Commercial Air Tour (CAT)

Aviation Rulemaking Committee (ARC)

Final Report

November 22, 2025

I. Executive Summary

The FAA chartered the Commercial Air Tour (CAT) Aviation Rulemaking Committee (ARC) in accordance with the Administrator's authority under Title 49 of the United States Code (49 U.S.C. § 106(p)(5)) and as mandated by the Federal Aviation Administration (FAA) Reauthorization Act of 2024, Public Law (Pub. L.) 118-63.

The CAT ARC (the ARC) members included aircraft owners and operators, CAT and safety organizations, and other industry experts. The ARC created three working groups focused on the following topics:

- Pilot Training
- Maintenance and
- Flight Data Monitoring (FDM).

The ARC members worked collaboratively to analyze data and develop recommendations for changes to regulations that increase the safety of commercial air tour operations.

The CAT ARC's work marks the first comprehensive effort to establish a *National Air Tour Safety Standard*—a unified regulatory framework that improves safety performance and standardizes operational requirements across all commercial air tour operations, regardless of certificate type, aircraft category, or area of operation. By recommending that the FAA fully modernize Part 136, the Committee aims to create a common safety baseline that incorporates Safety Management System (SMS) principles, risk-based oversight, and data-driven performance criteria into a single, clear set of rules. This effort resolves longstanding regulatory confusion between Parts 91 and 135, aligns air tour oversight with current FAA safety architecture, and provides both operators and inspectors with clear, enforceable standards. By recommending the FAA move the current Part 91 Letter of Authorization process into Part 136, the Committee has proposed a unified regulatory framework for all commercial air tour activity—allowing operators, inspectors, and the public to rely on one authoritative source for the nation's air tour safety standards. The resulting recommended framework promotes regulatory consistency, improves accountability, and boosts public confidence in the safety of commercial air tours. Setting one definitive standard would establish a new industry benchmark—one that reflects modern aviation practices, supports scalable compliance, and ensures every air tour passenger in the United States flies with the highest and most transparent safety standards.

A list of the ARC's recommendations is presented below. Details and supporting text for all recommendations are provided in Section VIII of this report.

1. The FAA should overhaul Part 136 to include all standards associated with Air Tour operations as outlined in this recommendation and in Appendix A of this report.
2. The FAA should require all CAT pilots not subject to Part 135 or Part 121 tests and competency checks to complete an annual Air Tour Flight Review (ATFR).
3. The FAA should establish Pilot-in-Command (PIC) minimum experience standards.
4. The FAA should establish clear Applicability Standards for Aircraft Airworthiness in Part 136.
5. The FAA should require CAT operators to submit data on aircraft service difficulties during passenger-carrying flights.
6. The FAA should require CAT operators to report mechanical interruptions that disrupt CAT operations in multiengine aircraft, paralleling existing Part 135 standards.
7. The FAA should require CAT operators to comply with manufacturer-recommended maintenance programs and life limits for engines, propellers, rotors, and emergency equipment, aligning Part 91 CAT operations with established safety practices in Part 135.
8. The FAA should establish a mandatory, standardized method to collect and record flight hour activity data from all commercial Part 91 and Part 135 operators conducting commercial air tours, ensuring that these data support accurate, state-specific safety analysis across the United States.
9. The FAA should require commercial air tour (CAT) operators, with defined exceptions, to develop and maintain Flight Data Monitoring (FDM) programs designed solely for operational and maintenance risk reduction.
10. The FAA should define the term "High Traffic Tour Area" (HTTA) and formally identify locations within the National Airspace System (NAS) where commercial air-tour activity is concentrated, resulting in an elevated risk of traffic conflicts.
11. The FAA should standardize the depiction of "High Traffic Tour Areas" as Alert Areas on Visual Flight Rules (VFR) sectional charts to clearly identify those areas.
12. The FAA should require all commercial air tour (CAT) operators to equip tour aircraft with Automatic Dependent Surveillance–Broadcast (ADS-B) In and Out in all airspace. Furthermore, the FAA should expedite its expansion of ADS-B infrastructure and service coverage to support low-altitude and "High Traffic Tour Area" operations in heavily utilized airspace.

II. Chairs Comments

It has been an honor to serve as Co-Chair of the Commercial Air Tours Aviation Rulemaking Committee (ARC) and to work alongside a distinguished group of operators, association representatives, directors, industry experts, and subject matter specialists. The ARC's work also benefited significantly from close cooperation with the National Transportation Safety Board (NTSB) and the Federal Aviation Administration (FAA), as well as numerous industry organizations and associations that provided valuable data, insights, and perspectives throughout the process. Collectively, this group brought a remarkable breadth of experience and a shared dedication to improving the safety, consistency, and sustainability of commercial air tour operations across the country.

The ARC's work signifies a milestone: an effort that, for the first time, aims to establish a unified, national safety standard for all commercial air tour operations in the United States. The Committee's recommendations offer the most comprehensive overhaul of aviation regulations in U.S. aviation history, culminating in the development of a National Air Tour Safety Standard. This cohesive regulatory framework enhances safety performance and harmonizes operational requirements across all commercial air tour operations, regardless of certificate type, aircraft category, or area of operation.

By overhauling 14 CFR Part 136, the ARC proposes a unified set of safety rules that replaces the fragmented regulations found in § 91.147 and Parts 119 and 135. This effort resolves decades of regulatory confusion, aligns oversight with the FAA's current safety system, and ensures that all commercial air tours in the U.S. follow a consistent, transparent standard.

The modernized Part 136 integrates Safety Management System (SMS) principles, risk-based oversight, and data-driven performance metrics into a framework designed to promote accountability and continuous improvement. It recommends transitioning the current Part 91 Letter of Authorization process into a unified regulatory framework, providing operators, inspectors, and the public with a single authoritative source for all air tour safety requirements. This recommended system would enhance regulatory clarity, enhance compliance scalability for operators of various sizes and complexities, and strengthen public confidence in the safety and professionalism of the air tour industry.

Beyond regulatory alignment, this effort represents a deliberate shift toward collaborative, data-driven safety governance. The Committee's recommendations acknowledge the diversity within the air tour sector, ranging from large, multi-aircraft operations in complex airspace to small operators serving remote and scenic regions, and ensure that every passenger, regardless of their location, benefits from the same safety standards. The

framework emphasizes partnership between the FAA and industry, encouraging the shared use of safety data and fostering a proactive safety culture that advances aviation safety more effectively than prescriptive rules alone.

This ARC exemplified the best of public-private collaboration. Through open discussion, rigorous analysis, and consensus building, the ARC achieved a balanced outcome, strengthening oversight without restricting operational flexibility or economic viability. The recommendations in this report provide a roadmap for implementing meaningful and enduring safety improvements, rooted in clarity, proportionality, and practicality.

On behalf of the ARC, I thank every member, advisor, and contributing organization for their professionalism, technical expertise, and dedication. Their collective work symbolizes not only a modernization of regulations but also a transformation in how safety is defined, managed, and communicated in the air tour industry. By proposing a single national safety standard under a unified Part 136, we set a new benchmark for consistency, transparency, and public trust—ensuring the legacy of this ARC' work for years to come.

III. ARC Tasks and Objectives

The CAT ARC Charter outlines the goals and objectives of the ARC. The objective of the ARC was to "provide a forum for the United States aviation community to review and develop findings and recommendations to increase the safety of CAT operations."[1] The ARC considered both rulemaking and non-rulemaking recommendations. Table 1 below lists the ARC task and where in the report the task is addressed.

Table 1 Charter Tasks

Paragraph Number	*Topic*	*Section of this report where this is addressed*
a1	Consider potential changes to operations regulations or requirements for commercial air tours, including requiring:	All Recommendations in this report
a.1.i	The adoption of pilot training standards that are comparable, as applicable to the standards under subpart H of part 135 of	Section VIII.B, Recommendation 2, Approach.

[1] Federal Aviation Administration, *Commercial Air Tour Aviation Rulemaking Committee Charter*, Jan. 14, 2025, p.1

Paragraph Number	*Topic*	*Section of this report where this is addressed*
	Title 14, Code of Federal Regulations.	
a.1.ii	The adoption of maintenance standards that are comparable, as applicable to the standards under subpart J of part 135 of Title 14, Code of Federal Regulations.	Section VIII.C, Recommendation 4, Rationale.
a.2	Establishing a performance-based standard for flight data monitoring for all CAT operators that reviews all available data sources to identify deviations from established areas of operation and potential safety issues.	Section VIII.D, Recommendations 9 and 12.
a.3	Requiring all CAT operators to install flight data recording devices capable of supporting collection and dissemination of the data incorporated in the Flight Operational Quality Assurance Program under § 13.401 of Title 14, Code of Federal Regulations (or, if an aircraft cannot be retrofitted with such equipment, requiring the CAT operator for such aircraft to collect and maintain flight data through alternative methods)	Section VIII.D, Recommendation 9, Approach.
a.4	Requiring all CAT operators to implement a flight data monitoring program, such as a Flight Operational Quality Assurance Program;	Section VIII.D, Recommendation 9.
a.5	Establishing methods to provide effective terrain awareness and warning;	Section VIII.B, Recommendation 2, Approach.
a.6	Establishing methods to provide effective traffic avoidance in identified high-traffic tour areas, such as requiring CAT operators that operate within such areas be equipped with an automatic dependent surveillance-broadcast out- and in-supported traffic advisory system that:	Section VIII.D. Recommandations 10 and 11.

