involves placing properties in historic contexts, the more that is known about a given context, the better the evaluation decisions about particular properties will be. Evaluation decisions can be made on the basis of incomplete data, but it is wise not to make them without some information on historic contexts, significance, and their component property types. A decision that a given property is not significant should never be made without access to a reasonable body of data on relevant historic contexts, since such an uninformed decision may result in the property's destruction without attention to its historic values.

When an evaluation must be made without a firm understanding of the relevant historic contexts, however, it should be made on the basis of as much relevant data as it is possible to accumulate. There should be full recognition that it may result in the destruction of a property that might later be found to be very significant, on the basis of complete survey results, or in the investment of money and other resources in a property later found to lack historic value.

A statement of significance, whether designed to show that a property is or is not significant, should be developed as a reasoned argument, first identifying the historic context or contexts to which the property could relate, next discussing the property types within the context and their relevant characteristics, and then showing how the property in question does or does not have the characteristics required to qualify it as part of the context.

In order to decide whether a property is significant within its historic context, determine:

- the facet of history of the local area, state, or the nation that the property represents;
- whether that facet of pre-contact or post-contact history is significant;
- whether it is a type of property that has relevance and importance in illustrating the historic context;
- how the property illustrates that history; and
- whether the property possesses the physical features necessary to convey the aspect of pre-contact or post-contact history with which it is associated.

LOCAL CONTEXT

The level of context of archeological sites significant for their information potential depends on the scope of the applicable research design. For example, a late Mississippian village site may yield information in a research design concerning one settlement system on a regional scale, while in another research design it may reveal information of local importance concerning a single group's stone tool manufacturing techniques or house forms. It is a question of how the available information potential is likely to be used.

STATE CONTEXT

Pre-contact and many early colonial sites are not often considered to have "State" significance, per se, largely because States are relatively recent political entities and usually do not correspond closely either to Native American political territories or cultural areas or to U.S. lands prior to statehood. Numerous sites, however, may be of significance to a large region that might geographically encompass parts of one, or usually several, States. Pre-contact resources that might be of State significance include regional sites that provide a diagnostic assemblage of artifacts for a particular cultural group or time period or that provide chronological control (specific dates or relative order in time) for a series of cultural groups.

NATIONAL CONTEXT

A property with national significance helps us to understand the history of the nation by illustrating the nationwide impact of events or persons associated with the property, its architectural type or style, or information potential. It must be of exceptional value in representing or illustrating an important theme in the history of the nation. Awatovi Ruins in Navajo County, Arizona, is an example of a pre-contact site of national significance. Designated a National Historic Landmark in 1966, Awatovi, meaning "high place of the bow," was one of the largest and most important of the five villages of Tusayan. Settled during the late twelfth century, it was the site of at least two thriving Hopi villages. A post-contact site that is of national significance is Mission Santa Ines in Santa Barbara County, California. This National Historic Landmark represents one of the most intact physical records of a colonial mission institution in the western United States. Archeological information recovered from Mission Santa Innes can shed light on the history of this diverse mission community and the relationship of this Spanish colony to world economic networks. (See the previous section, "What if an archeological property is nationally significant?")

THE IMPORTANCE OF SMALL OR OVERLOOKED SITES

Archeological properties which obviously stand out within the landscape, such as the ruins of southwestern pueblos and the mounds and earthworks of the mid-continent, may clearly convey their significance simply because they are visible. It is no surprise that archeologists have spent a lot of energy on researching and writing about these salient sites (e.g. Tainter and Tainter 1996:7). However, it is clear from many studies that small sites also yield important information. Many of the arguments made by Talmage and others (1977) in "The Importance of Small, Surface, and Disturbed Sites as Sources of Significant Archeological Data" still hold. For example, demonstrating the significance of small sites on the Colorado Plateau, Alan Sullivan (1996) has looked at the evidence of wild-resource production from two non-architectural sites along the eastern south rim of the Grand Canyon. The most obvious features at these sites are piles of fire-cracked rocks. Several things suggest that these are production locations—the form of the rock piles, paleobotanical contents, and patterned artifacts, including manos and metates and Tusayan Grayware. There are no fragments of trough metates, a form associated with maize processing. In the Upper Basin trough metates are found exclusively at architectural sites. Sullivan (1996:154) surmises that "these patterned differences in metate form support the hypothesis that the role of wild resources in Western Anasazi subsistence economies has been underestimated" because our economic models are based on data skewed toward consumption rather than production locales and assemblages.

Sullivan states that archeologists have been remiss in not fully evaluating the contexts of subsistence remains. Because we have focused all our attention on sites of food consumption (the large Pueblo sites with architecture) rather than on sites of production (including these small sites), we have misinterpreted the role of wild resources among the Western Anasazi. The editors (Tainter and Tainter 1996:17) of a recent volume summarize his point this way:

> Sullivan makes the important suggestion that we have misunderstood Puebloan subsistence because we have focused our research on locations where food was consumed (pueblos) rather than locations where it was produced. The latter may be small, ephemeral artifact scatters. Many archaeologists overlook the importance of these small sites [See also Sullivan, Tainter, and Hardesty 1999; Tainter 1998].

Overlooking the significance of small sites may skew our understanding of past lifeways as those sites not only receive less research attention, but also are destroyed without being recorded thoroughly because they are "written off" as ineligible for listing in the National Register. Such losses point up the need to continuously reexamine historic contexts and allow new discoveries to challenge our ideas about the past. The development of local, statewide, and national historic contexts is also important because these contexts are used to judge significance by developing research agendas for all types of sites. If no historic context exists which relates to a specific property, a site's significance may be difficult to distinguish and consequently, the site may be determined ineliglible and/or destroyed.

Evaluators of archeological properties using the National Register Criteria should be aware of new discoveries and developments that affect historic contexts and take them into account during site evaluation.

It is also important to consider significance before considering integrity. At Fort Leonard Wood in Missouri, Smith (1994:96) developed a regional context through a combined cultural, historical, and landscape approach. The context assists in identifying sites that best represent the range and variety of culture history. Smith found that the most difficult part in devising such a context was the integration of the historic context with the archeological remains. Smith used site types as the key in an approach that could be used as a model for approaching the evaluation and management of common site types. In developing the context for the Fort Leonard Wood settler community, Smith identified different types of settlers with purposes ranging from subsistence to cash cropping and characterized associated sites according to their archeological visibility, signature, and sensitivity. Some sites, such as twentieth-century tenant sites, have high visibility, easily identified signatures, and low sensitivity. It would be important to examine some but by no means all of this common type of site. (See also Peacock and Patrick 1997 for a discussion of common site types and information potential). Other sites, such as those of early squatters, have very low visibility, low signatures (that is, they are difficult to identify), and very high sensitivity because they are extremely rare and would provide important information. Even a damaged site could address research questions if it were a less common type. In a region that is very poorly known, for example, the investigation even of deflated sites may yield information potential for 1) basic archeological questions about use of the region and 2) baseline data on site condition with which to evaluate other similar sites in the region.

EVALUATING ARCHEOLOGICAL PROPERTIES UNDER THE CRITERIA

The use of Criteria A, B, and C for archeological sites is appropriate in limited circumstances and has never been supported as a universal application of the criteria. However, it is important to consider the applicability of criteria other than D when evaluating archeological properties. The preparer should consider as well whether, in addition to research significance, a site or district has traditional, social or religious significance to a particular group or community. It is important to note that under Criteria A, B, and C the archeological property must have demonstrated its ability to convey its significance, as opposed to sites eligible under Criterion D, where only the potential to yield information is required.

CRITERION A: EVENT(S) AND BROAD PATTERNS OF EVENTS

Mere association with historic events or trends is not enough, in and of itself, to qualify under Criterion A—the property's specific association must be considered important as well. Often, a comparative framework is necessary to determine if a site is considered an important example of an event or pattern of events.

1. Identify the event(s) with which the property is associated. Generally for archeological properties this is demonstrated primarily through specific historic contexts. Archeological evidence supports the linkage. Event or events include:

- a specific event marking an important moment in American (including local) history (e.g., a battle, treaty signing, court decision); or
- a series of linked events or a historical trend (e.g., a military campaign, relocation of Native Americans to missions, establishment of a town, growth of a city's fishing industry, a major migration, establishment of a new cultural or political system, emergence of agriculture).

2. Document the importance of the event(s) within the broad pattern(s) of history. For example, the nomination of a Revolutionary War battle site, at a minimum, should include a discussion of the importance of the battle and its relevance to the Revolutionary War. Note that broad patterns of our history (including local history) are the same as what the National Register calls historic contexts, which are defined as relevant historic themes set within a time period and geographic region.

3. Demonstrate the strength of association of the property to the event or patterns of events. In order to do this, the property must have existed at the time of and be directly associated with the event or pattern of events. A mission built 50 years after the Pueblo Revolt would probably have no direct association with the Pueblo Revolt. A mission that was abandoned as a result of the Pueblo Revolt, on the other hand, would have a direct association.

4. Assess the integrity of the property. Under Criterion A, a property must convey its historic significance. For example, archeological properties must have well-preserved features, artifacts, and intra-site patterning in order to illustrate a specific event or pattern of events in history. Refer to the section "Aspects, or Qualities, of Integrity," on page 40 for an example of when a site would or would not be eligible under Criterion A due to integrity of setting.

Archeological sites that are recognized "type" sites for specific archeological complexes or time periods are often eligible under Criterion A. Because they define archeological complexes or cultures or time periods, type sites are directly associated with the events and broad patterns of history. In addition, archeological sites that define the chronology of a region are directly associated with events that have made significant contributions to the broad patterns of our history.

Properties that have yielded important information in the past and that no longer retain additional research potential, such as completely excavated archeological sites, must be assessed essentially as historic sites under Criterion A. Such sites must be significant for associative values related to: 1) the importance of the data gained; or 2) the impact of the property's role in the history of the development of anthropology/archeology or other relevant disciplines. Like other historic properties, the site must retain the ability to convey its association as the former repository of important information, the location of historic events, or the representation of important trends. For instance, a completely excavated pre-contact quarry site known to have been the only quarry site utilized by Native Americans in a northeastern state has revealed important information concerning the seasonal rounds of Native groups, and the procurement and reduction of local lithic materials. Information about how mining materials from this quarry functioned within the overall cultural system of the area and affected settlement and subsistence practices and the intact physical environment of the site convey its importance as the best example of pre-contact industry and commerce in this locale. The quarry is visible, located in a remote area, and maintains integrity of location, setting, feeling, and association. The site would be eligible at the local level of significance under Criterion A, but not D. The site may not be eligible at the state level of significance under Criterion A, as it may not exemplify an important quarry, comparatively, for the region.

Some sites may be listed for their significance in the history of archeology. In Colorado, the first Basketmaker II rockshelter excavated is listed under Criterion A at the state level for archeology. House types and domestic features were identified archeologically here for the first time. The rockshelter, excavated in LaPlata County by Earle Morris in 1938, is also listed for Criterion D because at least half of the midden remains and there is likely to be information there on the transition from the Archaic to Basketmaker adaptations.

The Yamasee Indian towns in the South Carolina Low Country are eligible under Criterion A as well as D as part of the first Indian land reservation in South Carolina. The Yamasee played a key role in the defense of South Carolina against the Spanish from 1684 to 1715.

A cultural landscape which includes both traditional cultural places and archeological sites may be eligible under Criteria A and D for its significance in the areas of Ethnic Heritage and Archeology. In an example from California, a landscape containing a village site and additional cultural features, as well as natural features of oak groves and grasslands, demonstrates the management of hunted and gathered resources through burning to promote particular environments. One of several research questions identified concerned the relationship between inland and coastal sites in the region.

Figure 6: Listed under Criteria A and D, the Charles Forte site (38BU51) is near Beaufort, South Carolina. The fort was built in 1562 and represents the first European occupation of South Carolina.
(J.M. Rhett)

The Multiple Property Submission (MPS) "Precontact American Indian Earthworks, 500 BC - AD 1650" for Minnesota creates registration requirements for earthworks under Criteria A, B, C, and D. The following two examples demonstrate the requirements.

Site X was first mapped in 1885 and contains more than 60 mounds and earthworks. A village site appears to be immediately associated with the site. Several of the mounds have looter's holes in them but the site has never been plowed. The site is still wooded and there is no recent development on or near the site. It is essentially in pristine condition. This site has excellent integrity of design, setting, materials, feeling, and association, and could therefore be nominated to the National Register under Criteria A, C, and D.

Site Y consisted of at least 225 earthworks and mounds and associated village site. It is the type site for a Late Pre-Contact context. However, the site has been extensively plowed, several factories have been built on it, and it is within an industrial park. Although the location of the mounds have been relocated using aerial photography and remote sensing, most have been destroyed. There is some evidence, however, that there are still some intact materials at the site. In this case, the site is not eligible under Criteria A or C because integrity of design, setting, and feeling are very poor and integrity of materials and association are merely acceptable. However it is eligible under Criterion D if the mound group and village are considered one site because together they still hold significant research potential.

A site determined eligible under Criteria A and D under this Multiple Property Submission cover document is eligible under Criterion A because it typifies a distinctive type of site that is part of the broader pattern associated with the emergence of agriculture along the margin of the eastern Plains and increasing population nucleation after circa 1100 A.D. For further examples of sites listed under Criterion A, see the "Summary of Significance" for Cannonball Ruins and Fort Davis under "Narrative Statement of Significance," in Section V of this bulletin.

CRITERION B: IMPORTANT PERSONS

In order to qualify under Criterion B, the persons associated with the property must be individually significant within a historic context. The known major villages of individual Native Americans who were important during the contact period or later may qualify under Criterion B. As with all Criterion B properties, the individual associated with the property must have made some specific important contribution to history. Examples include sites significantly associated with Chief Joseph and Geronimo.

1. Identify the important person or persons associated with the property. (For in-depth guidance on nominating a property under Criterion B, refer to the National Register bulletin *Guidelines for Evaluating and Documenting Properties Associated with Significant Persons*) "Persons significant in our past" refers to individuals whose activities are demonstrably important within a local, state, or national historic context. Under Criterion B, a property must be illustrative rather than commemorative of a person's life. An illustrative property is directly linked to the person and to the reason why that person is considered to be important. In most cases, a monument built to commemorate the accomplishments of a judge, for example, important in this nation's history would not be eligible for listing in the National Register. (For exceptions to this general rule refer to the "Criteria Consideration F: Commemorative Properties" discussion in *How to Apply the National Register Criteria for Evaluation*) The courthouse where the judge worked and wrote his opinions, on the other hand, may be eligible under Criterion B.

2. Discuss the importance of the individual within the relevant historic context(s). The person associated with the property must be individually significant and not just a member of a profession, class, or social or ethnic group. For example, a doctor who is known to have been important in the settlement and early development of a community would be important under Criterion B. A person who is known to have been a doctor but with no special professional or community standing would not be important under Criterion B.

3. Demonstrate the strength of association between the person and the property. Generally, properties should be associated with the activities, events, etc. for which the person is important. For example, the lab where a renowned scientist developed his inventions would be more strongly associated with the scientist than the apartment house where he lived. The importance or relevance of the property in comparison to other properties associated with the person should be addressed. Properties that pre- or post-date an individual's significant accomplishments usually are not eligible under Criterion B.

4. Address the property's integrity. Sufficient integrity implies that the essential physical features during its association with the person's life are intact. If the property is a site that had no material cultural remains, then the setting must be intact. Under Criterion B, archeological properties need to be in good condition with excellent preservation of features, artifacts, and spatial relationships. An effective test is to ask if the person would recognize the property. If "no," then integrity may be insufficient to qualify under Criterion B. Refer to "Aspects, or Qualities, of Integrity," in Section IV of this bulletin.

The Puckshunubbee-Haley Site in Madison County, Mississippi, is listed under both Criteria B and D as the residence site (without standing structures) of two significant individuals: Puckshunubbee, an important Choctaw chief from about 1801 to 1824, and pioneer Major David W. Haley, who purchased the chief's house after his death and was central to land negotiations with the Choctaw. This three-acre property also contains a Late Mississippian mound.

The farm site where a famous scientist lived for several years when she was a young woman is now in the middle of a modern day housing development. Several other properties associated with this scientist's career and her birthplace are already listed on the National Register. In addition, research and excavations have shown that the site is highly disturbed. This site would not be eligible under Criterion A, B, C, or D.

The Modoc Lava Beds Archaeological District in California is listed under Criteria A, B, and D. Under A, this 46,780-acre district is associated with the Modoc War of 1872-73 and contains places of traditional cultural significance to the Modoc people. Eligibility under B is for association with Captain Jack, the principal Modoc leader during the war, for the areas of significance: ETHNIC HERITAGE: Native American, and MILITARY. Important information under Criterion D is associated with chronology; settlement and subsistence; exchange relationships; military architecture; art and religion. The Modoc Lava beds were a major geographic crossroads for the far western United States. The role of the district's inhabitants in controlling the distribution of obsidian from the Medicine Lake Highland volcanic field is one of the specific research topics.