Paragraph Number	*Topic*	*Section of this report where this is addressed*
a.6.i	Includes both visual and aural alerts	Section VIII.D, Recommendation 12, Approach.
a.6.ii.	Is driven by an algorithm designed to eliminate nuisance alerts; and	Section VIII.D, Recommendation 9, Approach.
a.6.iii	Is operational during all flight operations	Section VIII.D, Recommendation 9.
b	When developing findings and recommendations related to the matters identified in paragraphs 4(a)-(f) of this Charter, the ARC must consider the following:	
b.1	Recommendations of the National Transportation Safety Board	Section VII.C.
b.2	Recommendations of previous aviation rulemaking committees that reviewed flight data monitoring program requirements for commercial operators under part 135 of Title 14, Code of Federal Regulations	Section VI.C.
b.3	Recommendations from industry safety organizations, including: The Vertical Aviation Safety Team, The General Aviation Joint Safety Committee, The United States Helicopter Safety Team	Section VIII.D, Recommendations 8 and 9.
b.4	Scientific data derived from a broad range of flight data recording technologies capable of continuously transmitting and that support a measurable and viable means of assessing data to identify and correct hazardous trends.	Section VIII.D, Recommendation 9.
b.5	Appropriate use of data for modifying behavior to prevent accidents;	Section VIII.D, Recommendation 9.
b.6	The need to accommodate technological advancements in flight data recording technology;	Section VIII.D, Recommendation 9 and 12.
b.7	Data gathered from aviation safety reporting programs;	All Recommendations.
b.8	Appropriate methods to provide effective terrain awareness and warning system protections while mitigating nuisance alerts for aircraft;	Section VIII.B, Recommendation 2 and Section VIII.D Recommendation 12, Approach.

Paragraph Number	*Topic*	*Section of this report where this is addressed*
b.9	The need to accommodate the diversity of airworthiness standards under part 27 and part 29 of Title 14, Code of Federal Regulations.	All Recommendations.
b.10	The need to accommodate diversity of operations and mission sets	All Recommendations.
b.11	Benefits of third-party data analysis for large and small operations	All Recommendations.
b.12	Accommodations necessary for small businesses	All Recommendations.
b.13	Other issues, as necessary.	
c	Provide information on the costs of the recommendations, where appropriate.	Section VIII.D, Recommendation 9.
d	The FAA may assign additional taskings related to Commercial Air Tour operations.	

IV. Industry Overview

Aerial sightseeing and air tours have been a part of the aviation landscape since two seats were installed on an airplane. Following WWI, the era of the Barnstormer commenced with sightseeing rides at air fests, county fairs, and air races. Pilots charged a fee to take sightseers aloft to see the surrounding landscape spawning the groundbreaking CAT industry. Barnstorming flight activity became the first civil aviation industry, before civil air mail flights.[2] As technology and reliability improved, thousands of sightseeing passengers took to the air to enjoy the art of flight.

The CAT industry grew after WWII, booming in the 1970s through the 2000's, as passengers explored areas including natural wonders, such as the Grand Canyon, Niagara Falls, and Hawaiian volcanic landscapes. Many pilots purchased surplus military aircraft to fly tourists and others to see the splendor of the landscape that often was inaccessible except by air. Today hundreds of thousands of people can be counted as aerial tourists.

As with all aviation pursuits, the CAT business has been subject to accidents and incidents, including fatalities. CAT accidents have happened at every tourist attraction and in every conceivable type of aircraft including balloons, gliders, gyros, fixed wing, rotary

[2] Bruce L. Larson, "Barnstorming with Lindbergh", *Minnesota History* 1991.

wing and others. From its origins, CAT operations have evolved into one of the safer sectors in the aviation industry.[3]

The industry accident rates are a ratio of the number of accidents per 100,000 flight hours within a given segment of the industry.[4] However, determining the CAT accident rate is unreliable because FAA General Aviation and Part 135 Activity Surveys serve as the source for total flight hours flown. The voluntary survey does not yield reliable data to produce a reliable report.[5] Section VII of this report for the ARC's analysis of CAT accidents between 2008-2023.

In the late 1920's, as a result of highly publicized accidents, perceived public safety and political pressure, the newly formed Department of Commerce established laws that effectively terminated the barnstorming activity. Although the stunt flying feature of barnstorming terminated, the sale of airplane rides to the public continued and grew in popularity after WWII.[6]

Public, political, and regulatory pressures since the 1980s have generated investigations, ordinances, and regulations to prevent accidents. In certain locations, such as the Grand Canyon and Hawaii, the FAA promulgated Special Federal Aviation Regulations (SFARs). The FAA issued SFAR 50-2 in 1988 for CAT flights over the Grand Canyon[7] and SFAR 71 in 1994 for CAT flights in Hawaii.[8] On June 1, 1995, the National Transportation Safety Board (NTSB) published a special investigation report titled, "Safety of the Air Tour Industry In The United States.[9]"

Many self-regulatory organizations have emerged in sincere attempts to codify practices and procedures to prevent accidents. The Hawaii Helicopter Operators Association, Helicopter Aviation International Fly Neighborly Program and Tour Operators Program of Safety are notable for their focus on CAT safety. In addition, numerous local pilot/operator associations enact policies and practices for CAT flights. National and international

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[3] For full comparison of CAT operations against other sectors, see *infra* Section VII.E.

[4] Total General Aviation Flight Hours is a significant issue for the ARC relative to the accuracy of the accident rate. These references are germane to this subject and listed in order of relevance.
https://libraryonline.erau.edu/online-full-text/ntsb/aircraft-accident-data/ARG06-02.pdf
https://www.faa.gove/data_research/aviation_data_statistics/operational_metrics
https://www.faa.gov/data_research/aviation_data_statistics/general_aviation
https://bts.gov/content/us-general-aviationa-safety-data

[5] https://www.faa.gov/data_research/aviation_data_statistics/general_aviation

[6] Bruce L. Larson, "Barnstorming with Lindbergh", *Minnesota History* 1991.

[7] 53 FR 20264, June 2, 1988.

[8] 59 FR 49145, September 16, 1994.

[9] https://www.ntsb.gov/safety/safety-studies/Documents/SIR9501.pdf

organizations, such as Vertical Aviation International, Tour Operators Program of Safety, Fly Neighborly, and the American Air Tour Association, are aggressively working toward CAT operational safety. The industry is proactive in its approach to safe operations as evidenced by multiple instances of operator and community collaboration.

V. Regulatory Overview

The ARC determined that the current structure of 14 CFR Part 136, developed in 2007 following a series of geographically-driven rulemakings, no longer accurately reflects the operational, technological, or regulatory realities of the modern commercial air tour industry. While Part 136 is well-intentioned in development, over time, provisions affecting air tour operations have become distributed across multiple parts of Title 14 (Parts 91, 119, 135, 136, and 194), creating inconsistencies in applicability, authorization procedures, terminology, and enforcement.

Genesis and Evolution of Part 136

Part 136 was originally promulgated to codify minimum, nationally consistent safety standards for commercial air-tour operations after years of fragmented oversight under Parts 91, 119, and 135.

Prior to 2007, air tour regulation emerged in an ad hoc manner, often prompted by local safety concerns or legislative action, rather than a unified safety strategy. The Grand Canyon National Park Special Flight Rules Area (SFRA), for example, set an early precedent for geographically specific air-tour rules, which were later followed by similar carve-outs for operations in Hawaii and Alaska.

When the FAA finalized Part 136 in 2007[10], its intent was modest: to merge disparate Hawaii, Alaska, and Grand Canyon operating requirements into a single framework (under one part) while creating a baseline set of passenger briefing, flotation, and overwater safety standards applicable nationwide.

However, the implementation of Part 136 did not fully consolidate authority over air-tour operations. Critical regulatory touchpoints (such as the authorization framework in § 91.147, the definition of sightseeing operations in § 119.1(e)(2), and operator qualification and training standards under Part 135) remained distributed across multiple parts of Title 14 of the Code of Federal Regulations.

[10] "National Air Tour Safety Standards," 72 FR 6912, February 13, 2007.

Resulting Patchwork Framework

The 2007 rulemaking achieved only partial consolidation, leaving major operational and procedural requirements scattered across other parts. Over the next 15 years, this partial integration evolved into a patchwork of overlapping and sometimes contradictory requirements, with limited consistency in cross-references and policy coherence. For example:

- The **definition of a commercial air tour** differed in wording between § 119.1(e)(2) and § 136.1, creating ambiguity over when Part 119 certification was required.

- **Letters of Authorization (LOAs)** under § 91.147 operated outside the procedural safeguards of § 119.51, leading to uneven enforcement and due-process issues.

- **Hawaii-specific provisions** (Subpart D) became outdated as the FAA introduced national standards for flotation and performance planning; yet those localized rules remained in place, resulting in regional regulatory inequity.

- The **structure of Part 136 itself**—beginning immediately with operational requirements rather than an applicability or definitions section—departed from the logical sequencing used in Parts 91, 121, and 135 complicating interpretation.

The rule's incremental amendments (e.g., the 2023 rotorcraft overwater update and 2024 life-preserver revision) further layered new provisions onto an already disjointed framework, often without reconciling terminology, scope, or cross-references. As a result, operators and inspectors alike were left to interpret overlapping and inconsistent standards that varied by geography and certificate type.

This fragmentation has led to ambiguity for both operators and regulators regarding when a Part 119 certificate is required, when a Letter of Authorization (LOA) applies, and which operational and safety standards govern flights conducted under different regulatory authorities. As a result, operators have faced duplicate or conflicting requirements, and a lack of a single, unified regulatory structure has hindered the FAA's oversight.

Need for Comprehensive Overhaul

The ARC concluded that the current Part 136, while well-intentioned in its 2007 inception, has become a legacy construct of piecemeal policymaking, implemented without a unifying risk-based strategy. It no longer supports clear applicability, modern technology integration, or proportional enforcement. The fragmented framework has limited the FAA's

ability to manage national safety performance effectively, led to an excessive burden on operators, and hindered consistent oversight.

Accordingly, the ARC recommends a comprehensive restructuring and modernization of Part 136—not merely an amendment or incremental revision of isolated provisions. The recommended new framework establishes a single, authoritative regulatory foundation for all commercial air-tour operations, replaces location-specific rules with national standards, and incorporates scalable safety mechanisms aligned with contemporary FAA regulatory philosophy.

VI. Working Group Narratives and Challenges

A. Pilot Training

The Commercial Air Tour ARC Pilot Training Working Group examined how best to ensure that pilots conducting air tours possess the competencies, decision-making skills, and operational discipline required for safe low-level sightseeing operations in diverse aircraft and environments. The group reviewed the full range of existing training frameworks—from basic Part 91 flight reviews to full Part 135 Subpart H programs—to identify scalable, performance-based standards that would provide equivalent safety outcomes without imposing disproportionate cost or administrative burden.

Commercial air tour operations often involve repetitive flights over demanding terrain, congested airspace, and sensitive environmental areas. Yet pilot qualification requirements remain highly variable, depending on the certificate type, geography, and aircraft complexity. The Working Group recognized the need for an integrated competency framework that emphasizes judgment, route-specific risk management, and scenario-based recurrent training rather than rote compliance.

Overarching Intent
Establish a performance-based pilot-training standard for all commercial air-tour operations that achieves safety outcomes comparable to 14 CFR Part 135 Subpart H training—scaled to aircraft type and operational complexity—while ensuring proportionality and flexibility for small operators.

Collective Rationale
Current regulations create a discontinuity between pilots conducting air tours under Part 91 and Part 135. Although both share the same low-altitude, high-repetition risk profile, only Part 135 operators are required to maintain structured training, checking, and currency programs. By aligning air-tour pilot training expectations under a unified, competency-based framework, the FAA can close this gap, improve the standardization of

key maneuvers (e.g., power-off approaches, confined-area operations, and off-airport emergency procedures), and enhance decision-making in changing weather and terrain environments. A performance-based rule would also allow modern delivery methods—such as scenario-based e-learning, recurrent proficiency evaluations, and route-specific briefings—to be adopted without prescribing one-size-fits-all curricula.

B. Maintenance

The Commercial Air Tour ARC Airworthiness Working Group reviewed maintenance practices across the diverse fleet engaged in air-tour operations, including legacy piston aircraft, experimental and limited-category types, and modern turbine helicopters, to evaluate whether existing inspection and maintenance requirements under Parts 91 and 135 provide an adequate baseline of safety. The group identified significant variability in maintenance oversight, documentation, and component-life tracking for aircraft operated under different regulatory parts but performing identical missions.

Overarching Intent
Align maintenance standards for commercial air-tour aircraft with the intent of Part 135 Subpart J by establishing a scalable, performance-based maintenance-management framework that ensures continuous airworthiness and configuration control, regardless of certificate type.

Collective Rationale
Air-tour aircraft experience high-frequency, short-duration cycles, frequent engine restarts, and exposure to corrosive and challenging environments—conditions that differ significantly from those typically encountered in general aviation. These factors accelerate wear and create inspection intervals that may not be adequately addressed by baseline Part 91 requirements. The Working Group determined that adopting performance-based maintenance management practices—such as documented inspection programs tailored to utilization, electronic tracking of component times, and mandatory reporting of significant defects—would improve reliability and support data-driven oversight. By harmonizing preventive-maintenance philosophies across Parts 91 and 135 tour operators, the FAA can strengthen airworthiness assurance without imposing disproportionate cost on small businesses.

C. Flight Data Monitoring (FDM)

The Air Tour ARC FDM Working Group developed recommendations to strengthen the use of operational data and airspace awareness information to improve the safety of CAT operations. The group focused on establishing performance-based practices for data collection and analysis, defining and publishing areas of concentrated tour activity to

enhance situational awareness, and promoting equipage that enables real-time traffic information, while ensuring non-punitive use and scalability for operators of all sizes. In their review, the group considered safety data, the work of industry groups, and the recommendation of prior ARCs, specifically the Final Report from the Investigative Technologies ARC.[11]

Commercial air tours are conducted in diverse aircraft and environments, from single-ship vintage operations to multi-base Part 135 fleets. Flights are often short, frequent, and at low altitude, where traffic density and terrain features can compress margins. Across this diversity, three system needs are common: (1) credible measures of exposure to calculate risk, (2) routine, non-punitive analysis of flight data within a Safety Management System (SMS), and (3) clear, consistent airspace information—supported by traffic-awareness technology—for both tour and non-participating pilots.

To address these needs, the Working Group organized its recommendations around a data-centric safety framework that:

1. **Captures** the activity and flight information necessary to understand exposure and trends;
2. **Analyzes** flight data within each operator's SMS to identify and mitigate hazards; and
3. **Communicates** concentrated tour activity and traffic information consistently to all airspace users.

Together, the five recommendations form a scalable, performance-based continuum that accommodates the full spectrum of CAT operators, from vintage aircraft and single-aircraft owner/operators to large Part 135 providers, while emphasizing flexibility, proportionality, and the protection of safety information.

Overarching Intent

Establish a unified, data-driven safety architecture for the commercial air tour industry. The intent is not to prescribe specific equipment or analytic tools, but to embed performance-based practices that adapt to aircraft type, operator size, and mission profile—so that activity data, flight data, and airspace information are routinely used for

[11] Federal Aviation Administration, *Investigative Technologies Aviation Rulemaking Committee Final Report*, Sept. 25, 2025.

proactive risk reduction within each operator's SMS under a non-punitive, protected framework.

Collective Rationale

With Part 5 SMS requirements extending across CAT operations, objective information is essential to move from reactive oversight to predictive safety management. Affordable reporting mechanisms, lightweight data-capture options, and ADS-B services make it feasible for even the smallest operators to participate meaningfully. Standardizing activity reporting (with state-level granularity) provides credible exposure denominators; integrating FDM into SMS converts raw data into safety insight; and clearly identifying high-traffic tour areas—then depicting them consistently and supporting them with ADS-B—improves situational awareness for everyone in the NAS. Implemented together, these measures deliver measurable safety improvements without imposing a disproportionate burden.

Individual Recommendations, per the ARC Charter

The recommendations in Section VIII. D of this report are the Working Group's practical application of this framework. Presented in sequence, they move from exposure measurement (activity data) to organizational learning (FDM within SMS) to shared airspace awareness (defined High Traffic Tour Areas and standardized charting) to traffic-information enablement (ADS-B In/Out with appropriate infrastructure and targeted exemptions).

To calculate credible risk and evaluate interventions, the FAA and industry need reliable exposure data. This recommendation modernizes the activity survey and reporting granularity so CAT operations can be measured and compared objectively at the state level.

VII. ARC's Analysis of Air Tour Accident Data (2008-2023)

A. NTSB Data Background and Overview

Data for this report is derived from investigations and causal reports published by the NTSB. The NTSB electronic repository is comprised of two databases, with one only spanning 2008-2023, and the other beginning from 1982 and continuing to the present. The reports between the two databases vary, with some differences in criteria, narratives, and reporting points.

To normalize the data and assemble a report with a common frame of reference, the ARC developed two registers. The first document listed each accident report by date of accident with the most common features pertaining to the accident: pilot, location, phase of flight, type of accident and probable causes(s). A second register was constructed to further separate the parameters into a yearly account. The second record allowed for a more critical examination of trends and specifics of accident data as they pertained to CAT activities.

The NTSB repository included 117 accident reports classified as "air tours" that the ARC considered. A full summary of the ARC's research methodology is included in Section VII.D below.