The Kukaniloko Birth Site in Hawaii is listed under A, B, and D for, "ARCHEOLOGY: Prehistoric; ETHNIC HERITAGE: Native Hawaiian; SOCIAL HISTORY; POLITICS-GOVERNMENT; and RELIGION. Kukaniloko is a celebrated place set aside for the birth of high ranking chiefs, marked by large basalt stones. Once part of a larger religious complex, Kukaniloko continues to be visited by Hawaiians who occasionally leave offerings. It is associated with a number of prominent chiefs born there. The nomination states that important information may be gathered from the analysis of the boulders and petroglyphs, which are thought to have astronomical significance.

CRITERION C: DESIGN, CONSTRUCTION, AND WORK OF A MASTER

To be eligible under Criterion C, a property must meet at least one of the following requirements: the property must embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or represent a significant and distinguishable entity whose components may lack individual distinction.

A Significant and Distinguishable Entity Whose Components May Lack Individual Distinction. This portion of Criterion C refers to districts. For detailed information on districts, refer to the National Register bulletin *How to Apply the National Register Criteria for Evaluation.*

Figure 7: The bedrock mortars and rock alignment on a bedrock base mark a work area or former above-ground structure in the Modoc Lava Beds Archaeological District in Tulelake County, California, part of the Lava Beds National Monument. (Janet P. Eidsness)

The above requirements should be viewed within the context of the intent of Criterion C; that is, to distinguish those properties that are significant as representatives of the human expression of culture or technology (especially architecture, artistic value, landscape architecture, and engineering).

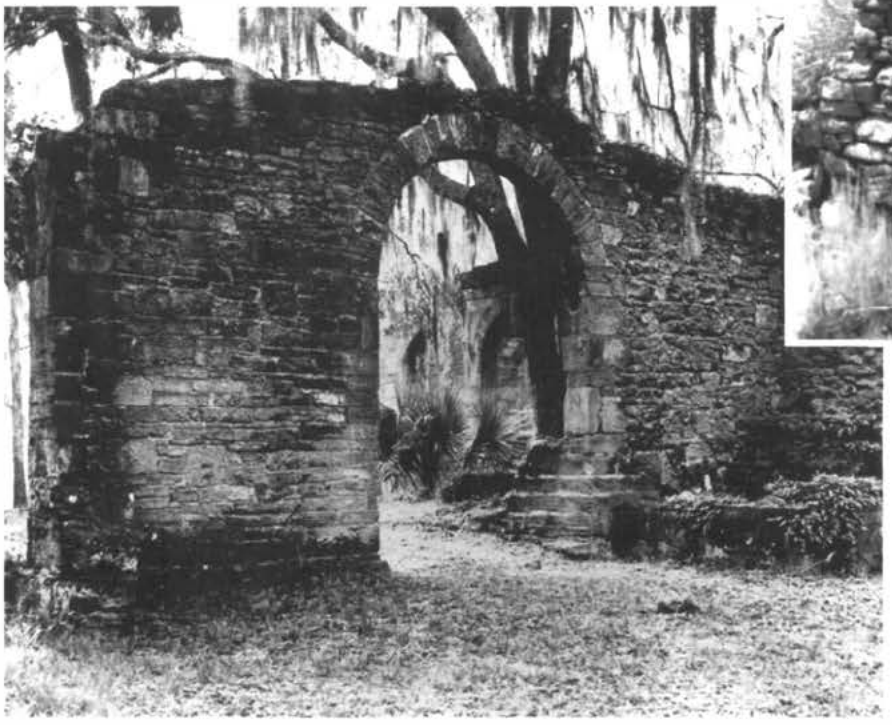
1. Identify the distinctive characteristics of the type, period, or method of construction, master or craftsman, or the high artistic value of the property. Distinctive characteristics of type, period, or method of construction are illustrated in one or more ways, including:

- The pattern of features common to a particular class of resources, such as a sugar mill with associated archeological remains that is representative of eighteenth-century Caribbean sugar mills;
- The individuality or variation of features that occurs within the class, such as the well-preserved ruins of an 1860s brewery that was designed and built to produce one type of ale;
- The evolution of that class, or the transition between the classes of resources, such as the well-preserved sites of four adjacent shipyards, each representing a different time period in clipper ship building.

A master is a figure of generally recognized greatness in a field, a known craftsman of consummate skill, or an anonymous craftsman whose work is distinguishable from others by its characteristic style and quality. If a well-preserved, eighteenth-century pottery kiln site, such as the Mt. Sheppard, North Carolina pottery, illustrates how a particular type of exceptional pottery was produced by a renowned pottery manufacturer, then it would qualify under Criterion C.

High artistic value may take a variety of forms including community design or planning, landscaping, engineering and works of art. A property with high artistic value must (when compared to similar resources) fully express an aesthetic ideal of a particular concept of design. The well-preserved ruins of a building that was used as a hospital and still has intact walls covered with pictures and graffiti drawn by Civil War soldiers who stayed there would be eligible under Criterion C.

2. Discuss the importance of the property given the historic contexts that are relevant to the property and the applicability of Criterion C. Note that the work of an unidentified craftsman or builder is eligible if the work (usually a building or structure) rises above the level of workmanship of other similar or thematically-related properties. As a result, comparison with other properties is usually required to make the case of eligibility under Criterion C.



Figures 8 and 9: Florida's New Smyrna Sugar Mill ruins (left) (Florida State News Bureau) and Seven Towers Pueblo (above), nominated under the Great Pueblo Period of the McElmo Drainage Unit MPS in Colorado (Richard Fuller), are good examples of archeological properties with significant standing architectural and subsurface archeological components.

For example, a colonial plantation site may have standing buildings that are excellent examples of a rare form of colonial construction. To illustrate this, Colonial-period construction methods need to be discussed to a level of detail sufficient to demonstrate that the construction methods seen at the example plantation are rare.

3. Evaluate how strongly the property illustrates the distinctive characteristics of the type, period, or method of construction, master or craftsman, or the high artistic value of the property. For example, an archeological property with a standing structure that was used as a stage stop for the Butterfield Overland Mail service may qualify under Criterion A but not be eligible under Criterion C because the structure is not representative of the stage stops that were actually built to service the stages and mail carriers.

4. Address the integrity of the property. To meet the integrity requirement of Criterion C, an archeological property must have remains that are well-preserved and clearly illustrate the design and construction of the building or structure. An exception to the above-ground rule is structures that were intentionally built below the ground. For example, many industrial complexes, such as brick manufacturing or mining sites, contain potentially significant architectural or engineering remains below ground. Another exception might be found at archeological sites that contained relatively intact architectural remains buried through either cultural or natural processes. Thus, well-preserved architectural remains that were uncovered by archeological excavation might be considered eligible under Criterion C. Refer to "Aspects, or Qualities, of Integrity" in Section IV of this bulletin.

A late Mississippian village that illustrates the important concepts in pre-contact community design and planning will qualify. A Hopewellian mound, if it is an important example of mound building construction techniques, would qualify as a method or type of construction. A Native American irrigation system modified for use by Europeans could be eligible if it illustrates the technology of either or both periods of construction. Properties that are important representatives of the aesthetic values of a cultural group, such as petroglyphs and ground drawings by Native Americans, are generally eligible.

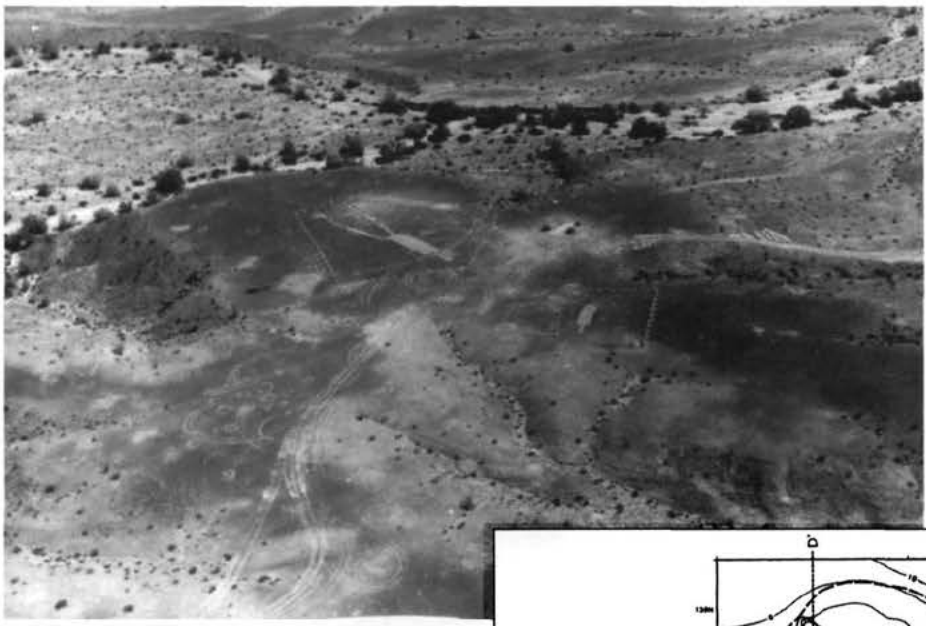


Figure 10: The Blythe Intaglios in California represent a property with high artistic value. (Bureau of Land Management)

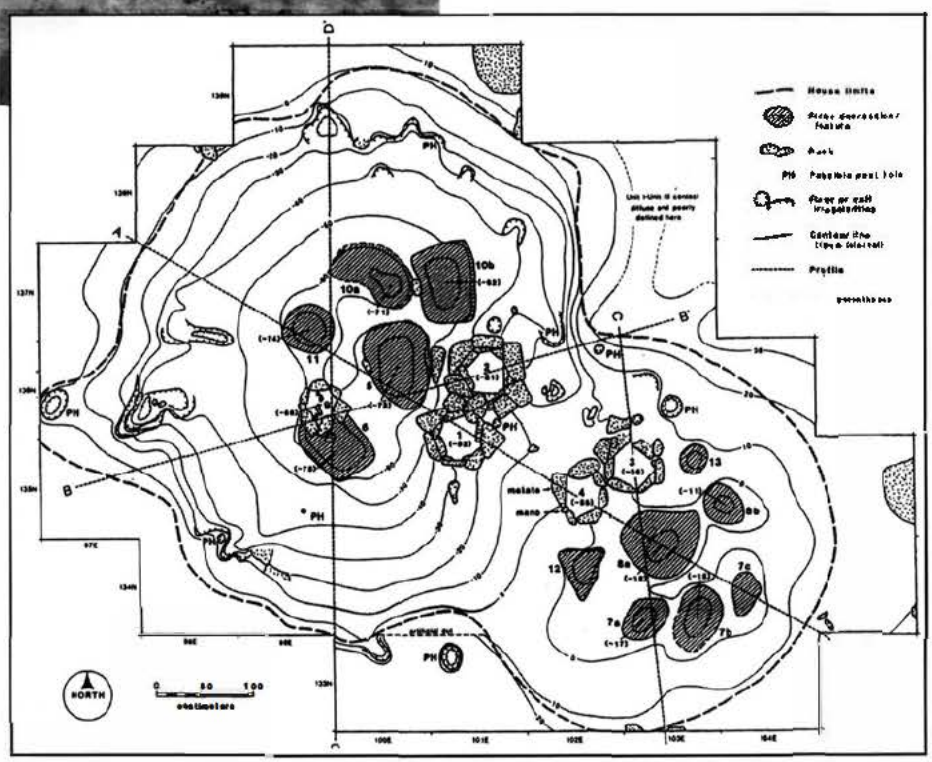


Figure 11: At the multicomponent Yarmony Archaeological Site in Colorado, the 7000 year old Early Archaic pithouses (such as the one shown here) are exemplary buildings in their age, complexity of features, artifact associations, and physical integrity. This site is listed under Criterion C for architecture and Criterion D for archaeology. (Figure from Michael Metcalf and Kevin Black, *Southwestern Lore* 54(1) 1988)

The Beattie Mound Group in downtown Rockford, Illinois, is eligible under Criteria C and D for architecture and archeology. The mound group embodies distinctive characteristics of the earthwork type of construction in three forms: conical, linear, and turtle effigy. This group is unusual in representing a variety of forms in a small area. These mounds are part of the "Effigy Mound" tradition of the Upper Mississippi Valley, which dates from about A.D. 300-1100.

An archeological district in Colorado is listed at the state level of significance under Criteria C and D for architecture and archeology. The district contains at least 24 sites dating from A.D. 975-1150. These sites include rock shelters with coursed masonry features, rock shelters with wall alignments, rock shelters without architectural features, open masonry which incorporate boulders/rocks outcrops into room features, and mesa top sites with alignments. Research questions focus on the relationship of the district to related sites in the Four Corners region. As a frontier community established during a time of dynamic cultural change, this district may establish the extreme northern extension of an important culture area. The boundary contains a complete environmental profile from the mesa top downslope to the creek.

The archeological remains of a seventeenth-century integrated iron production facility are important at the state level of significance as they represent the earliest example of this type of facility in the state. Road construction has disturbed only a portion of the site, however, the major activity areas are not discernable archeologically due to this disturbance. This site is not eligible under Criterion C as an example of the first phase in the evolution of iron production facilities in this locale, but may still be eligible under Criterion D if other areas of the site are intact enough to produce important information.

In Alaska, a cedar dugout canoe more than 29 feet long is listed as a structure and a site. Its historic function is Transportation/water-related; it is not currently in use. In fact, it was never finished by the Tlingit Indian(s) who began construction sometime before 1920. Because it is unfinished, it shows part of the construction process that would not be apparent in a finished canoe. It is an example of an early Northern type of Indian canoe with a distinctive profile. When it was listed in 1989, it was the only partially finished Native canoe of this type found *in situ* in southeast Alaska. The canoe is eligible under Criterion C as it embodies the distinctive characteristics of a type—the Northern canoe; and method of construction—the unfinished canoe retains construction elements usually lost in a completed canoe. The construction site itself is preserved as the tree stump from which the log was cut is intact and exhibits saw marks that help date the construction to no earlier than the late nineteenth century. The site has the potential to yield important information about the use of the forest by Tlingit peoples and about the construction of canoes during the last decades when they were being made. Archeological investigations at the site are likely to yield artifacts or features associated with manufacture.

CRITERION D: INFORMATION POTENTIAL

Criterion D requires that a property "has yielded, or may be likely to yield, information important in prehistory or history." Most properties listed under Criterion D are archeological sites and districts, although extant structures and buildings may be significant for their information potential under this criterion. To qualify under Criterion D, a property must meet two basic requirements:

- The property must have, or have had, information that can contribute to our understanding of human history of any time period;
- The information must be considered important.

Figure 12: Leluh Ruins, located on Leluh Island, Kosrae State, Federated States of Micronesia, includes massive basalt walls, high chief's compounds, a royal tomb and other sacred compounds, several streets, a canal system and extensive archeological deposits. The site is listed under Criteria A, C, and D as it is associated with the rise of complex society in the Pacific, contains a distinctive form of architecture in its stacked basalt prisms and blocks, and the associated archeological remains may address a wide range of important research questions. (R. Cordy)

Nominations should outline the type of important information that a property is likely to yield as shaped by the applicable research topics. To do this, the property must have the necessary kinds and configuration of data sets and integrity to address important research questions.

There are five primary steps in a Criterion D evaluation.

1. Identify the property's data set(s) or categories of archeological, historical, or ecological information.
2. Identify the historic context(s), that is, the appropriate historical and archeological framework in which to evaluate the property.
3. Identify the important research question(s) that the property's data sets can be expected to address.
4. Taking archeological integrity into consideration, evaluate the data sets in terms of their potential and known ability to answer research questions.
5. Identify the important information that an archeological study of the property has yielded or is likely to yield.

Application of Criterion D requires that the important information which an archeological property may yield must be anticipated at the time of evaluation. Archeological techniques and methods have improved greatly even in the few decades since the passage of the National Historic Preservation Act. The questions that archeologists ask have changed and become, in many cases, more detailed and more sophisticated. The history of archeology is full of examples of important information being gleaned from sites previously thought unimportant. Because important information and methods for acquiring it change through time, it may be necessary to reassess historic contexts and site evaluations periodically.

Changing perceptions of significance are simply a matter of the normal course of all social sciences and humanities as they evolve and develop new areas of study. What constitutes "information important in prehistory or history" changes with archeological and historical theory, method, and technique.

Specific questions may change but there are a number of categories of questions that are used routinely to frame research designs in terms of anthropological observations of societies. Such general topics include but are not limited to: economics of subsistence, technology and trade; land use and settlement; social and political organization; ideology, religion, and cosmology; paleo-environmental reconstruction; and ecological adaptation. In addition, a category of questions that relate to improvement to archeological methodology should be considered. For other general categories see the National Park Service *Thematic Framework* (NPS 1996), available at <www.cr.nps.gov/history/thematic.html>.

Through the disciplined study of the archeological record and supporting information, archeologists can provide answers to certain important questions about the past that are unobtainable from other sources. Archeological inquiry generally contributes to our understanding of the past in three ways. It:

- describes, records, and reconstructs past lifeways across time and space;
- tests new hypotheses about past activities; and
- reinforces, alters, or challenges current assumptions about the past.