B. NTSB Accident Investigation Methodology

Any analysis of accident data from the NTSB and the two developed registers requires an understanding of the manner in which aviation accident investigations take place, especially air tour events. Following a fatal aviation accident, the NTSB will generally dispatch an investigator(s) to probe into the manner and cause of the accident. However, the NTSB is not staffed sufficiently to investigate every accident. Therefore, the NTSB relies on trained investigators from the FAA to investigate most non-injury CAT accidents.

When non-fatal or non-injury CAT accidents occur, the NTSB will often direct an FAA Flight Standards District Office (FSDO) to send a trained investigator to the scene. Although accident investigation is not a primary duty of the FAA representative, the intent is the same as that of a NTSB investigation- to uncover cause(s) and prevent future accidents.

The number of investigations conducted by a FSDO employee is small compared to that of an NTSB investigator. Therefore, the resulting FSDO-authored investigative report occasionally yields more diverse conclusions and recommendations than the results of a more comprehensive NTSB investigation. This difference must be considered when analyzing NTSB data for CAT accidents.

C. ARC Research: NTSB Data Findings

This section presents the ARC's analysis of NTSB accident data for United States CAT operations from 2008 through 2023. The analysis focuses on Part 91 and Part 135 fixed-wing and helicopter flights, excluding balloons and gliders. The objective of the analysis is to evaluate accident rates, trends, and causes in CAT operations, and to place these findings in context with broader aviation segments, including Part 135 Commuter and On-Demand operations and General Aviation (GA).

Based on the information provided below, the ARC concluded:

- CAT operations (conducted under § 91.147 and part 135) exhibit a slightly higher accident rate than Part 135 Commuter and On-Demand operations (charter flights originated in one location and ending in another) but are significantly less than GA as a whole. CATs remain substantially safer than general aviation.
- The accident rates are based on available data that was determined to be potentially deficient due to the limited, voluntary data set from the General Aviation Survey where flight hours are currently collated. Accurate CAT operations data is not available. If there were more accurate, dependable reporting and data for CAT flight hours flown annually, the accident rate would likely be significantly lower.
- Accident distribution is balanced across categories and regulatory parts.
- Training-related factors, particularly Loss of Control (LOC) and Controlled Flight into Terrain (CFIT), remain the most frequent causes of accidents.
- System failures (both power plant and non-power plant) represent a significant concern.
- Turbine fixed-wing aircraft demonstrated notably strong reliability, with no powerplant or non-powerplant failures reported in 17 years.
- The ARC recommended improving the quality and accuracy of data, consistent with a Vertical Aviation Safety Team (VAST).[12] in Section VIII.D, Recommendation 8.

D. Methodology, Assumptions, and Comprehensive Data Limitations

The ARC used the following data sources in their analysis: NTSB accident data from 2008-2023 (using NTSB's public Case Analysis and Reporting Online (CAROL) database)[13] and FAA data gathered from the annual General Aviation Survey.[14] The information for each year of the survey contains an appendix that explains the methodology for the survey. The appendix explains how the survey was accomplished, the sampling rates, and the response rates. Critically, the appendix reports only a 37% response rate for the surveys.[15]

The ARC analyzed fixed-wing and helicopter CAT operations data under Part 91 and Part 135 and excluded balloons and gliders. Adjustments were considered for weighted averages applied for 2020 to account for missing or incomplete data because2020 was an anomalous year statistically due to forced shutdowns of CAT companies during the global pandemic. When looking at the data as an annualized dataset or for year-on-year

[12] Vertical Aviation Safety Team, *The Case for Unified Rotorcraft Accident Data Standards*, Jan. 10, 2025.
[13] https://data.ntsb.gov/carol-main-public/basic-search
[14] Federal Aviation Administration, *General Aviation and Part 135 Activity Surveys*, July 29, 2025.
[15] Federal Aviation Administration, Methodology For The 2023 General Aviation and Part 135 Activity Survey APPENDIX A, Table A9.

comparisons, weighted averages were used for 2020. This had no bearing on the per 100,000 hours accident rate of the ARC's detailed analysis of accident data.

The NTSB accident data covered three primary groupings: CAT accidents (both Part 135 and § 91.147), Part 135 Commuter and On-Demand accidents, and GA accidents. A discussion of limitations of this data follows.

The NTSB datasets were inconsistent. To accurately analyze specific trends and causal concentrations within the accident data, each accident record should be consistently and correctly characterized, entered, and catalogued to the cause of the accident, and correctly categorized as a CAT accident, as applicable.

The ARC found wide variation in how operators self-categorized their flights and how accident investigators categorized accident causes, creating multiple levels of data inaccuracies. To address these inaccuracies, the ARC conducted additional analysis of the available NTSB datasets. The additional analysis included an exhaustive record-by-record analysis of each accident record and all its attendant records to confirm accidents were in fact CAT accidents and to correct and confirm inaccurate data categorization within each record. Data inaccuracies and inconsistencies (where data entered did not match the facts provided on the NTSB Form 6120 or the Aviation Investigation Final Report) included: regulation flight conducted under, flight schedule type, flight operation type, phase of flight, phase code, occurrence name and occurrence code. Based on this exhaustive review, ARC members corrected individual records for consistency and accuracy, and produced an accurate CAT accident data subset, which they used to produce this analysis[16].

To accurately and fairly compare the CAT industry to other sectors of commercial aviation and GA, an accurate record of CAT hours flown annually must be used to veritably derive a comparative rate to these other sectors. The only current source of hours flown by the CAT industry as a discreet commercial segment is the Federal Aviation Administration General Aviation Survey, which is conducted annually. The FAA General Aviation Survey is a voluntary, physical mail-based reporting mechanism where a multi-page physical survey is sent to general aviation aircraft owners and operators through the U.S. Postal Service. This survey requires recipients to open the mail, spend 30 minutes or more completing the survey, then mailing the completed survey back to the Federal Aviation Administration for analysis and entry into the General Aviation Survey database.

[16] Appendix B of this report shows the ARC's annotated analysis of the NTSB accident data.

The survey is plagued by a relatively low response rate, thereby compromising the statistical analysis of the data and likely resulting in underreporting of flight hours by both GA as a whole and discreet commercial segments ostensibly covered within the broader survey. The key rate considered when comparing accident rates across aviation is the number of accidents per one hundred thousand hours of operation. This formula and resulting rate is used to compare commercial aviation to GA and segments of commercial aviation to other segments of commercial aviation. Therefore, flight hour estimates may understate true activity levels potentially inflating accident rates.

E. Flight Hours and Accident Rates

Based on available data, the ARC concluded that CAT operations have a higher accident rate than Part 135 On-Demand commuter operations but a significantly lower rate than general aviation. The ARC believes if more accurate data for CAT flight hours flown annually were available, the CAT accident rate would likely be significantly lower. Note that the data omits minor outliers, such as bird or Unmanned Aircraft System strikes. The following presents the accident rates the ARC calculated for various aviation segments from 2008 through 2023:

- General Aviation (GA):
  341.3M hours | 20,684 accidents | 6.05 accidents/100k hours
- Part 135 (Commuter and On-Demand):
  62.6M hours | 727 accidents | 1.16 accidents/100k hours
- CAT operations (Part 91 + Part 135):
  6.5M hours | 117 accidents | 1.79 accidents/100k hours
- Part 91:
  61 **accidents | 0.93 accidents/100k hours**
- Part 135:
  56 accidents | 0.86 accidents/100k hours

F. CAT Accident Distribution and Causes

Based on available data, the ARC concluded accident distribution is balanced among all aircraft categories (except balloons and gliders), as well as between Part 91 and Part 135 operations.

- Total Accidents: **117**
  Fatal Accidents: **27 (23% of total)**

- By Aircraft Category:
  Helicopters: **57**
  Fixed-wing: **60**
- By Regulation Part:
  Part 91: **61 (50% fixed-wing, 50% helicopters)**
  Part 135: **56 (46% fixed-wing, 54% helicopters)**

Based on available data, the ARC concluded Loss of Control/Controlled Flight into Terrain (LOC/CFIT) remains the single largest cause of both total and fatal accidents. System-related failures, particularly in powerplants, are a consistent contributor, with turbine helicopters representing the largest share of system failures. The ARC notes that combining powerplant failures and non-powerplant system failures into one category would result in the single largest cause of total CAT accidents (but not total *and* fatal CAT accidents).

All Events (2008–2023):

- LOC/CFIT, low-altitude maneuvering: **30**
- Powerplant failures: **26**
- Ground operations: **16**
- Non-powerplant system failures: **15**
- Midair collisions: **6**
- Fuel issues: **5**
- Inadvertent Instrument Meteorological Conditions (IMC): **3**
- Other causes: **9**

Fatal Events (2008-2023):

- LOC/CFIT: **12**
- Powerplant failures: **6**
- Midair collisions: **4**
- CFIT (subset): **3**
- Non-powerplant failures: **2**
- Inadvertent IMC: **1**
- Ground operations & fuel-related: **0**

Flight Training vs. Aircraft System-Related:

- Flight Training-related accidents: **67**

- Aircraft System-related accidents: **41**

G. Category Specific Trends

Based on available data, the ARC concluded that turbine helicopters show higher vulnerability to both powerplant and non-powerplant system failures, while turbine fixed-wing aircraft had no reported system failures during the study period.

Powerplant Failures:

- Piston fixed-wing: **10**
- Piston helicopter: **7**
- Turbine helicopter: **9**
- Turbine fixed-wing: **0**

Non-Powerplant System Failures:

- Piston fixed-wing: **3**
- Piston helicopter: **5**
- Turbine helicopter: **7**
- Turbine fixed-wing: **0**

H. Comparative Analysis: Part 91 vs Part 135

Based on available data, the ARC concluded that both flights flown under parts 91 and 135 show similar causal patterns, with slightly more LOC/CFIT in flights flown under Part 135 and a slightly higher proportion of system failures in flights flown under Part 91. The differences are not statistically significant due to small sample sizes.

Part 91:

- **47% accidents due to LOC/CFIT**
- **39% due to system failures**

Part 135:

- **57% accidents due to LOC/CFIT**
- **30% due to system failures**

I. Manufacturer-Specific Trends

Based on available data, the ARC researched manufacturer-specific trends and concluded that accident occurrences are distributed across multiple manufacturers with no dominant outlier.

VIII. ARC Recommendations

A. Regulatory Overhaul

1. *Part 136 Reorganization*

The FAA should overhaul Part 136 to include all standards associated with Air Tour operations as outlined in this recommendation and in Appendix A of this report.

INTENT: To direct a comprehensive restructuring of Part 136 to unify, modernize, and clarify the regulatory framework governing all CAT operations conducted for compensation or hire, eliminating legacy, redundant, and region-specific provisions while preserving safety outcomes and administrative accountability.

The intent is to create a unified, logically structured regulatory framework within Part 136 that consolidates all general applicability, authorization, and oversight provisions for CAT operations into a new Subpart A – General Requirements and Authorizations, while relocating the existing "National CAT Standards" content to a new Subpart B – National Air Tour Standards and Operating Requirements.

This reorganization will modernize Part 136 to reflect the FAA's current regulatory architecture and ensure clear delineation between (1) who Part 136 applies to and how authorizations are obtained, and (2) the specific operating and safety standards applicable to those authorizations.

The ARC recommends and has developed a comprehensive restructuring and modernization of 14 CFR Part 136 that unifies all commercial air tour operations under a coherent national framework. This framework aligns the regulatory structure, terminology, and oversight with long-standing FAA practice, incorporating scalable, data-driven, and risk-proportionate safety standards.

RATIONALE: The ARC found that incremental amendments and legacy regional provisions have rendered the existing Part 136 outdated and inefficient. The recommended overhaul addresses several critical deficiencies:

1. **Fragmented authority** – Key air-tour provisions exist outside Part 136 (§§ 91.147 and 119.1(e)(2)), resulting in overlapping or conflicting compliance obligations. The rewrite consolidates these authorities into one unified framework.
2. **Outdated structure and terminology** – Part 136 currently begins with substantive operating rules rather than a general applicability framework, lacks a standard applicability section, contains embedded definitions within operational text, and includes geographically limited subparts (e.g., Hawaii), which is inconsistent with national safety management.
3. **Limited procedural protections** – LOA holders operated under uncertain amendment and revocation procedures. The rewrite incorporates due-process language based on § 119.51.
4. **Lack of performance integration** – Previous standards relied on static prescriptive measures. The overhaul introduces modern, performance-based mechanisms: pilot-qualification and recurrent-training requirements, FDM programs, ADS-B equipage, and enhanced maintenance reporting (§ 136.25).
5. **Need for proportionality and exception management** – The rewrite formalizes defined exception categories (*Historic Operations*, *Line of Sight*, *Vintage Aircraft, and others*) that allow the FAA to tailor compliance expectations without becoming overly burdensome and without compromising safety.

Collectively, these updates would align Part 136 with the structure and philosophy of Parts 91, 119, 121, and 135: methodical structure and organization, in a usable format, with defined applicability provisions, key definitions presented in a cohesive format, and with operational and surveillance considerations taken into account in the underlying rulemaking. This unified design enhances regulatory clarity, simplifies compliance, and ensures FAA oversight resources are directed toward the highest-risk operations.

APPROACH: The ARC recommends the following:

- **Reorganize** Part 136 into a clear, hierarchical format:

Subpart A – General Requirements and Authorizations: applicability, definitions, LOA process, Part 5 (SMS), and Part 120 integration.

- Establish an overarching framework for the applicability, definitions, and authorization of all commercial air-tour operations.
- The overhauled Subpart A consolidates provisions historically scattered across §§ 91.147 and 119.1(e)(2) into a single, coherent structure. It defines the

relationship between Part 136 and other operating parts, prescribes the Letter-of-Authorization (LOA) process with due-process protections, integrating § 119.51, and references requirements for Safety Management Systems under Part 5. It also incorporates Part 120 drug-and-alcohol testing requirements that are currently referenced under Parts 135 and 121.

- This subpart provides the legal and procedural foundation for the rule and all other subparts, ensuring contiguous authorization, a platform for consistent terminology throughout the Part, and serves as the connective framework between FAA authorization, operational execution, and ongoing safety assurance.

Subpart B – National Air Tour Operating Standards: pilot qualifications, recurrent training, over-water and performance planning requirements, and technology-based safety systems (FDM / ADS-B In-Out).

- Replace and expand the legacy operational provisions to create a comprehensive, performance-based national framework governing all air-tour flight operations.
- Subpart B codifies minimum pilot-in-command qualifications and recurrent training requirements, unifies over-water and rotorcraft performance planning provisions, and introduces modern, data-driven safety systems, such as Flight Data Monitoring (FDM) and ADS-B In/Out.
- The subpart emphasizes scenario-based training, terrain awareness, and IIMC recovery competencies, as well as proportional technology adoption, to enhance situational awareness and safety management while maintaining flexibility for small operators and legacy aircraft.
- The overhaul of this subpart continues to uphold and further harmonize airplane, rotorcraft, and powered-lift operations within a unified operational standard, replacing legacy aircraft-specific distinctions with a performance-based structure that is adaptable to future technologies.

Subpart C – Airworthiness and Maintenance Requirements: standardized inspection, service-difficulty, and maintenance-reporting requirements, including new § 136.25.

- Structure Subpart C (Airworthiness and Maintenance) to parallel the maintenance framework applicable to Part 91 operations, without independently referencing Part 43. Maintain the automatic applicability of Part 43 and § 91.417 by cross-reference through Part 91, and use § 136.25 (“Additional Maintenance Requirements”) to impose the ARC’s recommended supplemental inspection and reporting provisions modeled after portions of Subpart J of Part 135.

Subparts D (National Parks Air Tour Management) and E (Grand Canyon National Park): retain the provisions for the National Air Tour Management Act as is, and retain the placeholder for Grand Canyon operations (reserved).

- Relocate § 91.147 and § 119.1(e)(2) content into Part 136, methodically, and update references to establish it as the controlling regulatory framework.
- Amend § 91.147 and § 119.1(e)(2) to reference Part 136 as the controlling framework.
  - Amend § 119.1(e)(2) to read: "Nonstop Commercial Air Tours under part 136 of this Chapter."
  - Amend § 91.147 to read: "No person may conduct a nonstop commercial air tour except in accordance with part 136 of this chapter."
- Delete obsolete Subpart D (Hawaii) and integrate its provisions into national standards.
- Add definitions for Historic Operations, Line of Sight, and Vintage Aircraft to delineate eligibility for exceptions or alternate compliance under §§ 136.15, 136.17, and 136.25.
- Incorporate § 119.51 due-process procedures for LOA issuance, amendment, and rescission.
- Implement proportional compliance mechanisms, such as phased FDM adoption and technology exemptions, based on aircraft type, operational scope, and risk exposure.
- Overhaul existing guidance and reissue FAA implementation materials detailing timelines, inspector training, and operator transition expectations.
  - This should include concurrent revisions to FAA Order 8900.1 (Vol 3, Ch 18) to align inspector oversight procedures for Letters of Authorization (LOAs) and certificate holders with the restructured Part 136 framework, as well as the publication of an updated Advisory Circular 136-1B to ensure consistent national implementation.
- Eliminate duplicative definitions and location-specific provisions, replacing them with nationally consistent, performance-based standards.
- Harmonize terminology across Parts 91, 119, 135, and 136 (e.g., 'commercial air tour,' 'Letter of Authorization,' 'operator') to ensure consistent interpretation and enforcement.
- Update all internal part 136 and 14CFR cross-references (in Parts 61, 91, 119, 120, 135, and 121) accordingly and as applicable, and include preamble notes clarifying that these changes are structural reorganizations that do not expand the scope of regulation or alter existing operational authority, other than the implications derived

from the ARC's work, and in line with the intent and rationale set for this and all recommendations within the CAT ARC report.

These structural reforms would collectively establish Part 136 as a fully integrated, modernized, and nationally uniform regulatory part for the commercial air tour industry.

a. Subpart A—Establish a new Subpart A (General Requirements and Authorizations) and partially relocate existing Subpart A to Subpart B.