The Mt. Jasper Lithic Source in Coos County, New Hampshire, is listed under "ARCHEOLOGY: Prehistoric; and INDUSTRY," for its contribution to the understanding of lithic technology and, secondarily, for its contribution to understanding settlement and exchange patterns. The lithic source area contains places where a rare and high quality raw material was found, mined, and made into tools essential for survival by hunter-gatherers from ca. 7000 BC

Figure 13: The Shenks Ferry Site in Lancaster County, Pennsylvania, an important contact period village site, was excavated in the 1930s and 1970s. It was listed in the National Register in 1982 without additional excavations. (Archaeology Laboratory, WPMM, Harrisburg, Pennsylvania)

to A.D. 1500. The recovery of tools made from Mt. Jasper rhyolite at sites distant from the source shows it widespread use.

In the southern Idaho uplands, a large district significant at the state level encompasses the drainages of two creeks and represents 6000 years of occupation. Site types in this high desert sagebrush-grass-juniper environment include rockshelters and caves, rock art sites, campsites, lithic scatters, workshops, and rock alignments. Important research questions under Criterion D concern the arrival of the Shoshoni in southern Idaho, the relationship of the area people to the Fremont residents in Utah, and the function of various types of rock alignments.

The Big Sioux Prehistoric Prairie Procurement System Archeological District contains a representative sample of the best preserved elements of a hunting and gathering system in the northwest Iowa plains from 10,000 to 200 years ago. It includes large and small sites, plowed and unplowed, and material on all types of landforms in the river valley. This discontiguous district's 30 sites are stretched along 15 miles of river terraces and blufftops. They include: late base camps; deeply-buried early Archaic camps; and procurement sites from all pre-contact time periods. The nomination argues that there is a common bias toward emphasizing individual sites, especially large and spectacular sites. Small, temporarily occupied sites seem to be the first to fall out of research designs. Small sites may appear to produce little information because broad cultural patterns cannot be reconstructed from one small site. However, small sites, especially single-component sites may contain detailed information which is unobtainable from larger, multi-component sites. Without the context of a larger subsistence and settlement system, small sites may appear meaningless but in a well-developed context, their significance can be assessed realistically. Base camps must be connected with temporary sites in order to reconstruct the whole settlement system.

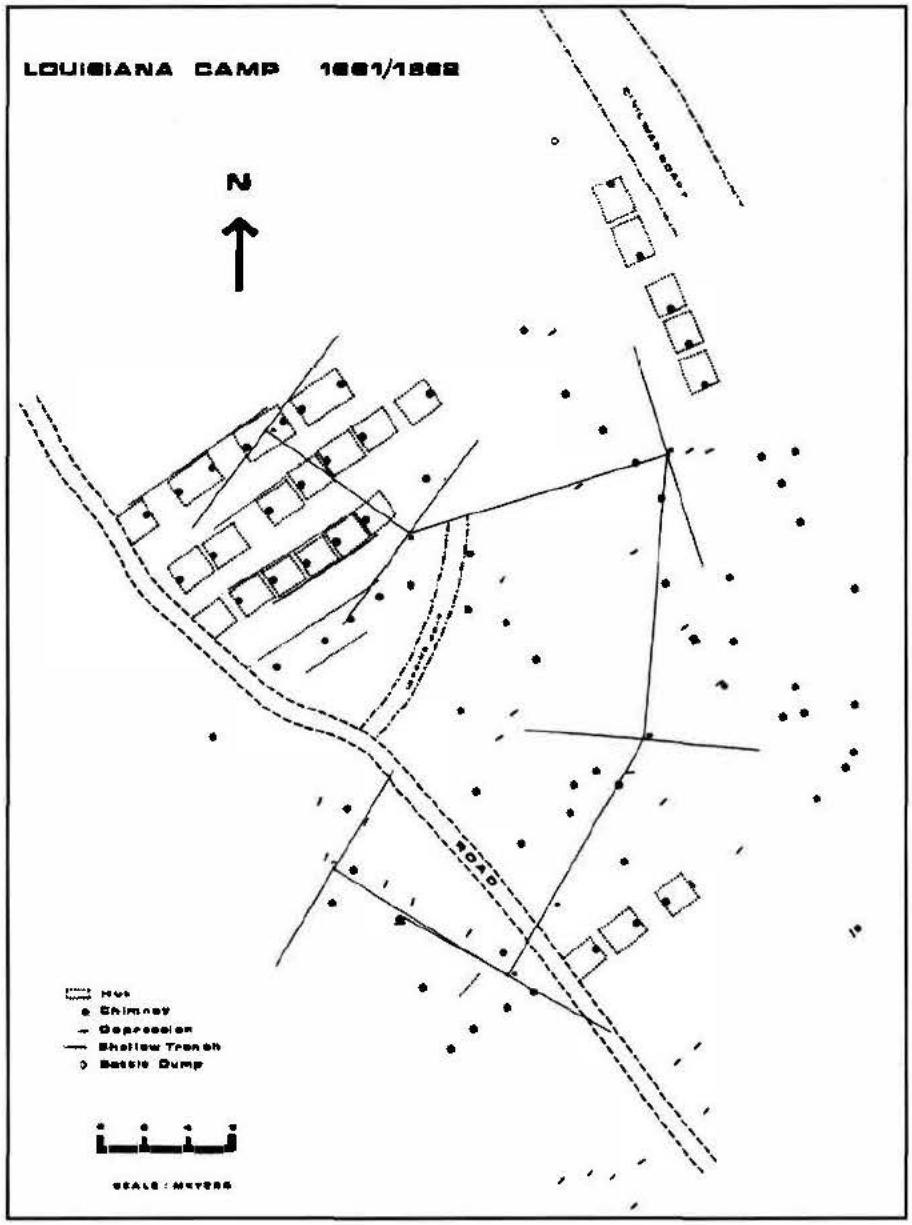


Figure 14: Because the recorded surface manifestations were obvious at Camp Carondelet, Prince William County, Virginia, archeological excavations were not required to list this Civil War encampment under Criterion D. (Jan Townsend)

If archeological studies were conducted previously at a site, additional test excavation may not be required before preparing a National Register nomination. For example, the Shenks Ferry site in Lancaster County, Pennsylvania (a contact period village dating from the sixteenth century), was excavated in the early 1930s and in the 1970s and was listed in the National Register in 1982 without additional field investigations.

The patterning of artifacts and features on the ground surface of some properties may be sufficient to warrant nominating them to the National Register. If this is the case, then demonstrating the presence of intact subsurface artifact or feature patterning through test excavations may not be required. That is, there is no mandatory testing of sites to determine their significance. For

example, Camp Carondelet in Prince William County, Virginia, the 1861-1862 winter camp of a Louisiana brigade, was listed in the National Register without excavations. This Civil War camp, which is evidenced by above-ground patterning of hut outlines, chimney falls, trash pits, roads, and rifle pits has sufficient surface information to justify a statement of significance. Field work included mapping the above camp features and noting the location of artifacts visible on the surface of the ground and in and around holes dug by relic hunters. Similarly, mounds or earthworks such as those of the Effigy Mound tradition of the Upper Mississippi Valley would not require intrusive testing for a convincing statement of significance to be argued based on analogy with similar excavated properties.

At the John Dickinson house, a National Historic Landmark located near Dover, Delaware, ground-penetrating radar was used to locate subsurface evidence of outbuildings, barns, and other features prior to the reconstruction of this eighteenth-century plantation's architecture (Bevan 1981). At Fort Benning, Georgia, electromagnetic, magnetic, and GPR investigations at the Creek town of Upatoi revealed highly patterned subsurface features interpreted as probably graves. The use of non-destructive techniques provided evidence of subsurface remains and raised the priority of site protection as a land management concern (Briuer et al. 1997).

Data Sets

Data sets, or data categories, are groups of information. Data sets are defined by the archeologist, taking into consideration the type of artifacts and features at the property, the research questions posed, and the analytical approach that is used. Whatever their theoretical orientation, all archeologists look at patterns in the archeological record. It is the evaluation or analysis of data sets and their patterning within the framework of research questions that yields information. Data sets can be types of artifacts (such as ceramics, glass, or tools), archeological features (such as privies, trash middens, or tailings piles), or patterned relationships between artifacts, features, soil stratigraphy, or above-ground remains. A graveyard, for example, might contain at least three data sets: the human remains, items buried with the deceased, and the arrangement of the graves within the cemetery.

Data sets that are known or expected to be represented at the property should be described. If the property is a district and there are multiple data sets (which is likely), then each of the kinds of data sets should be described. The data sets represented at each site may be presented in tabular form or in a matrix. The data sets described in this section must be consistent with the artifact and feature information included in the "Narrative Description" of the site. For example, if a chronology data set is described, then the property must have data (such as time-diagnostic artifacts) that can be used to address chronology. If there is a data set, or data sets, linked to a research topic of non-local exchange systems, for example, then there must be evidence of such activities represented in the archeological deposits.

Important Information and Research Questions

What are important questions in archeology? Even if a current list of important research questions existed (that archeologists could agree upon), the questions would still change as the discipline evolves and certain questions are answered and others are asked. Moreover, as research questions of the future cannot be anticipated, the kinds of data necessary to answer them cannot be determined with certainty. Thus, the research potential of a historic property must be evaluated in light of current issues in archeology, anthropology, history, and other disciplines of study (Ferguson 1977). The list of important research questions does not need to be lengthy or exhaustive. Examples of the kinds of research questions anticipated may be provided. A single important question is sufficient.

Theoretical positions on and pragmatic debates about important research questions are expressed at professional archeological conferences and in the professional literature and journals. For example, the Society for Historical Archeology sponsored a plenary session titled "Questions that Count in Archeology" at its annual meeting in 1987. This session addressed the issue of which theoretical frameworks or general research topics will generate the most important questions for post-contact archeology (e.g. Deagan 1988). From a theoretical viewpoint, Kathleen Deagan (1988:9), for example, makes the case that the questions that "count cannot be answered by either historical or archeological data alone, or through simple comparisons of two data categories." Rather than simply reinforcing other documentary sources, the interpretation of archeological evidence provides a supplementary and complementary record of the past. Other questions that count are those that apply archeological techniques to answering history-based questions about which there is inadequate documentation. In fact, to date, this has been post-contact archeology's most successful scholarly contribution (Deagan 1988:9). According to Deagan (1988:9), "other questions appropriate to the unique capabilities of historical archeology focus on understanding general cultural phenomena that transcend specific time and space."

A nomination should provide a clear link between the contexts, the research questions, and the data found at the property. Whatever the theoretical orientation of the archeologist, the connection between the archeological data and the important questions should be explicit in the National Register nomination.

One way to link archeological remains with research questions is through middle-range theories that connect the empirical world with generalized hypotheses (Leone 1988;

Merton 1967; Binford 1977, 1981a, 1981b; Thomas 1983a, 1983b; South 1977,1988). The middle-range and general theories should follow from and be consistent with the information presented in the discussion of historic contexts.

As noted above, there is no set outline that must be followed in describing research questions within the narrative statement of significance. General theories and the more specific hypotheses that shape the research questions, for example, may be presented in the historic context discussion and simply referenced during the description of important research questions. The National Register nomination should include a clear and concise presentation of the required information. The specific format for doing this will be determined in large part by the nature of the archeological property and its information potential.

Archeologists have recognized the importance of comparative information from a regional data base in making effective eligibility decisions. This is especially true when dealing with large numbers of a common resource type that have not been evaluated, such as nineteenth-century farmsteads or stone circles. A regional perspective provides a logical framework in which to evaluate seemingly "mundane" or "redundant" historic properties (e.g., Hardesty 1990; McManamon 1990; Peacock and Patrick 1997; Smith 1990; Wilson 1990).

Preparing Multiple Property Submission cover documents may also help solve the problems encountered with the eligibility of "redundant" resources. The format of the multiple property document may serve as a research design that specifies significance, important information, documenting protocols and identification strategies for particular types of resources that are worthy of preservation. For instance, registration requirements specify eligibility requirements. (For further guidance on multiple property submissions, see the National Register bulletin *How to Complete the National Register Multiple Property Documentation Form*).

A good example of a regional study proposed in National Register documentation is the Multiple Property Submission, "Native American Archaeological Sites of the Oregon Coast." In the cover document, several sets of research topics and questions are presented at local, regional, and national scales of research. Topics used to evaluate the eligibility of individual sites include: how have Oregon Coast environments been occupied and/or used by Native Americans varied through space and time; when and how did coastal adaptations develop along the Oregon Coast; how did Oregon Coast settlement and subsistence change through time; when did ethnographic patterns first develop on the Oregon Coast; how did Euroamerican colonization affect Oregon Coast Native Americans and how did Native Americans affect the course of colonization; and questions related to general archeological method and theory.

Under each of these topics are more detailed questions. The Multiple Property Submission cover document recognizes that the study of individual sites creates the building blocks for regional models and ultimately for more general and broadly applicable archeological and anthropological method and theory. Regional research topics that can be addressed through the comparative study of individual sites include the following: 1) Changes in Oregon coast environments through time; 2) Antiquity of coastal adaptations; 3) Regional developments in settlement and subsistence; 4) Origins and development of ethnographic cultural patterns; and 5) Effects of European contact and colonization on Native Americans and their resources.

General topics of broad importance are addressed in a comparative framework. Four such topics are extensions of the regional questions. These are: 1) Environmental Change and Human Adaptations; 2) Coastal Adaptations and Maritime Cultural Ecology; 3) Cultural Complexity and its origins; and 4) "European radiation" and indigenous societies.

When evaluating sites within a regional perspective, the following kinds of information should be presented:

- definition of the region or community under consideration;
- relative estimate of how many other similar properties were once located within the region;
- identification, where applicable, of surviving standing structures or sites;
- evaluation of level of archeological investigation of similar properties; and the
- outline of the documentary, ethnographic, or other supporting evidence related to the property.

To systematically evaluate properties, National Register nomination preparers often use an evaluation matrix, especially for pre-contact archeological properties. This approach to evaluation can also be particularly useful for evaluating the scientific or information potential of a post-contact archeological property. Donald L. Hardesty describes the development of a significance evaluation matrix in his 1988 publication, *The Archeology of Mining and Miners: A View From the Silver State*. Although Hardesty's focus is on mining properties, the process that Hardesty calls "a logical questioning framework" is applicable to all kinds of archeology properties (1990:48).

In Hardesty's evaluation matrix the vertical axis comprises key areas of research (such as demography, technology, economics, social organization, and ideology) while the horizontal axis describes three research levels (world system, region, and locality) where questions about the past may be addressed. The specific features of an evaluation matrix are determined taking into consideration the theoretical framework, middle range theories linking the data sets

to the relevant research questions, the research questions or topics, and the data sets represented at the property. In this example, a post-contact archeological property would be eligible for the National Register if its archeological record contains information with sufficient integrity that can be used to address one of the topics within the evaluation matrix. If the information at the site cannot be used to address these research themes, then the property may not be eligible for the National Register.

Archeological properties that fall between the clearly eligible and the clearly ineligible are the most difficult to evaluate for inclusion in the National Register. Moreover, it is important to realize that professional archeologists, historians, and architectural historians may disagree on the eligibility of a particular historic property. In theory, given high quality, and often site-specific, archeological research designs and comprehensive historic contexts, questions of eligibility should be minimal. As with all scientific and humanistic endeavors, it is the quality and bias of the questions we ask that determines the nature of the answers we recover from the past.

OTHER SIGNIFICANCE CONSIDERATIONS

The following: Areas of Significance, Period of Significance, Significant Dates, Significant Person(s), Cultural Affiliation, Architect or Builder, are important for all nominations, whether Criteria A, B, C, or D are being applied. Criteria considerations are listed and discussed on pp. 19-20 under "National Register Criteria."

AREAS OF SIGNIFICANCE

For post-contact archeological properties enter "ARCHEOLOGY: Historic-Aboriginal" or "ARCHEOLOGY: Historic-Non-Aboriginal" or both. For pre-contact properties enter "ARCHEOLOGY: Prehistoric." In addition, enter any categories and subcategories about which the property is likely to yield important information and list them in relative importance to the property. For example, an Indian industrial school may have the following areas of significance: "ARCHEOLOGY: Historic-Aboriginal," "EDUCATION," and "ETHNIC HERITAGE: Native American." If the school was of a special architectural design, then "Architecture" may also be added to the list. A pre-contact lithic source may have areas of significance "ARCHEOLOGY: Prehistoric" and "INDUSTRY." A paleo-Indian kill site may have the areas of significance "ARCHEOLOGY: Prehistoric" and "ECONOMICS" because there are no areas of significance specific to non-agricultural societies.

The ARCHEOLOGY Area of Significance has the subcategories noted above. Many archeological sites can be associated with a specific ethnic group, which also has subcategories. If this is the case, then enter "ETHNIC HERITAGE: Asian," "ETHNIC HERITAGE: Black," "ETHNIC HERITAGE: European," "ETHNIC HERITAGE: Hispanic," "ETHNIC HERITAGE: Native American," "ETHNIC HERITAGE: Pacific Islander," or "ETHNIC HERITAGE: Other."