INTENT: To create a unified, logically structured regulatory framework within Part 136 that consolidates all general applicability, authorization, and oversight provisions for commercial air tour operations into a new Subpart A – General Requirements and Authorizations, while relocating the existing "National Air Tour Safety Standards" content to a new Subpart B – National Air Tour Safety Standards and Operating Requirements.

This reorganization would modernize Part 136 to reflect the FAA's current regulatory architecture and ensure clear delineation between (1) who Part 136 applies to and how authorizations are obtained, and (2) the specific operating and safety standards applicable to those authorizations.

RATIONALE: The current Part 136 begins immediately with substantive safety standards under the heading "Subpart A – National Air Tour Safety Standards," without first establishing a clear applicability and authorization framework. This differs from the structure of most operational parts of Title 14 (e.g., Parts 91, 119, 121, 135), which begin with a general or administrative subpart defining scope, applicability, and certification or authorization requirements.

Over time, the regulatory treatment of commercial air tours has become fragmented across several parts:

- § 119.1(e)(2) exempts certain nonstop commercial air tours within 25 statute miles from Part 119 certification requirements;
- § 91.147 separately requires a Letter of Authorization (LOA) for such operations and references Part 136 safety provisions; and
- Part 136 houses operational and safety standards but lacks foundational applicability language.

This distribution has caused confusion for both operators and FAA inspectors regarding which requirements apply, when an LOA is required, and how oversight is exercised. The

ARC determined that these provisions should be unified into a single, coherent structure within Part 136, eliminating the need for duplicate or conflicting rules in Parts 91 and 119.

The recommended Subpart A would:

- Consolidate the applicability framework for all commercial air tour operations (certificate holders, LOA holders, and § 91.146 charitable flights);
- Codify due-process protections for Letters of Authorization by requiring both operators and the FAA to follow § 119.51 procedures for amendments, suspensions, or revocations; and
- Incorporate cross-references to Parts 5 and 120 for Safety Management Systems and drug/alcohol testing.

Relocating the existing "National Air Tour Safety Standards" content to Subpart D, and redesignating Subpart B as "operating rules" and Subpart C as "airworthiness requirements," respectively, for Commercial Air Tour operations, with the addition of ARC charter-required considerations, preserves continuity while creating a structure consistent with other FAA operational parts.

This restructuring also supports the complementary ARC recommendations to amend § 119.1(e)(2) (so that it references the overhauled Part 136 § 136.3(d), rather than restating the 25-SM exception) and to amend § 91.147 so that it serves only as a referral clause to Part 136. Together, these changes would establish Part 136 as the authoritative source for all commercial air tour authorization and operational requirements.

APPROACH: The ARC recommends all of the following.

Create a new Subpart A – General Requirements and Authorizations in Part 136 containing:

- § 136.1 Applicability (integrating concepts from §§ 91.147(a), 135.1(a)(5), 135.1(c), and other relevant portions of authoritative 14 CFR);
- § 136.2 Definitions (effectively splitting the current 136.1 into two sections);
- § 136.3 Authorizations – requiring adherence to § 119.51 procedures for all amendments, reconsiderations, and revocations, and consolidating the Authorization for Passenger-Carrying Flights for Compensation or Hire, codifying the LOA requirements formerly in § 91.147(b), and relocating 119.1(e)(2); and
- Relocate existing Subpart A ("National Air Tour Safety Standards") to become "Subpart B – National Air Tour Standards and Operating Requirements" without altering substantive provisions.

Update all internal part 136 cross-references accordingly and include preamble notes clarifying that these changes are structural reorganizations that do not expand the scope of regulation or alter existing operational authority, other than the implications derived from the ARC's work, and in line with the intent and rationale set for this and all recommendations within the CAT ARC report.

i. Remove Residual Enforcement Clause – "Any Other Factors the FAA Considers Appropriate" (§ 136.1(d)(viii))

INTENT: To remove or, if necessary, narrow the residual discretionary clause that allows subjective interpretation of what constitutes a commercial air tour, ensuring consistent and predictable application of the rule across all FAA offices.

RATIONALE: The clause "any other factors the FAA considers appropriate" in the existing rule grants unrestricted discretion to determine that a flight constitutes a commercial air tour, even when it does not meet any of the enumerated factors. This broad language enables inconsistent enforcement, undermines regulatory transparency, and introduces uncertainty for operators.

The ARC concluded that the seven enumerated factors already capture the full spectrum of commercial sightseeing characteristics. The FAA retains sufficient enforcement authority under Parts 13, 91, and 119 to address attempts to circumvent regulation or operate unsafely.

However, recognizing that the FAA may wish to maintain limited flexibility to interpret edge cases, the ARC recommends either full removal (Plan A) or, if discretion is retained, a narrowly tailored residual clause (Plan B) that constrains its scope.

APPROACH: The ARC recommends the following.

- Remove paragraph 136.1(d)(viii) "Any other factors that the FAA considers appropriate."
- Clarify in the preamble that the enumerated factors are intended to be comprehensive but not prescriptive, and that the FAA's general enforcement authority remains unaffected.

ii. Clarify Applicability of § 91.146 Charitable and Community Event Flights

INTENT: To specify the limited applicability of Part 136 to event-based charitable, nonprofit, and community flights conducted under § 91.146, ensuring these operations remain distinguishable from commercial air tours while maintaining basic passenger safety standards.

RATIONALE: Section 91.146 authorizes certain nonprofit and community flights that may appear similar to air tour operations but are not conducted for compensation or hire in the traditional sense. The absence of clear cross-references between § 91.146 and Part 136 has led to inconsistent interpretation and unnecessary administrative burden for operators and inspectors. Limiting applicability to the general and passenger-briefing requirements of §§ 136.7 and 136.13 preserves essential safety provisions (e.g., passenger awareness, operating limitations) while recognizing that these flights are short-duration, charitable events conducted under strict non-profit criteria. This clarification supports the ARC's goal of aligning regulatory treatment with operational intent and risk level.

APPROACH: The ARC recommends the following.

Amend § 136.1(b)(3) to read as follows:

- (3) Part 91 operators conducting flights described in § 91.146. Such operations are subject only to §§ 136.7 and 136.13 of this part.

iii. Add New Definitions to § 136.2: Historic Operations, Vintage Aircraft, and Line of Sight

INTENT: To add three new definitions, Historic Operations, Line of Sight, and Vintage Aircraft, to § 136.2 to clarify eligibility for exception or modified compliance under new data-monitoring, maintenance, and surveillance requirements established in §§ 136.15, 136.17, and 136.25.

These definitions would provide the FAA and operators with objective criteria to determine when specific modern technological or procedural mandates (e.g., FDM, ADS-B In/Out, or enhanced maintenance tracking) are impracticable or disproportionate to operational risk.

RATIONALE: The ARC identified a regulatory gap in the existing Part 136 structure: although modernization efforts now introduce advanced data, maintenance, and surveillance provisions, no standardized criteria describe when exceptions or alternative means of compliance may appropriately apply.

The recommended definitions—drawn from the FDM Working Group's research and refined by the ARC—ensure consistent, transparent, and equitable treatment for specialized operations and legacy aircraft. They also serve to prevent over-application of rules to operations whose risk profiles or technical limitations do not justify full compliance.

Specifically:

- Historic Operations

A flight for compensation or hire in which the purpose is to experience flight on board a historically significant aircraft due to its legacy or heritage. The viewing of ground sites that add to the historic element of the flight experience is acceptable in this definition.

The ARC emphasizes that marketing and promotional materials must reflect the historic aircraft experience as the primary purpose of such flights. Inclusion of ground sites that enhance the historical context is an imperative qualifier.

This definition establishes that properly qualified historic operations are not "sightseeing" within the meaning of § 136.1(a)(2), since their principal purpose is educational or commemorative rather than tourism-based.

- Line of Sight

An operation in which the aircraft remains visible throughout the entire flight, without the aid of any device other than corrective lenses, to a person standing within 500 feet of the point of origin or return. Adjacent terrain or structures that momentarily obscure the view do not disqualify the operation.[17]

Operations conducted within the Airport Traffic Area (ATA) or within an equivalent area surrounding an off-airport landing zone (LZ) are considered line-of-sight operations for this rule.

- Vintage Aircraft

An aircraft constructed by the original manufacturer (or licensee) on or before December 31, 1970, or of comparable configuration and vintage, whose design characteristics limit installation or operation of modern safety-monitoring or surveillance systems.

Together, these definitions ensure that the FAA and industry can apply a risk-based and practical compliance framework across various operational types, aircraft capabilities,

[17] Definition adapted from 14 CFR 107.31.

and historical missions—without diluting the underlying safety objectives of the modernized Part 136.

APPROACH: The ARC recommends the following:

- Add the following definitions to § 136.2 in alphabetical order:
    - *Historic Operations* refer to flight operations in aircraft of historical significance that are held out and conducted for educational, commemorative, or preservation purposes, and are offered for compensation or hire.
    - *Line of Sight* means operations in aircraft that are visible throughout the entire flight, without the aid of any device other than corrective lenses, to a person standing within 500 feet of the flight's point of origin/point of return. Adjacent buildings and obstacles to the point of origin that may obstruct the "line of sight" aspects of the operation do not disqualify the operation from meeting the definition of "line of sight". Normal aircraft operations within the Airport Traffic Area (ATA), or equivalent geographical area surrounding an off-airport landing zone (LZ), are considered line-of-sight operations for the purpose of this definition.
    - *Vintage Aircraft* means an aircraft constructed by the original manufacturer (or licensee) on or before December 31, 1970.
- Establish these terms, as used in §§ 136.15 (Flight Data Monitoring), 136.17 (ADS-B In/Out), and 136.25 (Additional Maintenance Requirements), as the controlling basis for determining exceptions or alternate means of compliance.
- Clarify in the preamble that these definitions are intended to delineate exception eligibility and proportional application of modernization requirements and provide background to support the intent and nature of application of these terms, in contrast to expanding the definition of a commercial air tour or excepting operations wholesale from FAA oversight.

iv. Remove Definition of "Suitable Landing Area for Rotorcraft" from § 136.1(d)

INTENT: To eliminate a redundant and non-standard definition that does not appear elsewhere in Part 136 and that conflicts with established FAA regulatory principles governing pilot-in-command authority, emergency decision-making, and existing operational performance standards.

RATIONALE: The current definition of "suitable landing area for rotorcraft" in § 136.1(d) directs that landing areas must be "site-specific, designated by the operator, and accepted by the FAA." The ARC determined that this definition is unnecessary and potentially confusing for several reasons:

- Unused and non-standard terminology.
- The term "suitable landing area for rotorcraft" is not used or referenced anywhere else within Part 136, making its inclusion redundant. The terminology is also non-standard within Title 14 and does not appear in related Parts such as 91, 135, or 27/29.
- Conflict with pilot-in-command authority and emergency decision-making.
- The definition contradicts the fundamental regulatory principle that the PIC retains ultimate authority during emergencies. Under § 136.1(f) (emergency deviations) and § 91.3(b), the PIC may deviate from any regulation as required to meet an emergency. By implying pre-designation and FAA "acceptance" of suitable landing areas, the existing definition undermines the PIC's discretion and authority in the most critical phase of flight—responding to an emergency.
- Covered elsewhere in existing regulations and pilot training.
- Rotorcraft emergency-landing planning and performance expectations are already addressed under existing FAA rules and standards, including § 91.119(c) (minimum altitudes), § 135.203(b) (altitude limitations for helicopters), and the airworthiness and flight manual performance requirements of Parts 27 and 29. Effective emergency planning also relies on pilot training, experience, familiarity with the route to be flown, and sound aeronautical decision-making—all of which make the definition redundant and unenforceable.
- Regulatory clarity and modernization.

Removing this definition eliminates an implied FAA approval process that lacks a procedural basis and aligns Part 136 with modern regulatory drafting conventions, which separate definitional and operational provisions. This deletion also supports the ARC's broader goal of ensuring that all definitions within Part 136 are descriptive rather than prescriptive.

APPROACH: The ARC recommends the following:

- Delete the definition of "suitable landing area for rotorcraft" currently contained in § 136.1(d).

- Rely on existing FAA rules, airworthiness standards, and pilot-in-command authority provisions (§ 136.1(f); § 91.3(b)) to address emergency landing decision-making.
- Clarify in the preamble that this deletion does not reduce safety standards; it removes a redundant and potentially conflicting definition while preserving full PIC authority during emergency operations.

v. Establish Due-Process Protections for Letters of Authorization (§ 136.3)

INTENT: To ensure that both the FAA and operators follow consistent, transparent procedures when amending, suspending, or revoking Letters of Authorization (LOAs) issued under Part 136.

RATIONALE: Unlike Parts 121 and 135, which require the FAA to follow § 119.51 procedures when modifying certificates or authorizations, the current § 136.3 provides only permissive guidance. This has led to instances where LOAs were unilaterally amended or rescinded without prior notice or opportunity for the operator to respond, resulting in ongoing litigation and regulatory uncertainty.

Commercial air tour LOAs function as limited operating certificates, granting authority to carry passengers for compensation or hire and imposing operational conditions. Because these authorizations carry the same operational and economic consequences as Part 119 certificates, they warrant the same procedural safeguards. Requiring that both the FAA and LOA holders adhere to § 119.51 ensures due process, accountability, and parity across the regulatory framework.

APPROACH: The ARC recommends the following:

- Amend § 136.3(a) to read:

  "Operators subject to this subpart who have Letters of Authorization under this part shall be subject to the requirements and procedures described in § 119.51 of this chapter when applying for, amending, reconsidering, suspending, or revoking such authorizations."

- This amendment would codify that the FAA must follow § 119.51's notice, response, and documentation procedures when modifying or withdrawing an LOA, and that LOA holders must likewise comply with those procedures when seeking changes or reconsideration.

vi. Remove Subpart D and Relocate § 136.5. Recommendation – Remove § 136.5 and Subpart D (Air Tours in the State of Hawaii)

INTENT: To eliminate geographically specific provisions that national standards have superseded and to promote a unified, risk-based regulatory framework for all commercial air tour operations, regardless of location.

RATIONALE: Subpart D of Part 136 was originally adopted to address unique safety and operational considerations in Hawaii, including high tour density, mountainous terrain, and variable weather. At the time of adoption, there were no uniform federal standards for air tour pilot qualification, training, maintenance, or operational procedures.

The ARC's proposed overhaul of Part 136 would establish comprehensive national requirements across these domains through new Subparts A–C. These recommended provisions would provide equivalent or greater safety assurance for all air tour operations, including those conducted in Hawaii.

Maintaining a separate subpart for Hawaii would perpetuate unnecessary regulatory inconsistency and complexity without a corresponding safety benefit. The specific risk mitigations intended by the Hawaii rules—terrain avoidance, weather minima, pilot training, and maintenance discipline—are addressed uniformly across the revised Part 136 and by the operators' governing parts (Part 135 or Part 121). Additionally, the National Parks Air Tour Management Act and related Air Tour Management Plans (ATMPs) already provide a separate mechanism for addressing location-specific flight planning, altitude, and environmental considerations in Hawaii's national parks.

Therefore, removal of Subpart D would streamline regulatory application, reduce duplicative oversight, and align with the FAA's movement toward consistent, performance-based safety standards. This deletion would not diminish safety but rather ensure that all commercial air tour operations are governed by a single, coherent regulatory framework.

APPROACH: The ARC recommends the following:

- Delete both § 136.5 and Subpart D – Air Tours in the State of Hawaii in its entirety.
- Remove all internal cross-references to Subpart D (e.g., in current § 136.5 and associated definitions).
- Incorporate any relevant general safety provisions into Subparts A–C where nationally applicable, as expressed in subsequent Subpart D recommendations as applicable.

- Note in the preamble that location-specific mitigations for Hawaii will continue to be addressed through flight path and air traffic management (as applicable), Letters of Authorization, and ATMPs under existing statutory authority.

b. Subpart B – Establish a new Subpart B (National Air Tour Standards and Operating Requirements) and Relocate Existing Subpart B to Subpart D

INTENT: To consolidate all operational safety provisions governing commercial air-tour flights into a single, performance-based framework that harmonizes airplane, rotorcraft, and powered-lift operations under national standards. Subpart B integrates pilot qualification, recurrent training, and operational-performance requirements with new technology-driven safety programs (FDM / ADS-B In-Out), ensuring consistency and scalability across all operators.

RATIONALE: Legacy Part 136 distributed operational rules across multiple sections (§§ 91.147, 136.7–.13, and 136.75) and imposed geographically specific standards (notably Hawaii). This created redundant and occasionally contradictory language, uneven enforcement, and fragmented oversight.

The recommended Subpart B corrects these deficiencies by—

1. Establishing a unified set of National Air Tour Operating Standards (§§ 136.5–.17) applicable to all certificate and LOA holders.
2. Codifying pilot-in-command qualifications and structured annual air-tour flight reviews incorporating terrain-awareness, inadvertent-IMC recovery, and scenario-based competencies.
3. Standardizing passenger-safety provisions (seat-belt, flotation, briefing, and emergency-egress procedures) consistent with Parts 91, 121, and 135.
4. Replacing geographic triggers (e.g., “beyond the shoreline”) with performance-based criteria (e.g., “beyond power-off glide distance”), harmonizing airplane and rotorcraft operations.
5. Integrating modern safety-technology programs—Flight Data Monitoring (§ 136.15) and ADS-B In/Out (§ 136.17)—with clear, risk-proportionate exception categories (Historic Operations, Line of Sight, Vintage Aircraft).
6. Ensuring national uniformity by relocating and superseding Hawaii-specific Subpart D content while maintaining equivalent safety levels through objective, data-supported standards.

Collectively, these reforms would create a clear, measurable, and enforceable operating framework that mirrors the structure of other FAA operational parts, simplifies compliance, and elevates safety management through performance data and pilot competency.