Other Areas of Significance include: AGRICULTURE, ART, COMMERCE, COMMUNICATIONS, COMMUNITY PLANNING AND DEVELOPMENT, CONSERVATION, ECONOMICS, EDUCATION, ENGINEERING, ENTERTAINMENT/ RECREATION, EXPLORATION/

AN EVALUATION MATRIX FOR MINES

Research Domain	World System	Region	Locality
Demography	Comparative data on patterns of mining frontier demography	Patterns of occupation / abandonment in district	Reconstruction of household population
Technology	Adaptive variety and change in industrial and appropriate technologies on the mining frontier	Adaptive change in industrial technologies imported into district	Reconstruction of mining/milling technologies
Economics	Adaptive patterns of economic production and distributions on the mining frontier	Patterns of economic distribution and production within the district	Reconstruction of household consumption and production
Social Organization	Patterns of mining frontier social structure and change	Patterns of "colony" social structure and ethnic relations	Reconstruction of household status and ethnicity
Ideology	Emergence of "syncretic" mining frontier ideology	Interaction of Victorian and ethnic folk cultures	Reconstruction of household ideology

SETTLEMENT, HEALTH/MEDICINE, INDUSTRY, INVENTION, LANDSCAPE ARCHITECTURE, LAW, LITERATURE, MARITIME HISTORY, MILITARY, PERFORMING ARTS, PHILOSOPHY, POLITICS/GOVERNMENT, RELIGION, SCIENCE, SOCIAL HISTORY, TRANSPORTATION, AND OTHER. Each of these Areas of Significance, none of which have subcategories, are defined in the National Register bulletin *How to Complete the National Register Registration Form*.

Every effort should be made to use the listed "Areas of Significance." If none are applicable (except, of course, "Archeology..."), then "Other" may be entered and the appropriate area(s) of significance described in the text. The use of the "Other" category, however, precludes analysis of the property in terms of the other properties listed in the National Register. Each of the areas of significance must be described in the narrative significance section, and, if the property is eligible under Criterion D, linked to the information potential of the property.

PERIOD OF SIGNIFICANCE

The period of significance for an archeological property is the time range (which is usually estimated) during which the property was occupied or used and for which the property is likely to yield important information if evaluated under Criterion D. There may be more than one period of significance. If the periods of significance overlap, then they should be combined into one longer period of significance. Periods of significance should be listed in order of importance relative to the property's history, the areas of significance, and the criteria under which the property is being nominated. The periods of significance must follow from the data presented in the narrative description and significance statements in the nomination.

For example, an antebellum plantation that was built in 1820 and burned in 1864 and has well preserved archeological deposits dating from 1820 to 1864 has a 1820-1864 period of significance. If the same property was reoccupied from 1870 through 1900 and this period is represented by intact archeological deposits, then the periods of significance are 1820-1864 and 1870-1900. If the same site was then occupied sporadically from 1910 to 1920 by transients and there are no archeological remains associated with this period of use, then the periods of significance are still 1820-1864 and 1870-1900.

If a portion of the same property was mined for gold from 1875 through 1880 and the remains of this mining activity are intact and well preserved, then the periods of significance will still be 1820-1864 and 1870-1900. If the mining activity extended from 1865 to 1875, then the property's period of significance would be 1820-1900. The subperiods of significance (i.e., 1820-1864, 1865-1875, and 1870-1900) may be listed below the overall period of significance but, since subperiods are not coded into the National Register database, this is not required. The subperiods of significance, however, should be described in the narrative significance statement.

Figures 15 and 16: Archeological properties illustrate the diversity of a region's history. In Hawaii, for example, post-contact archeological properties include the Kalaoa Permanent House Site (above) (ca. A.D. 1400-1800) (R. Cordy) and the Kalaupapa Leprosy Settlement (right) (early twentieth century). (NPS)

SIGNIFICANT DATES

Significant dates are single years in which a special event or activity associated with the significance of the property occurred. A significant date is by definition included within the period of significance time range. The property must have historical integrity for all the significant dates entered. The beginning and closing dates of a period of significance are "significant dates" only if they mark specific events or activities related to the significance of the property. The dates should be listed in order of importance given the property's history and why it is significant. Martin's Hundred in Virginia has two significant dates: 1619, the year when it was established; and 1622, the year when it was almost completely destroyed in a Native American uprising (Nöel Hume 1982).

For archeological districts enter dates that relate to the significance of the district as a whole and not for individual resources unless the dates are also significant relative to the district. For many archeological properties, specific significant dates cannot be identified. If this is the case, enter "N/A." Radiocarbon, tree ring or other scientifically-determined absolute dates can be entered in this section. Note, however, that radiocarbon dates will be listed in the NRIS without their standard deviations.

SIGNIFICANT PERSON(S)

If an archeological property is being listed in the National Register under Criterion B (i.e., association with a significant person or persons), then this category should be completed. Enter the full name of the significant person, placing the last name first. If there is more than one significant person, list them in order of importance relative to the property's history. Do not enter the name of a family, fraternal group or organization. Enter the names of several individuals in one family or organization, only if each person made contributions for which the property meets Criterion B. Enter the name of a property's architect or builder only if the property meets Criterion B for association with that individual.

CULTURAL AFFILIATION

Cultural affiliation must be filled out when nominating a property under Criterion D. Cultural affiliation has been defined by the National Register to be "the archeological or ethnographic culture to which a collection of artifacts or resources (or property) belongs." For pre-contact archeological resources, "cultural affiliation" generally refers to a cultural group that is, in part, defined by a certain archeological assemblage and time period. For example, "Paleoindian," "Hopewell," "Hohokam," "Adena," and "Shoshonean" are commonly used cultural affiliation terms. Archeologists also commonly enter the archeological time period in this category; for example, "Early Archaic," "Late Woodland," and "Late Prehistoric," and "Proto-historic."

Archeologists who study the post-contact period usually are able to enter the ethnic identity of the group that occupied or used the property because the information is generally available through documents, oral histories, or comparative studies. For example, "Hawaiian," "Chemehuevi," Creek," "Irish-American," "Chinese-American," "African-American," "British," "Spanish," and "Dutch" are common cultural affiliation entries. Entries such as "Shaker" and "Mormon" are also used. When a historical property, such as a mining camp, cannot be linked to a specific cultural group, then the appropriate entry simply may be "Anglo-American" or "Euro-American" or even "American." Every effort should be made to complete the cultural affiliation section; however, if the cultural affiliation is unknown, enter "unknown."

ARCHITECT OR BUILDER

The name of the person(s) responsible for the design or construction of the property, if known, is entered in this category. The full name should be used. If the property's design derived from the stock plans of a company or government agency and are not credited to a specific individual, enter the name of the company or agency; for example, "Southern Pacific Railroad," "Sears," or "U.S. Army." Enter the name of property owners or contractors only if they were actually responsible for the property's design or construction. If the architect or builder is unknown, enter "unknown."

ASPECTS, OR QUALITIES OF INTEGRITY

The National Register criteria stipulate that a property must possess integrity of location, design, setting, materials, workmanship, feeling, and association. The National Register bulletin *How to Apply the National Register Criteria for Evaluation* directs that "integrity is the ability of a property to convey its significance" and "to retain historic integrity a property will always possess several, and usually most, of the aspects." (For further guidance, see *How to Apply the National Register Criteria for Evaluation*).

The evaluation of integrity is sometimes a subjective judgment, but it must always be grounded in an understanding of a property's physical features and how they relate to its significance. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining which of these aspects are most important to a particular property requires knowing why, where, and when the property is significant.

The importance of each of these aspects of integrity depends upon the nature of the property and the Criterion or Criteria under which it is being nominated. Integrity of location, design, materials, and association are of primary importance, for example, when nominating archeological sites under Criteria A and B. Design, materials, and workmanship are especially important under Criterion C. Location, design,

materials, and association are generally the most relevant aspects of integrity under Criterion D. Integrity of setting within the site is important under Criteria A and B. Under Criteria C and D, integrity of setting adds to the overall integrity of an individual site and is especially important when assessing the integrity of a district. Integrity of feeling also adds to the integrity of archeological sites or districts as well as to other types of properties. Integrity of setting and feeling usually increases the "recognizability" of the site or district and enhances one's ability to interpret an archeological site's or district's historical significance.

Assessment of integrity must come after an assessment of significance:

Significance + integrity = eligibility.

To assess integrity, first define the essential physical qualities that must be present for the property to represent its significance.

Second, determine if those qualities are visible or discernible enough to convey their significance. Remember to consider the question of "to whom significance might be conveyed." For example, the significance of particular historic buildings may be apparent primarily to architectural historians but not to many individuals in the general public. Similarly, the significance of some properties may be apparent primarily to specialists, including individuals whose expertise is in the traditional cultural knowledge of a tribe. A property does not have to readily convey its significance visually to the general public; however, National Register documentation of the significance of a property should be written such that members of the general public can understand the property's significance and the physical qualities which convey that significance.

Third, determine if the property needs to be compared to other similar properties. This decision is made in light of the historic context(s) in which the property's significance is defined.

ASPECTS, OR QUALITIES, OF INTEGRITY

Aspect/Quality	Definition
Location	The place where the historic property was constructed or the place where the historic event occurred.
Design	The combination of elements that create the form, plan, space, structure, and style of a property.
Setting	The physical environment of a historic property. Setting includes elements such as topographic features, open space, viewshed, landscape, vegetation, and artificial features.
Materials	The physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property.
Workmanship	The physical evidence of the labor and skill of a particular culture or people during any given period in history.
Feeling	A property's expression of the aesthetic or historic sense of a particular period of time.
Association	The direct link between an important historic event or person and a historic property. Under D it is measured in the strength of association between data and important research questions.

Finally, based on the significance and essential physical qualities, **determine which aspects of integrity are vital to the property being nominated and whether they are present** (See also the recommended sequence for evaluation under "Evaluating Sites in Context," in Section IV of this bulletin).

Solely meeting **any** aspect of integrity is not sufficient to meet eligibility requirements. For instance, just because most archeological sites retain integrity of location does not make them eligible. As the National Register bulletin *How to Apply the National Register Criteria for Evaluation* states,

> To retain historic integrity a property will always possess several and usually most, of the aspects. The retention of specific aspects of integrity is paramount for a property to convey its significance. Determining *which* of these aspects are most important to a particular property requires knowing why, where and when the property is significant.

Archeologists use the word integrity to describe the level of preservation or quality of information contained within a district, site, or excavated assemblage. A property with good archeological integrity has archeological deposits that are relatively intact and complete. The archeological record at a site with such integrity has not been severely impacted by later cultural activities or natural processes. Properties without good archeological integrity may contain elements that are inconsistent with a particular time period or culture. For example, the contents of a thirteenth-century Native American trash pit should not contain artifacts indicative of a

nineteenth-century American farmstead. Because of the complexity of the archeological record, however, integrity is a relative measure and its definition depends upon the historic context of the archeological property.

Few archeological properties have wholly undisturbed cultural deposits. Often, the constant occupation or periodic reuse of site locations can create complex stratigraphic situations. Above-ground organization of features and artifacts may be used as evidence that below-ground patterning is intact. Because of the complexity of the archeological record and the myriad of cultural and natural formation processes that may impact a site, the definition of archeological integrity varies from property to property. For properties eligible under Criterion D, integrity requirements relate directly to the types of research questions defined within the archeologist's research design. In general, archeological integrity may be demonstrated by the presence of:

- Spatial patterning of surface artifacts or features that represent differential uses or activities;
- Spatial patterning of subsurface artifacts or features; or
- Lack of serious disturbance to the property's archeological deposits.

In addressing the presence of nineteenth-century farmsteads, archeologist John Wilson, for example, posed three sets of questions that are helpful in determining the potential archeological integrity of a given site or district (Wilson 1990):

- Are the archeological features and other deposits temporally diagnostic, spatially discrete, and functionally defined? Can you interpret what activities took place at the property and when they occurred?
- How did the historic property become an archeological site? Were the cultural and natural site formation processes catastrophic, deliberate, or gradual? How did these changes impact the property's archeological deposits?
- What is the quality of the documentary record associated with the occupation and subsequent uses of the property? Are the archeological deposits assignable to a particular individual's, family's, or group's activities?

Generally, integrity cannot be thought of as a finite quality of a property. Integrity is relative to the specific significance which the property conveys. Although it is possible to correlate the seven aspects of integrity with standard archeological

Figure 17: Seventeenth-century foundations at Gloucester Point, Virginia help to demonstrate the archeological integrity of this district.
(Virginia Research Center for Archaeology)

Figure 18: At the Shea Site in North Dakota, the visibility of an exterior ditch and interior ditch (shown here) are evidence of the high integrity of this Northeastern Plains Village dating ca. A.D. 1400-1600. This site addresses questions of sedentism, defense, domestic plant use in the Red River region, and fluid cultural boundaries between the Plains and the Woodlands.
(Michael Micholovic)

site characteristics, those aspects are often unclear for evaluating the ability of an archeological property to convey significance under Criterion D. The integrity of archeological properties under Criterion D is judged according to important information potential. Archeological sites may contain a great deal of important information and yet have had some disturbance or extensive excavation (and, thereby, destruction). For example, sites that have been plowed may be eligible if it is demonstrated that the disturbance caused by plowing does not destroy the important information that the site holds.

For example, survey has identified the first free African American settlement in the state, dating to the early nineteenth century. Few documentary records exist which document the site, therefore, most information about the settlement will be gained through archeological research. However, more than half of the site has been destroyed through previous development of the area. While the integrity of the site is questionable, the site may still be eligible under Criterion D for the important information it can provide about the free African American community in the state during this time period.

All properties must be able to convey their significance. Under Criterion D, properties do this through the information that they contain. Under Criteria A, B, and C, the National Register places a heavy emphasis on a property looking like it did during its period of significance. One of the tests is to ask if a person from the time or the important person who lived there, would recognize it. If the answer is "yes," then the property probably has integrity of materials and design. If the answer is "no," then the property probably does not. Keep in mind that the reason why the property is significant is a very important factor when determining what it is that the person should recognize. For example, if a plantation was best known for its formal and informal gardens and agricultural activities, then recognizable landscapes may be more important than recognizable buildings.

One of the most common questions asked about archeological sites and integrity is: Can a plowed site be eligible for listing in the National Register? The answer, which relates to integrity of location and design, is: If plowing has displaced artifacts to some extent, but the activity areas or the important information at the site are still discernable, then the site still has integrity of location or design. If not, then the site has no integrity of location or design.

A 17-acre multi-component camp site in the southeastern United States has been plowed continuously since 1965 to depths greater than the thickness of topsoil. Portions of some features remain intact and the property has horizontal integrity, with Archaic, Troyville and Plaquemine components somewhat co-mingled yet concentrated in different sections. The nomination states that "The nature and dispersion patterns of the artifacts from the various components indicate that the hill was primarily a scene of small scale and/or temporary activities. It was never a large village occupied by numerous people. Therein lies a compelling reason for the site's importance." The site is significant in the lower Mississippi Valley partly because of the small scale occupation there. Small sites are not always evaluated because attention is paid primarily to large mound and village sites in the region. Important research questions would involve the relationship of this small hamlet/work camp to the larger mound sites and villages. The nomination points out specific research goals from the State archeological plan as well.

Sites that have lost contributing elements may retain sufficient integrity to convey their significance under Criterion D. For example, at a 25-acre mound site in the southeastern United States, of four mounds described in 1883, there is now one left associated with an extensive artifact scatter. Repeated surface collections were carried out to better understand the internal organization of the settlement. The nomination states that "On the basis of knowledge of similar sites, subsurface features such as cooking facilities, storage pits, and domestic habitations are likely to exist." One of the research domains likely to be addressed at this A.D. 600-1000 property, which was listed in 1995, concerns the study of the technology and social organization of craft production. The researchers expect to find evidence of rudimentary craft specialization in connection with the emergence of social inequality. At this major mound group, such crafts could have been used by the elite who could control access to or the production of craft items in support of their status.

LOCATION

The location of a property often helps explain its importance. Archeological sites and districts almost always have integrity of location. Integrity of location is closely linked to integrity of association, which is discussed below. Integrity of location would not necessarily preclude the eligibility of secondary or redeposited deposits in an archeological property. Integrity depends upon the significance argued for the property. Shipwreck sites best illustrate the subtleties of integrity of location.

EXAMPLES: The shipwreck comprises a ship that fought in a very important battle of the Civil War. Its significance is tied to only this battle.

- If the ship sank during the battle or in a place away from the battle site but the sinking was related to the battle, then the shipwreck still retains integrity of location under any of the criteria.
- If, for reasons unrelated to the battle, the ship sank in another location, then the shipwreck, no matter how intact it is, does not have integrity of location under Criterion A.

EXAMPLE: The above mentioned ship is also important because of its unique construction.

- If the ship's sinking is unrelated to its role in the Civil War, then the shipwreck may still be eligible for listing under Criterion C, because the location of the ship's sinking is unrelated to the importance of the ship's construction.

EXAMPLE: The shipwreck is a ship that was commanded by one naval officer from 1850 to 1870. It engaged in blockades, battles, and general transport. The naval officer is now recognized as one of the most important naval officers in the Civil War and an innovator of naval engagement techniques.

- No matter where the ship sank, it may still be eligible under Criterion B.

Note that, as under Criterion A, integrity of location is usually a prerequisite under Criterion B. In this example, however, the property's significance is tied to an important naval officer and by nature, ships change location.

EXAMPLE: The shipwreck is a sailing ship that patrolled Maine's coast from 1840 to 1890. Its significance is tied to that function. It has statewide significance.

- If the ship later sank off Maine's coast or in an adjoining river or bay, then the ship has integrity of location under Criterion A.
- If the ship sailed to Florida in 1890 to serve as a private yacht and along the way sank off Cape Hatteras, then the ship does not have integrity of location under Criterion A.

EXAMPLE: Each of the above shipwreck examples have intact archeological deposits.

- If each of the shipwreck sites can yield important information through archeological investigations, then each, as a post-contact archeological site, has integrity of location under Criterion D.

EXAMPLE: The shipwreck is a ship that sank during a War of 1812 naval battle. Subsequent natural erosion and turbulence has since scattered the ship's structure and contents over at least a two square-mile area. Occasionally, divers find artifacts that are believed to be from the ship, but there is no discernable patterning of remains.

- The shipwreck has no integrity of location under any of the criteria, including Criterion D.

DESIGN

Elements of design include organization of space, proportion, scale, technology, ornamentation, and materials. It is of paramount importance under Criterion C and is extremely important under Criteria A and B. The word "design" brings to mind architectural plans and images of buildings or structures. Design, however, also applies to the layout of towns, villages, plantations, etc. For an archeological site, integrity of design generally refers to the patterning of structures, buildings, or discrete activity areas relative to one another. Recognizability of a property, or the ability of a property to convey its significance, depends largely upon the degree to which the design of the property is intact. The nature of the property and its historical importance are also a factor.

Under Criterion D, integrity of design for archeological sites most closely approximates intra-site artifact and feature patterning. For districts, inter-site patterning can be used to illustrate integrity of design.

EXAMPLE: The archeological site was a large 1890s horse farm that had a main house and office, many outbuildings, a race track, and paddocks. The horse farm is most noted for the innovative layout of its buildings and structures. Because its site plan proved to be especially efficient, all later horse farms in the area adopted the same design for placement of their buildings and structures. Because of the increased efficiency, horse farming surpassed crop-based farming and has served as the economic base for the region since 1900.

- If only the foundation of the main house and adjacent archeological deposits still exist, then the archeological site does not have sufficient integrity to qualify under Criterion A (or Criterion B if the property was owned and operated by an important horse breeder). The site may still retain sufficient archeological data on 1890s settlement and consumer behavior to nominate it under Criterion D.
- If this archeological site encompasses the entire horse farm complex and its significance can be conveyed from the patterning of the remaining building and structure foundations and track, remnants of paddock fence posts, intact road beds, etc., then the horse farm site likely has sufficient integrity of design under Criteria A and D, and perhaps C. If the horse farm was built and operated by a renowned horse breeder, then the property would qualify under Criterion B.

Keep in mind that the reason why the property is significant is a very important factor. For example, if a plantation was best known for its formal and informal gardens and agricultural activities, then the integrity of the landscapes may be more important than the integrity of the buildings.

EXAMPLE: The site was a 1790s mill site. Above-ground ruins, including the millrace and mill foundation, are present. The mill was the village's first and only industry, and the village grew up around it.

- If the site is in a 1950s subdivision and the creek is gone, then this archeological site lacks sufficient integrity of design under Criterion A.

- If the mill site is located within a small, relatively intact 1790s village and its importance in the early development of the village is evident given its placement relative to the neighboring 1790s buildings and the still flowing creek, then the archeological site has sufficient integrity of design under Criterion A. If it were associated with a miller important in the establishment and early development of the village, then the site would qualify under Criterion B.

SETTING

Setting includes elements such as topographic features, open-space, views, landscapes, vegetation, man-made features (e.g., paths, fences), and relationships between buildings and other features.

Archeological sites may be nominated under Criterion D without integrity of setting if they have important information potential. For example, if a site has rich and well-stratified archeological deposits dating from the 1690s to the 1790s but is located under a modern parking lot and between two modern commercial buildings, it will still qualify under Criterion D. In this case, the setting does not detract from the information potential of the site.

If a site's or district's historical setting (or the physical environment as it appeared during its period of significance) is intact, then the ability of the site or district to convey its significance is enhanced. If the setting conveys an archeological site's significance, then the site has integrity of setting under Criteria A and B. In order to convey significance, the setting should:

- appear as it did during the site's or district's period of significance; and
- be integral to the importance of the site or district.

EXAMPLE: The archeological district encompasses an area occupied by a Native American tribe during the Late Woodland period. Fifteen fishing camps are located on points of land that jut into the large lake and three villages are on high knolls overlooking the lake. These fishing camps and villages together represent Native American occupation and exploitation of the lake during the Late Woodland period. The economy was based on fishing and local trapping. The fishing camps and villages are represented by below-ground archeological deposits.

- If the natural environment around the lake and on the knolls appears similar to its Late Woodland appearance and the visitor can easily understand the significance of the sites and their relationships to each other and the lake and the surrounding knolls and can appreciate the Late Woodland lifeways of the Native Americans who lived there, then the district is eligible for listing under Criterion A.
- If modern cabins and large residences are near most of the fishing camps, high-rise structures line much of the lake shoreline, a shopping center is located on one of the three villages, and small play-ground parks are atop the other two villages, then this district does not have sufficient integrity for listing under Criteria A. In this scenario, Criterion D might be questioned.

Figure 19: The LSU Campus Mounds Site (16EBR6) is located on the campus of Louisiana State University in Baton Rouge. The site dates from 3000 B.C. to 2000 B.C. and is nominated under Criterion D as it has the potential to contribute to our understanding of Archaic lifeways. Even though the site's setting does not have integrity because it is physically surrounded by LSU structures and buildings, limited investigations have shown that the mounds are extremely well preserved. (Chris Hays)

MATERIALS

According to the National Register bulletin *How to Apply the National Register Criteria for Evaluation*, "the choice and combination of materials reveal the preferences of those who created the property and indicate the availability of particular types of materials and technologies." Integrity of materials is of paramount importance under Criterion C. Under Criteria A and B, integrity of materials should be considered within the framework of the property's significance.

Under Criterion D, integrity of materials is usually described in

Figure 20: The Madison Buffalo Jump State Monument in Gallatin County, Montana, shown in this aerial photo, exhibits excellent integrity of setting. The area includes a site identified for communal buffalo drives by pre-contact peoples over a period of at least 4,000 years. The pristine physical environment enhances the site's ability to convey its significance. (Rocky Rothweiler)

Figure 21: The Melting Furnace Site, part of the Estellville Glassworks Historic District, is in Atlantic County, New Jersey. Cemented with limestone mortar, it was constructed of sandstone and aggregated stone. All four walls of this structure were once pierced with large arched openings in brick. The site displays integrity of workmanship because of its standing wall surface, showing the brick arched colonnade. (Karen DeRosa)

terms of the presence of intrusive artifacts/ features, the completeness of the artifact/feature assemblage, or the quality of artifact or feature preservation.

EXAMPLE: The archeological site is a battery built by the Confederates early in the Civil War to blockade the Potomac River, which was Washington, D.C.'s primary supply route. The battery was formed by an intricate pattern of earthen berms shored up by wooden planks. Wood was also used to line the magazines and provide level platforms for guns. The wood is now gone.

- If the battery consists of earthen berms and depressions which show the configuration of the original battery and the location of gun platforms, magazines, etc., then this site has integrity of materials and is eligible under Criterion A.
- If the battery's earthen berms and depressions are indistinct because of erosion or other factors, then the site does not have integrity of materials under Criterion A.

WORKMANSHIP

Workmanship "is the evidence of an artisan's labor and skill in constructing or altering a building, structure, object, or site." It can apply to the property as a whole or to its individual components. Most often, integrity of workmanship is an issue under Criterion C. Under Criteria A and B, integrity of workmanship is important if workmanship is tied to the significance of the property.

Under Criterion D, workmanship usually is addressed indirectly in terms of the quality of the artifacts or architectural features. The skill needed to produce the artifact or construct the architectural feature is also an indication at of workmanship. The importance of workmanship is dependent on the nature of the site and its research importance.

EXAMPLE: The archeological site was a late eighteenth-century glass house that produced a unique kind of glassware. Rare silicates and an unusual melting technique were used to produce the unusual characteristics of the glass. The individual glass items were prized for their high quality and decorative styles.

- If the furnaces are still evident and activity areas where the components were processed and formed into vessels are discernable, then the site may have integrity of workmanship and be eligible under Criterion C. If the glass maker and owner of the glass house is well-known, then the property may be eligible under Criterion B.

FEELING

A property has integrity of feeling if its features in combination with its setting convey a historic sense of the property during its period of significance. Integrity of feeling enhances a property's ability to convey its significance under all of the criteria.

- If the site itself is still intact, but it is now surrounded by housing subdivisions and commercial buildings, then the site does not have integrity of feeling under Criterion A.

EXAMPLE: The archeological property was an early 1900s railway stop. It was located in the desert at a point were the railroad crossed one of the region's primary cattle trials. There were two nearby springs, structures to load cattle onto the rail cars, and a hinged, wooden sidewalk that could be realigned to accommodate the shifting sands. Camp sites were situated on a nearby knoll and adjacent to one of the springs. The closest town was 30 miles away when the site was used. This remote railway stop was vital to the surrounding ranches whose economy was based on cattle ranching.

- If the site is still in a remote area of the desert, and what remains at the site evokes a feeling of early cattle ranching days, then the site has integrity of feeling under Criterion A. The presence of the springs, remnants of the cattle-loading structures, segments of the hinged sidewalk following the railway tracks, and scattered rock-lined hearths, tobacco tins, solder tin cans, broken glass, etc., in combination with the site's remoteness, conveys feelings of times past.
- If the site itself is still intact, but it is now surrounded by housing subdivisions and commercial buildings, then the site does not have integrity of feeling under Criterion A.

ASSOCIATION

According to the National Register bulletin *How to Apply the National Register Criteria for Evaluation*, "a property retains association if it is the place where the event or activity occurred and is sufficiently intact to convey that relationship to an observer." Integrity of association is very important under Criteria A and B. The association between a property and its stated significance must be direct under these two criteria.

Under Criterion D, integrity of association is measured in terms of the strength of the relationship between the site's data or information and the important research questions. For example, a site with well-stratified archeological deposits containing butchered animal remains has information on subsistence practices over time. There is a strong association between the site's information and questions on subsistence practices. *How to Apply the National Register Criteria for Evaluation*, should be consulted for additional guidance on evaluating integrity.

EXAMPLE. The archeological property is an 1830s Cherokee settlement located in Georgia. The event or broad pattern of events under Criterion A is the removal of the Cherokee to Oklahoma.

- If soldiers invaded the settlement in 1839, taking the Cherokee prisoners and moving them into camps before marching them to Oklahoma, then the property is directly associated with the removal of the Cherokee to Oklahoma. The site has integrity of association under Criterion A.
- If the property was abandoned in 1835 because of disease and the Cherokee moved to another settlement several miles away, then the property probably has no direct association with the removal of the Cherokee to Oklahoma. The site does not have integrity of association under Criterion A.

V. PREPARING DOCUMENTATION FOR NATIONAL REGISTER ELIGIBILITY AND LISTING

When completing the National Register form with name and locational information, please consult the previous section "When should information about historic properties be restricted from public access?" In some cases, the common name of a site may give its location. In such cases, a Smithsonian trinomial or similar designation may be more appropriate as the preferred name.

CLASSIFICATION

SITES AND DISTRICTS

Most archeological properties are classified either as a site or as a district. A **site** is the location of a significant event or of historical human occupation or activity. The location must possess historical, cultural, or archeological value regardless of the value of any existing building or structure. Comprising the remains of a sixteenth- through nineteenth-century Spanish mission, Mission Socorro in El Paso County, Texas, is an example of an archeological site. Established after the Pueblo Revolt of 1680, this property functioned as a refugee mission for the Piro Indians. This site contains a material record of Piro acculturation into the Spanish and subsequent Anglo-American cultures. Study of the property could reveal information about lifeways at eighteenth-century Spanish missions and changes in Spanish and Native American technology, society, and ideology in a colonial frontier setting.

A **district** is a grouping of sites, buildings, structures, or objects that are linked historically by function, theme, or physical development or aesthetically by plan. The properties within a district are usually contiguous. For example, the Wakulla Springs Archeological and Historical District in Florida contains 55 archeological properties and six buildings that contribute to this diverse National Register district with a period of significance beginning in 15,000 B.C. Because archeological investigations are labor intensive and time consuming, survey and evaluation of 100 percent of the resources within a proposed archeological district may be impractical, if not unattainable. If it can be demonstrated that the area between the individual properties, although not completely surveyed, is likely to contain significant resources related to the documented properties, then classification as a district may still be appropriate despite the lack of a 100 percent survey.

If sites have a direct relationship through cultural affiliation, related elements of a pattern of land use, or historical development, but they are not contiguous and the space between the sites is not significant, then the property is best described as a discontiguous district.

Figure 22: A contributing resource in the Wakulla Springs Florida Archeological District, this early twentieth-century turpentine processing camp was identified through surface evidence. (Stephen C. Byrne)

A discontiguous district is most appropriate where:

- Elements, such as sites, are spatially discrete;
- Space between the elements, or sites, has not been demonstrated to be significant as it relates to the district;
- Visual continuity is not a factor in the significance.

The Brogan Mound and Village Site in Clay County, Mississippi, is an example of a discontiguous district. This property consists of a Middle Woodland burial mound and an associated multi-component habitation area approximately 200 meters away. A highway right-of-way and a house occupy the area between these portions of the district.

MULTIPLE PROPERTY SUBMISSIONS

Multiple Property Submissions comprise a group of individual properties that share a common theme or historic context. Multiple property nominations facilitate the evaluation and registration of individual properties by grouping them with other properties with similar characteristics. A Multiple Property Submission calls for the development of historic contexts, selection of related property types, and the identification and documentation of related significant properties. It may be based on the results of a comprehensive interdisciplinary survey for a specific area, county, or region of a state, or it may be based on an intensive study of the resources illustrative of a specific type of site, a single cultural affiliation, or a single or closely related group of historic events or activities.

Multiple Property Submissions are made up of a cover document (NPS 10-900-b) and individual nominations. The cover document includes the following sections: Statement of Historic Contexts; Associated Property Types; Geographical Data; Summary of Identification and Evaluation Methods; and Major Bibliographic References. The individual nominations, which can be districts, sites, structures, buildings and/or objects, include brief description and significance sections and boundary and bibliographic information. Multiple Property Submissions are designed to facilitate evaluating the eligibility and/or nominating additional properties at a later date.

Previously prepared Multiple Property Submissions can be useful guides to appropriate historic contexts and registration requirements for archeological properties. Multiple property submissions are discussed in the National Register bulletin *How to Complete the National Register Multiple Property Documentation Form*. The National Register maintains a list of approved multiple property submissions; the list and copies of the documentation are available upon request and on the web at: www.cr.nps.gov/nr/research/mplist.htm. A list of current multiple property submissions under which archeological properties have been nominated is included as Appendix B in this bulletin.

NATIONAL REGISTER PROPERTY CATEGORIES

District
A district possesses a significant concentration, linkage, or continuity of sites, buildings, structures, or objects united historically or aesthetically by plan or physical development. **Examples:** college campuses; central business districts; residential areas; commercial areas; large forts; industrial complexes; civic centers; rural villages; canal systems; collections of habitation and limited activity sites; irrigation systems; large farms, ranches, estates, or plantations; transportation networks; and large landscaped parks.

Site
A site is the location of a significant event, a pre or post-contact occupation or activity, or a building or structure, whether standing, ruined, or vanished, where the location itself possesses historic, cultural, or archeological value regardless of the value of any existing structure. **Examples:** habitation sites, funerary sites; rock shelters; village sites; hunting and fishing sites; ceremonial sites; petroglyphs; rock carvings; gardens; battlefields; ruins of historic buildings and structures; campsites; sites of treaty signing; trails; areas of land; shipwrecks; cemeteries; designed landscapes; and natural features, such as springs, rock formations, and land areas having cultural significance.

Building
A building, such as a house, barn, church, hotel, or similar construction, is created principally to shelter any form of human activity. "Building" may also be used to refer to a historically and functionally related unit, such as a courthouse and a jail or a house and a barn. **Examples:** Houses; barns; stables; sheds; garages; courthouses; city halls; social halls; commercial buildings; libraries; factories; mills; train depots; stationary mobile homes; hotels; theaters; schools; stores; and churches.

Structure
The term "structure" is used to distinguish those functional constructions made usually for purposes other than creating human shelter. **Examples:** bridges; tunnels; gold dredges; fire towers; canals; turbines; dams; power plants; corncribs; silos; roadways; shot tower; windmills; grain elevators; kilns; mounds; cairns; palisade fortifications; earthworks; railroad grades; systems of roadways and paths; boats and ships; railroad locomotives and cars; telescopes; carousels; bandstands; gazebos; and aircraft.

Object
The term "object" is used to distinguish those constructions that are primarily artistic in nature or are relatively small in scale and simply constructed. Although it may be, by nature or design, movable, an object is associated with a specific setting or environment. **Examples:** sculpture; monuments; boundary markers; statuary; and foundations.

ARCHEOLOGICAL DISTRICTS: CONTRIBUTING AND NONCONTRIBUTING RESOURCES

A contributing site, building, structure, or object adds to the historical associations, historic architectural qualities, or archeological values for which a property is significant. A contributing resource has the following characteristics:

- It was present during the period of time that the property achieved its significance;
- It relates to the documented significance of the property;
- It possesses historical integrity or is capable of yielding important information relevant to the significance of the property.

A noncontributing building, site, structure, or object does not add to the historical associations, historic architectural qualities, or archeological values for which a property is significant because:

- It was not present during the period of time that the property achieved its significance;
- It does not relate to the documented significance of the property;
- Due to alterations, disturbances, additions, or other changes, it no longer possesses historical integrity or is capable of yielding important information relevant to the significance of the property.

Contributing **and** noncontributing resources need to be differentiated and tallied. Identify all sites, buildings, structures, and objects located within the property's boundaries that are substantial in size and scale and determine which are contributing and which are noncontributing. As a general rule:

- Count a geographically continuous site as a single unit regardless of its size or complexity;
- Count separate areas of a discontiguous district as separate entities (e.g., sites, structures, etc.);
- Do not count minor resources (such as small sheds, grave markers, or machinery) unless they are important to the property's significance;
- Do not count architectural ruins separately from the site of which they are a part;
- Do not count landscape features (such as fences and paths) separately from the site of which they are a part unless they are particularly important or intrusive. For example, a narrow gravel pathway built 10 years ago to guide tourists from one mission building to another should not be counted.
- Do not count individual archeological components of stratified archeological sites separately;

A landscape feature, such as a formal garden or complex of formal gardens, may be classified and counted either as a site or as a district. Landscape features associated with archeological properties, however, will generally be counted as sites. The National Register bulletin *Guidelines for Evaluating and Documenting Rural Historic Landscape* and the National Register bulletin *How to Evaluate and Nominate Designed Historic Landscapes* provide guidance on defining, describing, and evaluating rural and designed landscapes. Refer to *How to Complete the National Register Registration Form* for further guidance on counting resources.

CLASSIFICATION EXAMPLES

Situation	Classification
1870s homestead archeological site with no standing structures or above-ground ruins.	Site
1870s homestead archeological site with a standing barn and house dating to the 1870s.	Site
1870s homestead archeological site situated atop and adjacent to important pre-contact archeological deposits.	Site
Four 1870s homestead sites adjacent to one another.	District
A pre-contact irrigation system fragmented by modern developments.	Discontiguous District
Three historically-related shipwrecks that are located approximately one-quarter mile apart.	Discontiguous District
Twenty shell midden sites located within a particular county.	Multiple Property Submission

HISTORIC AND CURRENT FUNCTIONS OR USES

Historic function or use relates to the function of the property during the time period associated with the property's significance. Current function refers to the present-day function/use of the property. Historic function and current function for archeological properties usually differ. For example, a Colonial-period site with a buried foundation of a county courthouse that is currently under cultivation has a historic function of GOVERNMENT/ county courthouse and a current function of AGRICULTURE / SUBSISTENCE/ agricultural field. If none of the listed functions and uses is appropriate, then the "Other" category may be checked and a description filled in.

Note that completion of the "Functions/Uses" category is especially important. There is no site-type category, in the sense that archeologists use the term, on the nomination form. Since most archeological properties are classified by function or use, the Function/Use designation approximates a site-type designation.

ARCHITECTURAL CLASSIFICATION MATERIALS

The descriptive categories, Architectural Classification and Material, are applicable only for archeological sites that have standing buildings or structures. If the property has a standing, contributing structure or building then these descriptive categories must be completed.

Data categories for "Architectural Classification" and architectural style references are listed in *How to*

FUNCTIONS AND USES PERTAINING TO ARCHEOLOGICAL PROPERTIES

Category	Subcategory
Domestic	Single dwelling, multiple dwelling, secondary structure, hotel, institutional housing, camp, village site
Agriculture/ Subsistence	Processing, storage, agricultural field, animal facility, fishing facility or site, horticultural facility, agricultural outbuilding, irrigation facility
Industry/ Processing/ Extraction	Manufacturing facility, extractive facility, waterworks, energy facility, communications facility, processing site, industrial storage, quarry site, tool production site
Commerce/Trade	Business, professional, organizational, financial institution, specialty store, department store, restaurant, warehouse, trade (archeology)
Transportation	Rail-related, air-related, water-related, road-related (vehicular), pedestrian-related, trail
Government	Capitol, city hall, correctional facility, fire station, government office, diplomatic building, custom house, post office, public works, courthouse
Defense	Arms storage, fortification, military facility, battle site, Coast Guard facility, naval facility, air facility
Recreation and Culture	Theater, auditorium, museum, music facility, sports facility, outdoor recreation, fair, monument/marker, work of art
Landscape	Parking lot, park, plaza, garden, forest, unoccupied land, underwater, natural feature, street furniture/ object, conservation area
Education	School, college, library, research facility, education-related
Religion	Religious facility, ceremonial site, church school, church-related residence
Funerary	Cemetery, graves/burial, mortuary
Health Care	Hospital, clinic, sanitarium, medical business/office, resort
Social	Meeting hall, clubhouse, civic
Vacant/Not in Use	(Use this category when the property is not being used)
Work in Progress	
Unknown	
Other	

Complete the National Register Registration Form. These categories represent American architectural styles. If the building or structure does not fit into the classification scheme and an appropriate classification is known, then "Other" should be checked and the name written in—for example, "Other: Mesa Verde Pueblo." If a building or structure style is not listed in the "Architectural Classification" list and "Other" is inappropriate, then "No Style" should be entered.

Architectural classification such as categories, subcategories, and other stylistic terminology have not been established for ruins. **Ruins** are defined by the National Register as buildings or structures that no longer possess original design or structural integrity. When there is considerable structural integrity still remaining, which is the case at many pueblos, the property should be classified as buildings rather than ruins. The principal existing and visible exterior materials, whether historic or non-historic, of standing buildings or structures or of above ground ruins must be described. A listing of materials from which to choose is provided in *How to Complete the National Register Registration Form.* If there are no aboveground buildings, structures, or ruins, enter "N/A." For example, if there is a subsurface stone foundation but no above-ground evidence, "N/A" should be entered.

NARRATIVE DESCRIPTION

The narrative description is the text that describes the archeological property as it was in the past (i.e., during its "period of significance") and as it is in the present. It also describes the property's environmental or physical condition, including the property's past environmental setting and its current setting. The property's physical integrity should also be discussed. There is no outline that must be followed when describing archeological properties. Many preparers, however, have found the following outline useful.

1. SUMMARY

Summarize the highlights of the information presented in the description narrative. At a minimum, the summary paragraph(s) should identify the general location of the property, its type, period of significance, the cultural group(s) associated with the property, the range of contributing resources, and the integrity of the property and its setting. Note that the period of significance and the cultural group associated with the property will be discussed more fully in the preceding "Evaluating Significance" section. For the purposes of this summary, these subjects should be discussed to the level needed to provide the reader with a basic orientation regarding the property.

2. ENVIRONMENT

Describe the present and, if different, the relevant past environment and physical setting that prevailed during the property's period(s) of occupation or use, or period of significance. This description should focus on the environmental features or factors that are or were relevant to the location, use, formation, or preservation of the archeological property.

3. TIME PERIOD OF OCCUPATION OR USE

Identify the time period when the property is known or projected to have been occupied or used. Explain how the period of time was determined, especially the beginning and end dates. Include comparisons with similar properties if data from them were used to establish the time period. The period of occupation often corresponds to the period of significance. Note that the individual period(s) of occupation or use is discussed in detail under the physical description of the property. This section is intended to be more general and inclusive of the periods of occupation.

4. PERSONS, ETHNIC GROUPS, OR ARCHEOLOGICAL CULTURES

Identify those who, through their activities, created the archeological property or, in the case of a district, occupied or used the area and created the sites within it. Discuss the supporting evidence for making such a determination.

5. PHYSICAL CHARACTERISTICS

Describe the physical makeup of the nominated property or properties. Where appropriate, the description of a site or a district should include the following:

Site

- Site type, such as village, quarry, tavern, rural homestead, military fortification, or shoe factory;
- Important (or contributing) standing structures, buildings, or ruins;
- Kinds and approximate number or density of features (e.g., middens, hearths, roads, or garden terraces), artifacts (e.g., manos and metates, lithic debitage, medicine bottles), and ecofacts (e.g., insects, macrobotanical remains);
- Known or projected depth and extent of the archeological deposits and the supporting evidence for archeological integrity. Known or projected dates for the period(s) in which the site was occupied or used and the supporting evidence;
- Vertical and horizontal distribution of features, artifacts, and ecofacts;
- Natural and cultural processes, such as flooding and refuse disposal, that have influenced the formation of the site;
- Noncontributing buildings, structures, and objects within the site.

District

- Type of district, such as an eighteenth-century New England village or a Middle Woodland mound group.
- Cultural, historical, or other relationships among the sites that make the district a cohesive unit.
- Kinds and number of contributing sites, buildings, structures, and objects that make up the district.
- Information on individual or representative sites and other resources within the district. Refer to the "Physical Characteristics" of a site previously presented. For districts with few significant archeological resources (usually sites), describe the individual sites. For archeological districts with a number of resources (usually sites), describe the most representative resources or types of resources and present the data on the individual resources in a table.
- Noncontributing sites, buildings, structures, and objects within the district.

6. LIKELY APPEARANCE OF THE PROPERTY DURING ITS PERIOD(S) OF OCCUPATION OR USE

Because of limited data, this description is often general and speculative, especially if aboveground elements no longer exist. Nevertheless, the description should be consistent with the description of the archeological remains. Knowledge of similar properties that have been comprehensively investigated may be used to support the description. A description of the property as it likely appeared in the past is particularly useful in evaluating integrity.

7. CURRENT AND PAST IMPACTS

Identify the impacts, natural and cultural, past and current, on or immediately around the property, such as modern development, vandalism, neglect, road construction, agriculture, soil erosion, or flooding. For a district, describe the integrity of the district as a whole and the integrity of individual sites. The emphasis in this section should be on identifying the kinds of impacts and assessing the extent or degree of impact. If qualitative categories, such as "high," "low," etc., are used, then these should be defined.

8. INTEGRITY

As defined by the National Register, properties that are eligible for inclusion have integrity. Integrity has seven aspects: location, design, setting, materials, workmanship, feeling, and association. As with much of the National Register nomination process, assessment of the archeological integrity at a particular historic property or district depends upon the identified historic contexts, questions, and research design. A comprehensive, accurate, and explicit evaluation of archeological integrity is an essential part of any nomination. For further discussion of integrity, refer to "Aspects, or Qualities, of Integrity," in Section IV of this bulletin for further guidance.

9. PREVIOUS INVESTIGATIONS

Previous investigations are discussed for the purposes of (1) documenting disturbances from archeological investigations, (2) identifying the information that the property has already yielded, and (3) determining, in part, the information potential if additional studies are conducted at the property. The following topics should be addressed: archival, literature, and oral history research; the extent and purpose of any excavation, testing, mapping, or surface collection; dates of relevant research and field work and pertinent biases; the identity of the researchers and, if relevant, their institutional or organizational affiliation; and directly relevant bibliographic references. Focus on those studies that pertain to the specific property being nominated. Other relevant studies and research should become evident through reading the "Contexts" section in the narrative significance discussion. Of particular importance are the archeological studies conducted to identify the property and to determine its horizontal and vertical extent and its integrity. Identify the location of repositories where collections and site records are maintained.

10. CONTRIBUTING AND NONCONTRIBUTING RESOURCES

List the contributing and noncontributing resources if they have not already been described as such in previous subsections. Often in the case of archeological properties, all categories of resources except "site" are noncontributing. When this occurs, the preparer simply needs to state, for example, that "all nine buildings on the property postdate the period of significance and are noncontributing resources" and that "there is only one contributing resource—the archeological site." Note that the totals of the contributing and noncontributing counts in the text must match with those found on the National Register form under the heading "Number of Resources within Property" and match those identified on the site map.

NARRATIVE STATEMENT OF SIGNIFICANCE

The "Statement of Significance" is an analytical statement. It is the most important section of any archeological nomination, and documents and justifies the significance of the property. In this section the significance of the property is justified by addressing applicable National Register criteria, areas of significance, period of significance, cultural affiliation, and, if applicable, criteria considerations, significant dates, significant persons, and the architect or builder.

With the exception of the "Summary of Significance" at the beginning of the section, there is no established outline for presenting the significance information. At a minimum, all statements of significance should describe the historic contexts used to evaluate the significance of the historic property, include a discussion of how the property is significant in these contexts, and an explanation of how archeological information provides important information for understanding these contexts (See also "Evaluating Sites in Context," in Section IV of this bulletin).

The "Summary of Significance" is a concise statement, accompanied by the supporting rationale, of why the property is significant. The criterion or criteria under which the property is being nominated and the areas of significance should be cited. In addition, the important information that the property is likely to yield should be summarized.

SUMMARY OF SIGNIFICANCE: FORT DAVIS, IN JEFF DAVIS COUNTY, TEXAS

The significance of Fort Davis, 41SE289, lies in the fact that it was a major force in providing protection for Euro-American settlers who remained in the Rolling Plains southwest of Fort Worth during the Civil War. In the absence of adequate military protection, families realized they would have to "fort up" together, or retreat east to larger settlements. Their decision to stay was an important determinant in the subsequent settlement and history of the western frontier of Texas following the Civil War, qualifying the site for listing on the National Register under Criterion A. Moreover, the site is significant as the only family fort that has been investigated archeologically, and contains an archeological assemblage of a very short time span (1864-1867) from families living at some distance from supplies during the Civil War. Such a collection will be of value to other researchers working on properties dating to this period. The cemetery is considered significant for the genealogical and historical data that it can provide concerning the fort residents and their descendants. Therefore, Fort Davis also meets Criterion D for inclusion in the National Register (Kenmotsu 1992).

SUMMARY OF SIGNIFICANCE: CANNONBALL RUINS, IN MONTEZUMA COUNTY, COLORADO (LISTED UNDER THE GREAT PUEBLO PERIOD OF THE MCELMO DRAINAGE UNIT MPS)

Cannonball Ruins is eligible under Criterion D in the areas of Community Planning/Development and Ethnic Heritage. The site has the potential to provide information regarding the organization of pre-contact communities as well as information regarding Mesa Verde cultural tradition and how it contributes to historic Pueblo Indian culture. The site is also significant in the area of Agriculture for its ability to provide information regarding the role of intensified horticulture. Habitation sites with public architecture are extremely important to our understanding of Southwestern U.S. pre-contact political and social development, population aggregation and regional abandonment. Cannonball Ruins is eligible under Criterion A for association with the movement of Mesa Verde Anasazi settlements to canyon and canyon-head settings in the thirteenth century A. D., an event that made a significant contribution to the broad patterns of Southwestern prehistory. The site represents a well-preserved example of a thirteenth-century village and is one of the largest and last villages from this period. The site is also eligible under Criterion B because of its association with the life and career of Sylvanus G. Morley, a person significant in the history of American archeology. Cannonball Ruins was the only excavation Morley undertook in the continental United States and the one in which he obtained his first fieldwork experience. Cannonball Ruins is eligible under Criterion C for its architectural significance. The standing structures at the site embody the distinctive characteristics of "Hovenweep-type" architecture and construction.

VI. BIBLIOGRAPHIC REFERENCES

In the bibliography, or reference section, include all primary and secondary sources that were used in documenting and evaluating the property and in preparing the National Register nomination. All references cited in the text must be listed in the bibliography. Established historic context reports or multiple property nominations that were used to evaluate the property also should be cited.

There is no mandatory bibliographic style. The National Register does require, however, that a standard style be used and only one style be used for any given nomination. Standard bibliographic styles are found in *A Manual of Style* and *A Manual for Writers*, both published by the University of Chicago Press. Archeologists may choose to use the bibliographic styles endorsed by the primary professional journals—*American Antiquity* and *Historical Archaeology*.

If an archeological property is in a national park and has standing structures or buildings, then the "List of Classified Structures" (LCS) should be consulted and cited. Each park maintains a list of properties within its boundaries, and each National Park Service Regional Office has a LCS Coordinator who maintains the files for the park units within the region.

PREVIOUS NATIONAL PARK SERVICE DOCUMENTATION

Although the nominating official (i.e., the SHPO, THPO, or FPO) is responsible for completing this section of the nomination, the preparer of the nomination should know whether or not the property has been:

- listed in the National Register, or determined eligible by the National Register for listing in the National Register (DOE);
- designated as a National Historic Landmark (NHL);
- recorded by Historic American Buildings Survey (HABS);
- recorded by Historic American Engineering Record (HAER); or
- preliminarily determined to be eligible as an individual listing under 36 CFR 67, that are rules and regulations regarding the certification of historic properties for rehabilitation tax benefits.

Files are maintained by the National Park Service for all of the above kinds of evaluated historic properties. The National Register, History and Education program of the National Park Service, which is located in Washington D.C., maintains the National Register and official DOE files and the National Historic Landmark files. Records of many other properties determined eligible are found in files maintained by SHPO, THPO and FPO. Historic American Buildings Survey and Historic American Engineering Record files are prepared by the National Park Service's HABS/HAER division, which also maintains a comprehensive listing of all HABS/HAER documented properties. Most HABS/HAER files and accompanying photographs are available through the Library of Congress. These files, some dating back to the 1930s, typically include detailed architectural drawings and excellent black-and-white photographs. State Historic Preservation Offices maintain files on the properties listed or determined to be eligible for listing in the National Register and on the properties certified for tax purposes under 36 CFR 67.

VII. ESTABLISHING BOUNDARIES AND GEOGRAPHIC INFORMATION

Boundaries define the horizontal extent of a historic property. Defining the perimeter of an archeological site is often difficult because of the unique environmental setting and archeological characteristics of individual properties. There is no single standard method for defining the extent of an archeological site's boundaries.

The methods for defining and documenting the boundaries of an archeological property should be explicitly described. Although final boundaries may have to be determined after data analysis is complete, the archeologist should make every effort to define preliminary boundaries of the property while in the field (For further guidance, consult the National Register bulletin *Defining Boundaries for National Register Properties* and its appendix, *Definition of National Register Boundaries for Archeological Properties*).

The intent of the "Geographical Data" section of the National Register nomination is to define the location and extent of the property being nominated. The parameters that physically define and describe the property's boundaries and the rationale for establishing those parameters are of paramount importance in this section.

Absolute boundary definition is often not achievable, especially for archeological properties. Nevertheless, for public administration purposes, defensible boundaries are required. This means that the boundaries chosen have to be justified and that justification must be consistent with the information presented in the description and significance sections.

When selecting boundaries, keep in mind the following general guidelines:

- The boundaries should encompass, but not exceed, the full extent of the significant resources and land area making up the property;
- Buffer zones or acreage not directly contributing to the significance of the property should be excluded;
- Include landscape features that are important in understanding the property;
- A setting that directly contributes to the significance of the property may be included;
- Leave out peripheral areas of the property that no longer retain integrity;
- As a general rule, because it is inconsistent with the concept of a site or district representing a discrete entity, specific areas within the boundaries of the property cannot be excluded from the nomination of the property. If the district does contain individual resources or areas that are linked by historic association or function but are separated geographically, then it may be appropriate to describe and evaluate the property as a discontiguous district.

National Register bulletins provide guidance on defining boundaries, including *How to Complete the National Register Registration Form*, and *Defining Boundaries for National Register Properties* and its appendix, *Definition of National Register Boundaries for Archeological Properties*.

Note that for **discontiguous districts**, each separate area of land must be described in terms of acreage, Universal Transverse Mercator (UTM) references, a boundary description, and a boundary justification.

ACREAGE

Enter the total acreage for the property. Acreage should be accurate to the nearest whole acre; or, if known, to the nearest tenth of an acre. If the property is less than one acre, enter "less than one acre." On the other hand, if the property acreage is known to be, for example 0.7 acres, then 0.7 may be entered instead. (For properties that are more than 100 acres, a United States Geological Survey (USGS) acreage estimator or other accurate method may be used to calculate the acreage). If the property is a discontiguous district, then the acreage for each area must be listed as well as the total acreage (e.g., A = 0.3; B = 1.2; and C 5.7 acres. Total 7.2 acres).

GUIDELINES FOR SELECTING BOUNDARIES

(summarized from
How to Complete the National Register Registration Form, p. 57)

The selection of boundaries for archeological sites and districts depends primarily on the scale and horizontal extent of the significant features. A regional pattern or assemblage of remains, a location of repeated habitation, a location or a single habitation, or some other distribution of archeological evidence, all imply different spatial scales. Although it is not always possible to determine the boundaries of a site conclusively, a knowledge of local cultural history and related features such as site type can help predict the extent of a site. Consider the property's setting and physical characteristics along with the results of archeological survey to determine the most suitable approach.

Obtain evidence through one or several of the following techniques:

- **Subsurface testing**, including test excavations, core and auger borings, and observation of cut banks;
- **Surface observation** of site features and materials that have been uncovered by plowing or other disturbance or that have remained on the surface since deposition;
- **Observation of topographic or other natural features** that may or may not have been present during the period of significance;
- **Observation of land alterations** subsequent to site formation that may have affected the integrity of the site;
- **Study of historical or ethnographic documents**, such as maps and journals.

If the techniques listed above cannot be applied, set the boundaries by conservatively estimating the extent and location of the significant features. Thoroughly explain the basis for selecting the boundaries in the boundary justification section.

If a portion of a known site cannot be tested because access to the property has been denied by the owner, the boundaries may be drawn along the legal property lines of the portion that is accessible, provided that portion by itself has sufficient significance to meet the National Register criteria and the full extent of the site is unknown.

Archeological districts may contain **discontiguous elements** under the following circumstances:

1. When one or several outlying sites has a direct relationship to the significance of the main portion of the district, through common cultural affiliation or as related elements of a pattern of land use; and
2. When the intervening space does not have known significant resources.

(Geographically separate sites not forming a discontiguous district may be nominated together as individual properties within a multiple property submission.)

UTM REFERENCES

Universal Transverse Mercator (UTM) grid references are used to identify the exact location of the property. A USGS quadrangle map and a UTM coordinate counter are tools for determining UTM reference points. Other methods for accurately determining UTMs, such as GPS, are also acceptable. Many state historic preservation offices will assist applicants in completing this item. Appendix VIII of *How to Complete the National Register Registration Form* and *Using the UTM Grid System to Record Historic Sites* (only available on the National Register Web site at: www.cr.nps.gov/nr/publications) provides instructions on how to determine UTMS. The following are general guidelines that apply to all kinds of properties:

- For properties that are less than 10 acres, enter the UTM reference for the point corresponding to the center of the property;
- For properties of 10 or more acres enter three or more UTM references. The references should correspond to the vertices of a polygon drawn on the USGS map accompanying the nomination;
- For linear properties of 10 or more acres, such as canals or trails, enter three or more UTM references, all of which should correspond to points along the line drawn on the accompanying USGS map;
- If UTM references define the boundaries of the property, as well as indicate the location, the polygon or line delineated by the references must correspond exactly to the property's boundaries;
- If the property is a discontiguous district, then a UTM reference is needed for each area. Three or more UTM references will be needed for those areas that are greater than ten acres.

VERBAL BOUNDARY DESCRIPTION

The verbal boundary description is a textual description of the boundary of the property as shown on the maps accompanying the nomination. It usually takes one of the following forms:

- a legal parcel number (e.g., Henderson County tax map 40, parcel 0024);
- a block and lot number (e.g., Block or Square 52, Lot 006);
- a subsection of a section within the Township and Range system (e.g., NW 1/4, NW 1/4, SE 1/4 of Section 11, Township 10S, Range 7E);
- metes and bounds (e.g., From the north side of the intersection of Walnut Creek and County Highway 36, the boundary proceeds in a northwest direction for 600 feet, the boundary line then turns and heads east for 200 feet, at which point the boundary turns and proceeds in a south-southeast direction to the original starting point.) This type of description should always begin at a readily identifiable feature located on the ground as well as on the map.
- the dimensions of a parcel of land fixed upon a given point such as the intersection of two streets, a benchmark, the tip of a spit of land jutting into a bay (e.g., The property boundary forms a rectangle which is 2000' in a north-south direction and 1000' in an east-west direction. The property's southeast corner corresponds to the northwest corner of the intersection of U.S. Highway 40 and Main Ave.).

A map drawn to a scale of at least 1" = 200' may be used in place of a verbal description. When using a map for this purpose, note under the heading "Verbal Boundary Description" that the boundaries are indicated on the accompanying base map. For example, "The boundary of the property is shown as the dashed line on the accompanying Willow Creek County parcel map #14." The map must have a scale and a north arrow and clearly show the relationship between the archeological property, its boundaries, and the surrounding natural and cultural features. The primary disadvantage of simply referring to a map for the property boundary is a pragmatic one—if the map is misplaced, then the location cannot be accurately determined.

If the boundaries of a large property are exactly the same as the UTM polygon, then the boundaries marked on the USGS map may be used in place of a verbal boundary description. For example, the boundary of the Anywhere Archeological District is delineated by the polygon whose vertices correspond to the following points: A 18 213600 4136270; B 18 322770 4125960; and C 18 314040 4166790. If the UTM polygon is the same as the property's boundaries, then the boundaries of the property may be recreated even if the map is misplaced.

BOUNDARY JUSTIFICATION

The boundary justification explains the reasons for selecting the boundaries of the property. The reasons should follow from the description and significance discussions. For archeological properties more than one reason may apply. All the reasons should be given and linked to the boundaries as they are drawn on the map. For example, "The property's western and southern boundaries correspond to the historic boundary of the property; the northern boundary follows the shoreline of the bay, which has not changed since the time period of the property's significance; and the eastern boundary corresponds to the eastern extent of intact archeological deposits. These boundaries encompass all of the archeological deposits and above-ground features and structures associated with the property."

For discontiguous districts, explain how the property meets the condition for a discontiguous district and how the boundaries were selected for each area. If the boundary justification is the same for all the areas of the district, simply present the justification and explain that this applies to each of the areas and list them.

VIII. MAPS AND PHOTOGRAPHS

At a minimum, a USGS map showing the location of the property (and, if more than 10 acres, its boundaries) and black-and-white photographs documenting the appearance and condition of the property must be included with every National Register nomination. Additionally, because of the complex nature of archeological properties, a site map (sketch or to scale) is usually required. The National Register Bulletin *How to Complete the National Register Registration Form* outlines the requirements for maps and photographs. See also the National Register Bulletin *How to Improve the Quality of Photos for National Register Nominations*. Some basic information is presented below.

MAPS

For most properties, the National Register requires a sketch map to document a district or a complex site. Site maps drawn to scale are preferable. All maps need to conform to the following requirements:

- Maps should be drawn, printed, or photocopied on archival paper. Maps should be folded to be no larger than 8½ by 11 inches. When submitting a large map that is not on archival paper, fold the map and submit it in an archival folder no larger than 8 ½ by 11 inches;
- Display the following 14 items on the map:
  1. Boundaries of the property, including points of UTM readings, carefully delineated;
  2. Names of major streets near the district and all named streets bordering the property;
  3. Names of places, especially those mentioned in the text sections of the nomination;
  4. Highway numbers;
  5. A north arrow (magnetic or true);
  6. Approximate scale for a sketch map and exact scale for a map drawn to scale;
  7. Contributing sites, buildings, structures, and objects (These should correspond to the description or list of contributing resources in the narrative sections and to the totals of contributing resources.);
  8. Noncontributing sites, buildings, structures, and objects (These should correspond to the description or list of noncontributing resources in the narrative sections and to the totals of noncontributing resources.);
  9. Land uses and natural features covering substantial acreage or having historic significance, such as forests, fields, orchards, quarries, rivers, lakes, and harbors;
  10. The general location and extent of disturbance, especially that described in the narrative sections;
  11. The location of previous archeological excavations, especially those that were extensive enough to cause some disturbance to the archeological deposits;
  12. The location of features and artifact loci described in the narrative section;
  13. The distribution of sites in a district. If more practical, this information may also be shown on the USGS map;
  14. For districts, the number of the accompanying photographs intended to show views of the property.

If the property is more than 10 acres, then a USGS map may be used in place of a sketch map as long as it can legibly show the required information. Maps drawn to a larger scale may be used to show the concentration of resources or types of representative sites. These maps should be keyed to a larger map covering the entire property. Archeological site numbers are usually sufficient for keying.

PHOTOGRAPHS

Clear black-and-white photographs need to be submitted with each nomination form. The photographs should accurately represent the property as described and its integrity. One photograph may be adequate to document a very small archeological site; more, however, are generally needed to adequately document the property. Documenting each property in an archeological district is unnecessary. Photographs of the properties most representative of the district, however, should be submitted. The photographs should be keyed to those representative properties described in the narratives. Prints of historic photographs, artifacts, features, etc. may supplement documentation. All, or a representative sample, of the contributing standing structures must be photographed.

Figure 23: Marking boundaries on low-level aerial photographs is an effective way of showing boundaries and the location of excavations. This photograph shows the Sand Hill Archeological Site in Jackson County, Indiana (see bottom, left-hand corner of photograph). (John W. Winship)

Guidelines include the following:

- The number of photographic views depends on the size and complexity of the property. Submit as many photographs as needed to depict the current condition and significant aspects of the property. Include representative views of both contributing and, if instructive, noncontributing resources. Photographs of representative artifacts and features may be included as well.

For archeological sites submit one or more photographs that depict:

- the condition of the site and above-ground or surface features;
- significant disturbances; and
- the site in relation to its environmental setting.

For archeological districts submit one or more photographs that show:

- the principal sites;
- the representative site types;
- the overall integrity of the district; and
- areas of significant disturbance.

The National Register requests recent photographs to document the present condition of the property. If photographs already exist and they accurately depict the condition of the property, then the older photographs may be used. A note to this effect, however, should be included in the nomination.

One copy of each photograph is submitted to the National Register. The SHPO, THPO or FPO may require additional sets of photographs. In addition, they may also require a set of slides. It is important to know this information prior to conducting field work or even budgeting a National Register nomination project.

Photographs must be:

- unmounted;
- of high quality;
- at least 3½ by 5 inches, preferably 8 by 10 inches for the most important views;
- printed on double or medium weight black and white paper having a standard finish (matte, glossy, satin); and
- labeled in pencil or with a photographic marker.

The preferred way to label photographs is to print in pencil (soft lead pencils work best) on the back of the photograph. **Photographs with adhesive labels will not be accepted.** Include the following information:

1. Name of the property or, if a district, the name of the resources (e.g., site number), and then the name of the district;

2. **County** and **state** where the property is located;

3. **Name** of the photographer;

4. **Date** of the photograph;

5. Location of the original **negative**;

6. **Description of the view** indicating direction of the camera;

7. **Photograph number.** For districts use this number to identify the vantage point on the accompanying sketch map.

Alternatively, continuation sheets may be used instead of completely labeling each photograph. To do this, label the photographs by name of property, county, and state, and photograph number (Items 1, 2, and 7 above). For each photograph, list the remaining information (Items 3-6) and Items 1, 2, and 7 on a continuation sheet. Information common to all photographs, such as the photographer's name or the location of the negatives, may be listed once with a statement that it applies to all photographs.

If the photographic paper will not accept pencil marks, print Items 1, 2, and 7 using a permanent marking pen in the front border near the lower right corner of the photograph (do not mark on the image area) and use the continuation sheets alternative.

In submitting a photograph to the NPS with a National Register form, **photographers grant permission to the NPS** to use the photograph for publication and other purposes, including duplication, display, distribution, study, publicity, and audio-visual presentations. The photographer will be credited. Please indicate on the photograph label which photos fall under Section 304 of the National Historic Preservation Act (For guidance on Section 304, see, "When should information be restricted from public access?" in Section I of this bulletin)

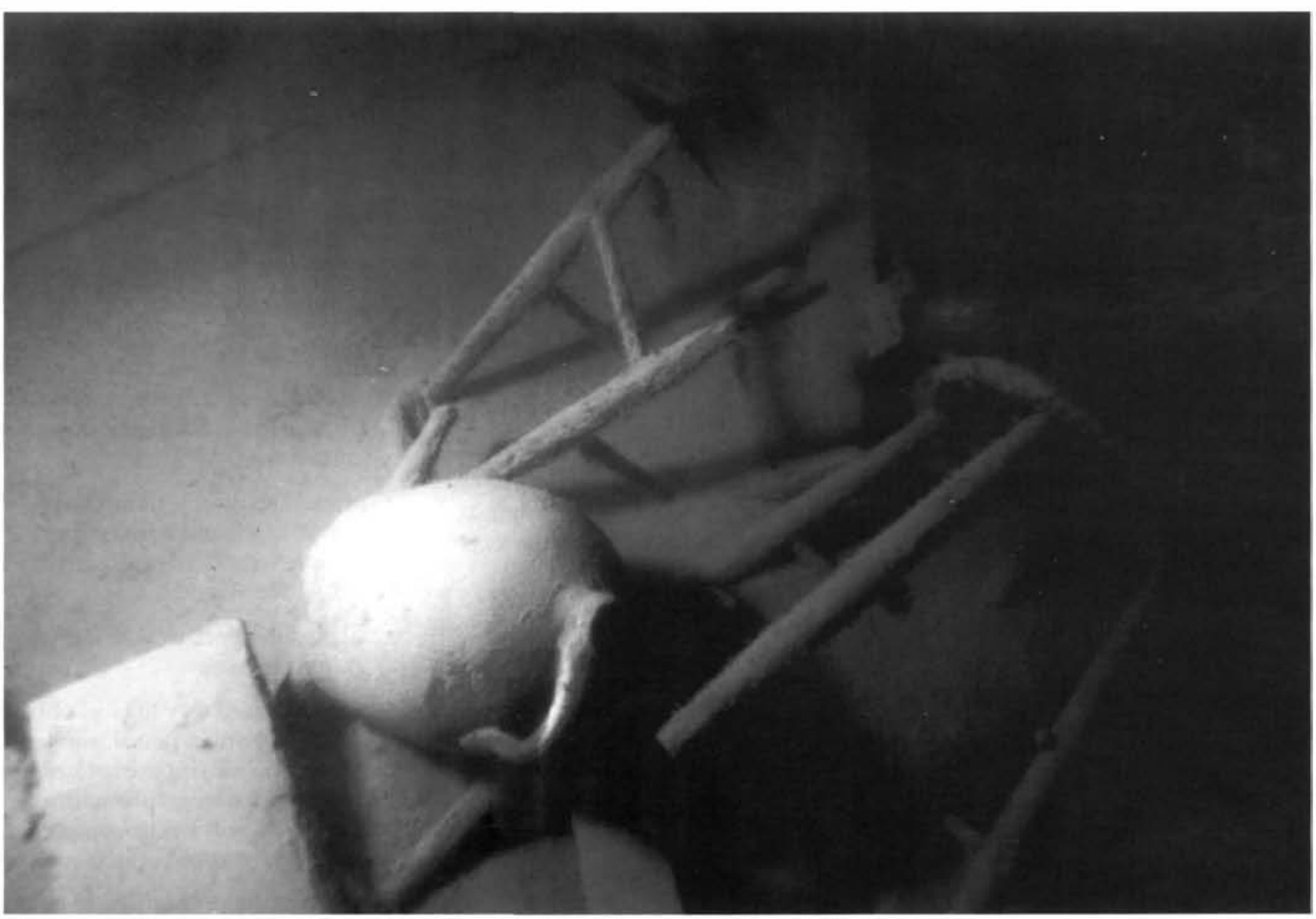


Figure 24: It is often difficult to get good photographs of underwater shipwrecks. The* F. T. Barney *is an exception. This photograph shows an interior view of a stern cabin. (Dale Purchase)

IX. OWNERSHIP

All State Historic Preservation Offices need the names and addresses of all fee-simple property owners. This information is used to notify owners of the intended nomination of their property to the National Register and its listing. The SHPO, THPO, or FPO may ask applicants to enter this information on the nomination form, on continuation sheets, or on another form.

The preservation officer will also submit the following items with the completed National Register form:

- notarized letters of objection from property owners; and
- comments received from public officials, owners, and the general public.

For more information on the notification process, see 36 CFR 60.

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APPENDIX A
NATIONAL REGISTER BULLETINS

THE BASICS

*How to Apply National Register Criteria for Evaluation**
Guidelines for Completing National Register of Historic Places Form
*Part A: How to Complete the National Register Form**
*Part B: How to Complete the National Register Multiple Property Documentation Form**
*How to Prepare National Historic Landmark Nominations**
*Researching a Historic Property**

PROPERTY TYPES

*Guidelines for Evaluating and Documenting Historic Aids to Navigation**
*Guidelines for Identifying, Evaluating and Registering America's Historic Battlefields**
*Guidelines for Evaluating and Documenting Historic Aviation Properties**
*Guidelines for Evaluating and Registering Cemeteries and Burial Places**
*How to Evaluate and Nominate Designed Historic Landscapes**
*Guidelines for Identifying, Evaluating and Registering Historic Mining Sites**
*How to Apply National Register Criteria to Post Offices**
*Guidelines for Evaluating and Documenting Properties Associated with Significant Persons**
*Guidelines for Evaluating and Documenting Properties That Have Achieved Significance Within the Last Fifty Years**
*Guidelines for Evaluating and Documenting Rural Historic Landscapes**
*Guidelines for Evaluating and Documenting Traditional Cultural Properties**
*Nominating Historic Vessels and Shipwrecks to the National Register of Historic Places**

TECHNICAL ASSISTANCE

*Defining Boundaries for National Register Properties**
*Guidelines for Local Surveys: A Basis for Preservation Planning**
How to Improve the Quality of Photographs for National Register Nominations
*National Register Casebook: Examples of Documentation**
Telling the Stories: Planning Effective Interpretive Programs for Properties Listed in the National Register
*Using the UTM Grid System to Record Historic Sites** (only available on the Web)

The above publications may be obtained by writing to the National Register of Historic Places, National Park Service, 1849 C Street, NC 400, NW, Washington, D.C. 20240.

Publications marked with an asterisk (*) are also available in electronic form on the Web at www.cr.nps.gov/nr, or send your request by e-mail to nr_reference@nps.gov.

APPENDIX B
MULTIPLE PROPERTY SUBMISSIONS

Multiple Property Submission cover documents under which archeological properties have been nominated as of January, 2000. A list of Multiple Property Submission cover documents may also be found on the web at: www.cr.nps.gov/nr/research/mplist.htm.

***Multiple Property Submission (MPS)** is the format currently used by the National Register for multiple property documentation, together with individual registration forms. In the past, the National Register has used the **Multiple Resource Area (MRA)** and T**hematic Group Resources (TR)** formats, however, these formats are no longer active. Nominations may still be submitted under previously accepted MRAs and TRs if they are submitted on National Register individual registration forms and meet the current standards for listing. For more information on multiple property submissions, refer to the National Register bulletin *How to Complete the National Register Multiple Property Documentation Form*. MRAs and TRs may also be updated and/or amended. For guidance on preparing an amendment please see the National Register bulletin *How to Complete the National Register Registration Form*, Appendix VI.

ALABAMA

- Plantation Houses of the Alabama Canebrake and Their Associated Outbuildings MPS

ARIZONA

- Bandelier's, Adolph F. A., Archeological survey of Tonto Basin, Tonto NF MPS
- Casa Grande MRA
- Fort Lowell MRA
- Hohokam Platform Mound Communities of the Lower Santa Cruz River Basin c. A.D. 1050-1450 MPS
- Hohokam and Euroamerican Land Use and Settlement along the Northern Queen Creek Delta MPS
- Logging Railroad Resources of the Conconino and Kaibab National Forests MPS
- Prehistoric Walled Hilltop sites of Prescott National Forest and Adjacent Regions MPS
- Snake Gulch Rock Art MPS

ARKANSAS

- Rock Art Sites in Arkansas TR

CALIFORNIA

- Earth Figures of California – Arizona Colorado River Basin TR

COLORADO

- Archaic Period Architectural sites in Colorado MPS
- Dinosaur National Monument MRA
- Great Pueblo Period of the McElmo Drainage Unit MPS
- Historic Resources of Aspen MPS
- Prehistoric Paleo-Indian Cultures of the Colorado Plains MPS

CONNECTICUT

- Lower Connecticut River Valley Woodland Period Archaeological TR

DELAWARE

- Nanticoke Indian Community TR
- St. Jones Neck MRA

FLORIDA

- Archaeological Resources in the Upper St. Johns River Valley MPS
- Archaeological Resources of the Caloosahatchee Region
- Archaeological Resources of the Everglades National Park MPS
- Archaeological Resources of the Naval Live Oaks Reservation MPS
- Rural Resources of Leon County

GEORGIA

- Baconton MRA
- Columbus MRA
- Cumberland Island National Seashore MRA
- Old Federal Road in Georgia's Banks and Franklin Counties MPS

IDAHO

- Chinese sites in the Warren Mining District MPS

IOWA

- Mines of Spain Archeological MPS
- Municipal, County, and State Corrections Properties MPS
- Prehistoric Hunters and Gatherers on the Northwest Iowa Plains, C. 10,000-200 B.P. MPS
- Prehistoric Mounds of the Quad-State Region of the upper Mississippi River Valley MPS

KANSAS

- Kansas Rock Art TR
- Santa Fe Trail MPS

KENTUCKY

- Ashland MRA
- Clark County MRA
- Early Stone Buildings of Kentucky TR
- Green River Shell Middens of Kentucky TR
- Hickman, Kentucky MPS
- Mammoth Cave National Park MPS
- Pisgah Area of Woodford County MPS
- Prehistoric Rock Art Sites in Kentucky MPS

LOUISIANA

- Louisiana's French Creole Architecture MPS

MAINE

- Native American Petroglyphs and Pictographs in Maine MPS
- Androscoggin River Drainage Prehistoric Sites MPS
- Boothbay Region Prehistoric Sites TR
- Cobscook Area Coastal Prehistoric Sites MPS
- Maine Fluted Point Paleoindian Sites MPS
- Penebscot Headwater Lakes Prehistoric Sites MPS
- Prehistoric Sites in North Haven TR

MARYLAND

- Delaware Chalcedony Complex TR
- Prehistoric human adaptation to the Coastal Plain Environment of Anne Arundel County MPS

MASSACHUSETTS

- Barnstable MRA
- Blue Hills and Neponset River Reservations MRA
- First Period Buildings of Eastern Massachusetts TR
- Stoneham MRA

MICHIGAN

- Shipwrecks of Isle Royale National Park TR

MINNESOTA

- American Indian Rock Art in Minnesota MPS
- Minnesota's Lake Superior Shipwrecks MPS
- Minnesota State Park CCC/WPS/Rustic Style MPS
- Pipestone County MRA
- Portage Trails in Minnesota MPS
- Pre-contact American Indian Earthworks MPS
- Washington County MRA

MISSOURI

- Prehistoric Rock Shelter and Cave Sites in Southwestern Missouri MPS
- Santa Fe Trail MPS

MONTANA

- Archeological Resources of the Upper Missouri River Corridor MPS
- Whoop-Up Trail of Northcentral Montana MPS

NEW HAMPSHIRE

- Harrisville MRA

NEW MEXICO

- Anasazi Sites within the Chacoan interaction sphere TR
- Animas Phase sites in Hidalgo county MPS
- Anton Chico Land Grant MRA
- Archaic sites of the northwest Jemez Mountains MPS
- Chaco Mesa Pueblo III TR
- Corona Phase Sites in the Jicarilla Mountains, New Mexico, MPS
- Cultural Developments on the Pajarito Platueau MPS
- Gallina Culture Developments in North Central New Mexico MPS
- Jimenez Cultural Developments in North-Central New Mexico
- Jemez Springs Pueblo sites TR
- Late Prehistoric Cultural Developments along the Rio Chama and Tributaries MPS
- Lincoln Phase sites in the Sierra Blanca Region MPS
- Mining sites in the Nogal mining district of the Lincoln National Forest MPS
- Navajo-Refugee Pueblo TR
- Prehistoric adaptations along the Rio Grande Drainage, Sierra County, New Mexico TR
- Prehistoric and Historic Agricultural sites in the Lower Rio Bonito Valley TR
- Pueblo IV sites of the Chupadera Arroyo MPS
- Railroad Logging Era Resources MPS
- Rayado Ranch MPS
- Ring Midden sites of the Guadalupe Mountains MPS
- Santa Fe Trail MPS

NEW YORK

- Colonie Town MRA
- Rhinebeck Town MRA

NORTH CAROLINA

- Dan River Navigation System in North Carolina TR
- Durham MRA
- Iredell County MRA

OREGON

- Early French-Canadian Settlement MPS
- Native American Archeological sites of the Oregon Coast MPS

PENNSYLVANIA

- Bituminous Coal and Coke resources of PA MPS
- Gristmills in Berks County MPS
- Industrial Resources of Huntingdon county MPS
- Iron and Steel Resources in Pennsylvania MPS

RHODE ISLAND

- Foster MPS
- Indian use of Block Island, 500 BC-AD 1676 MPS
- Indian use of Salt Pond Region between ca. 4000 BP and ca 1750 AD MPS
- North Kingstown MRA

SOUTH CAROLINA

- Congaree Swamp National Monument MPS
- Early Ironworks of Northwestern South Carolina TR
- Edisto Island MRA
- Historic Resources of St. Helena Island c. 1740-c. 1935 MPS
- Late Archaic-Early Woodland period shell rings of South Carolina
- McCormick MRA
- Pacolet Soapstone Quarries TR
- Yamasee Indian Towns in the South Carolina Low county MPS

SOUTH DAKOTA

- 19th century South Dakota Trading Posts MPS
- Big Bend Area MRA
- James River Basin Woodland sites TR
- Petroforms of South Dakota TR
- Prehistoric Rock Art of South Dakota MPS
- Rock Art in the Southern Black Hills TR
- South Dakota portion of the Bismark to Deadwood trail MPS

TENNESSEE

- Historic and historic archaeological resources of the American Civil War MPS
- Iron Industry on the Western Highland Rim 1790s-1920s MPS
- Mississippian Cultural Resources of the Central Basin (AD 900-AD 1450) MPS
- Mocassin Bend MRA

TEXAS

- 19th century pottery kilns of Denton County TR
- Bastrop MPS
- Indian Hot Springs MPS
- New Mexican Pastor Sites in Texas Panhandle TR
- Salado MRA

UTAH

- Great Basin Style Rock Art TR
- Tintic Mining District MRA

VERMONT

- Bellows Falls Island MRA

VIRGIN ISLANDS

- Virgin Islands National Park MRA

VIRGINIA

- Civil War Properties in Prince William County MPS
- Montgomery County MPS
- Oakland Farm Industrial Park MRA

WEST VIRGINIA

- Berkeley County MRA
- Bulltown MRA
- Rockshelters on the Gauley Ranger District, Monongahela National Forest MPS

WISCONSIN

- Cooksville MRA
- Great Lakes Shipwrecks MPS
- Late Woodland Stage in Archeological Region 8 (AD 650-1300) MPS
- Paleo-Indian Tradition in Wisconsin MPS
- Prehistoric Archaeological resources of the Milwaukee VA Medical Center MPS
- Trempeauleau MRA
- Wisconsin Indian Rock Art Sites MPS

WYOMING

- Aboriginal Lithic Source Areas in Wyoming TR
- Domestic Stone Circle Sites in Wyoming MPS
- Early and Middle Archaic Housepit sites in Wyoming MPS

APPENDIX C
CHECKLIST FOR ARCHEOLOGICAL NOMINATIONS

The following list of questions may be used as a checklist in the final review of a nomination prior to submission to the National Register of Historic Places. Bold-printed segments indicate major categories of information in the National Register nomination.

2 LOCATION

- Has the "not for publication" box been considered?

7 DESCRIPTION

- Is the environmental setting described and related to the property or district? Cross check with topographic and sketch maps and photographs.
- Are the probable occupation or construction dates identified for all components of the property or district? If the property can not be dated, the text should so state. Cross check with sketch maps and photographs.
- Are all major or significant features identified and described? Cross check with topographic and sketch maps and photographs. Check areas and periods of significance.
- Are the major types of alterations and disturbances identified and evaluated for their impact upon the property's or district's integrity? Cross check with sketch maps and photographs.
- Are all contributing and non-contributing properties in the district identified and counted? Cross check with topographic and sketch maps and photographs.
- Does the description convey the significant qualities of the property? Do the significant aspects retain integrity?
- Is the character of the district identified?
- Does this character provide a basis for grouping properties into a district?

8 SIGNIFICANCE

- Does the narrative clearly represent and convey the Period(s) and Area(s) of Significance checked? Have they been justified in a specific discussion within the Statement of Significance?
- Have the applicable criteria been identified and documented within the Statement of Significance?
- Does the context in which a property has been evaluated as significant justify the local, state, or national level of significance chosen for the property?
- Is Cultural Affiliation (necessary under D) indicated in the Statement of Significance?
- Have the criteria considerations been indicated and justified where applicable?

FOR PROPERTIES MEETING CRITERION A:

- Does the significance statement identify the applicable major event(s) associated with the property or district?
- Does the significance statement justify the importance of the event(s) with respect to its impact on the broad patterns of prehistory or history?
- Does the significance statement demonstrate that the property or district has stronger associations to the event(s) than other comparable properties or districts?

FOR PROPERTIES MEETING CRITERION B:

- Does the significance statement identify the specific person(s) who was significant in the past?
- Does the significance statement justify the importance of the person(s)?
- Does the significance statement demonstrate that the property or district has stronger associations to the person(s) than other comparable properties or districts? Comparison should be made on the basis of length of association and degree of integrity.

FOR PROPERTIES MEETING CRITERION C

- Does the significance statement identify and justify the importance of an applicable design concept(s), construction technique(s), or usage of building material(s)?
- Does the significance statement demonstrate that the property or district provides a better illustration of a design concept(s), construction technique(s), or usage of building materials than other properties or districts?

  Comparison should be made on the basis of those:

  - Characteristics that were typically common to a:

    Design concept(s), construction technique(s), or usage of building material(s)
  - Characteristics that express individuality or variation within a:

    Design concept(s), construction technique(s), or usage of building materials
  - Characteristics that documents the evolution of a:

    Design concept(s), construction technique(s), or usage of building material(s)
  - Characteristics that documents the transition of one:

    Design concept(s), construction technique(s), or usage of building material(s)

FOR PROPERTIES MEETING CRITERION D:

- Does the significance statement describe the potential research topics that the property can address?
- Does the significance statement justify the importance of these research topics within an applicable historic context? Does the significance statement identify the data that can address these research topics?
- Does the significance statement affirm that the property contains or is likely to contain these data?

9 BIBLIOGRAPHY

- Were all appropriate areas in the text properly referenced?
- Are all citations used in the text referenced in the bibliography?

10 GEOGRAPHICAL DATA

- Are boundary lines fixed at permanent features or UTM references appearing on USGS topographic maps?
- Does the sketch map indicate the boundary of the nominated property?
- Does the verbal boundary description describe the boundaries on all sides of the property or district?
- Does the boundary justification discuss the:
  - method(s) used to define the boundary, and
  - relationship between the property's or district's significance and the boundary?
- Are all major or significant features included within the boundary?
- Does the boundary exclude unjustified acreage or buffer zones?
- Does the boundary include entire buildings, structures, or objects as opposed to only portions of buildings, structures, or objects?

ACCOMPANYING DOCUMENTATION

- Are the sketch maps labeled? Do maps have a:
  - title,
  - legend,
  - north arrow, and
  - scale?
- Does the sketch map show the entire boundary of the property or district?
- Does the sketch map show features, disturbances, and contributing and non-contributing elements discussed in the nomination?
- Do the photographs illustrate the:
  - environmental setting,
  - major or significant features, and
  - major alterations or disturbance?