APPROACH: The ARC recommends the following:

- Re-designate existing operational sections as Subpart B – National Air Tour Standards and Operating Requirements (§§ 136.5–.17).
- Incorporate Pilot-Training WG recommendations (§§ 136.6 and 136.7) and FDM WG provisions (§§ 136.15 and 136.17).
- Harmonize passenger-briefing, flotation, and rotorcraft-performance standards (§§ 136.8–.13) under uniform applicability.
- Apply defined exception categories (Historic, Line of Sight, Vintage) for proportional compliance and alternate-means approvals.
- Ensure cross-reference alignment with Subpart A (applicability / LOA framework) and Subpart C (maintenance/airworthiness).
- Clarify in the preamble that this reorganization modernizes and standardizes operational rules without expanding regulatory scope beyond the ARC's intended safety enhancements.

i. Re-Numeration and Modification of § 136.8 Passenger Briefings

INTENT: To maintain and clarify passenger-briefing requirements applicable to all commercial air-tour operations while harmonizing the language with Part 91 and ensuring alignment with existing seat-belt and supplemental-restraint provisions.

RATIONALE: Legacy § 136.7 already required pre-flight passenger briefings but contained duplicative or outdated phrasing.

The ARC retained the substance of the rule and reorganized it for clarity and ease of understanding. The revision ensures that every air-tour passenger, regardless of the aircraft type or operating part, is briefed on the use of restraints, smoking prohibitions, and emergency-exit procedures, with an additional over-water briefing component that parallels rotorcraft and airplane requirements.

Revised paragraph (c) explicitly cross-references § 91.108(g), ensuring consistency with modern supplemental-restraint standards without introducing new prescriptive text.

This maintains the original safety intent of § 136.7 while providing regulatory clarity and eliminating redundant or conflicting provisions across Parts 91, 121, and 135.

APPROACH: The ARC recommends the following:

- Retain § 136.8 with reorganized structure and plain-language formatting.
- Incorporate explicit reference to § 91.108(g) for supplemental-restraint briefings.
- Ensure the rule applies uniformly to both Part 91 LOA and Part 135 certificate holders conducting air tours.
- Clarify in the preamble that the revision consolidates equivalent provisions from §§ 91.519, 121.571, and 135.117 without expanding requirements.

ii. Modify § 136.9 Life Preservers for Operations Over Water

INTENT: To simplify and standardize life-preserver requirements for over-water operations by basing applicability on *power-off glide distance* rather than geographic shoreline proximity, thereby harmonizing airplane and rotorcraft provisions and removing ambiguity.

RATIONALE: The current § 136.9 used "beyond the shoreline" as the determining factor, which causes confusion in diverse operating environments (e.g., operations in the Grand Canyon and the Colorado River).

The ARC adopted "beyond power-off glide distance from the shoreline" to provide a quantifiable, aircraft-specific criterion consistent with performance data in approved flight manuals. Resultingly, in its revision, the ARC removed the § 136.9(b)(2) reference to operations 'within power-off gliding distance to the shoreline' as redundant under the new performance-based applicability.

The revision also aligns the conditions under which life preservers must be *worn* with those that merely make them *accessible,* with the rotorcraft performance and multi-engine capability distinctions already established in § 136.11.

This approach reduces unnecessary passenger encumbrance where risk is minimal (e.g., multi-engine aircraft capable of continued safe flight) while preserving equivalent levels of safety for single-engine or low-performance aircraft.

APPROACH: The ARC recommends the following:

- Replace "beyond the shoreline" with "beyond power-off glide distance from the shoreline."

- Harmonize requirements across airplane, rotorcraft, and powered-lift categories.
- Retain the exception for operations conducted solely for takeoff or landing.
- Clarify in the preamble that the change is a definitional refinement, not a relaxation of safety intent.

iii. Modify § 136.11 Rotorcraft Floats for Over Water

INTENT: To maintain and modernize requirements for rotorcraft flotation systems while harmonizing applicability thresholds and operational criteria with the revised § 136.9.

RATIONALE: The legacy rule referenced "beyond the shoreline," creating the same interpretive issues addressed in § 136.9.

The updated provision uses *power-off glide distance* as the trigger for float or flotation-system equipage, ensuring objective applicability based on aircraft performance rather than geography. The ARC intentionally retained the phrase 'beyond the shoreline' in § 136.11(b)(2) for operational clarity, as the arming requirement concerns pilot actions rather than applicability thresholds.

The ARC retained the requirement for system arming and control-switch placement on a primary flight control but aligned operational language with current manufacturer manuals and rotorcraft certification standards.

This would ensure that flotation systems are installed and armed consistently with approved flight manual limitations, enhancing predictability and reducing pilot workload during over-water segments.

Finally, in its revision, the ARC removed § 136.11 (c)(2) of the current rule, which duplicates glide-distance logic and required life-preserver wear to eliminate overlap with § 136.9.

APPROACH: The ARC recommends the following:

- Re-base applicability on *power-off glide distance* rather than geographic shoreline.
- Maintain separate provisions for the performance capabilities of single- and multi-engine rotorcraft.
- Preserve functional requirements for control-switch location and arming procedures.
- Clarify in guidance that this section complements § 136.9 to provide a unified national standard for all over-water air-tour operations.

iv. Modify of § 136.13 Rotorcraft Performance Plan

INTENT: To retain and nationalize the rotorcraft-performance-planning requirements that originated in Hawaii-specific Subpart D (§§ 136.75(b)–(c)), making them applicable to all commercial air-tour rotorcraft operations under a single national standard.

RATIONALE: The ARC reviewed the existing § 136.75 performance-planning rules and found them identical in substance to the revised § 136.13(a) provisions.

The revised requirements have therefore been consolidated and clarified to avoid duplication.

This would ensure that every rotorcraft operator conducts a documented performance plan before each air-tour flight, accounting for density altitude, weight, and height/velocity limitations, and that the pilot in command verifies compliance prior to takeoff.

These measures would codify best practices already observed by most operators while providing a uniform, enforceable standard that applies nationwide rather than by region.

APPROACH: The ARC recommends the following:

- Adopt a single, consolidated § 136.13 incorporating the Hawaii-specific provisions of § 136.75(b)–(c).
- Retain requirements for PIC review and compliance.
- Reference approved flight-manual performance data (weight, CG, height/velocity).
- State in the preamble that this consolidation eliminates redundancy and establishes a single national standard for rotorcraft performance planning.

c. Subpart C— Establish a new Subpart C (Airworthiness Standards, Aircraft Maintenance Requirement) and relocate existing Subpart C to Subpart E
Addressed in maintenance/airworthiness recommendations, Section VIII.C.

d. Subpart D – Delete existing Subpart D (…Hawaii…) and house(?) National Parks Air Tour Management in Subpart D of the part 136 overhaul plan

i. Delete Subpart D – Special Operating Rules for Air Tour Operators in the State of Hawaii

INTENT: To delete Part 136, Subpart D in its entirety and consolidate all air-tour safety and operational requirements under a single, unified national standard. This change removes outdated, geographically limited regulations while ensuring that Hawaii operations continue to meet identical or higher levels of safety through the revised national framework established in Subparts A and B.

RATIONALE: Subpart D was created before national air-tour standards were in place and was intended to address Hawaii-specific operating risks such as complex terrain, coastal weather patterns, and concentrated sightseeing traffic. Since the promulgation of § 136.9, § 136.11, and related national standards—and the implementation of the Air Tour Management Plan (ATMP) process—those objectives are now fully incorporated into federal policy applicable to all U.S. air-tour operations.

Maintaining Hawaii-only provisions now introduces redundancy, regulatory inconsistency, and enforcement confusion. In several cases (§ 136.75 (a)–(e)), the requirements of Subpart D are word-for-word duplicative of existing national rules in §§ 136.7, 136.9, 136.11, and 136.13. Where the language differs, the national standards already provide clearer, performance-based criteria that are objectively verifiable through aircraft flight-manual data and PIC authority.

Removing Subpart D accomplishes the following:

- Eliminates duplicative rules that no longer provide unique safety benefit.
- Aligns Hawaii operations with the national air-tour framework, ensuring identical safety expectations and oversight criteria.
- Reduces regulatory complexity and conflict with Part 91 minimum-altitude and briefing provisions.
- Supports the ARC's overarching goal of a single, performance-based, risk-aligned regulatory structure for all commercial air-tour operations.

It is important to note that these recommended changes would not diminish safety for Hawaii operators and passengers, nor reduce regulatory burden; rather, they would codify an equivalent level of protection through standardized national requirements.

APPROACH: The ARC recommends the following:

- Remove Part 136 Subpart D and all associated sections (§§ 136.71 through 136.75).

- Integrate all overlapping provisions into existing national sections as follows:
    - Overwater and flotation requirements → §§ 136.9 and 136.11.
    - Rotorcraft performance planning → § 136.13(a) and (b).
    - Passenger briefing requirements → § 136.7.
    - Minimum-altitude rules → § 91.119 (general applicability).
- Retain §§ 136.1 and 136.2 as the controlling applicability and definition framework for Hawaii operations under the unified national standard.
- Note in the preamble that Hawaii air-tour operations remain subject to the same safety standards and ATMP requirements as all other U.S. operations; this deletion removes only redundant regional text, not operational oversight or regulatory burden.

ii. Remove §§ 136.71 and 136.73 (Hawaii Applicability and Definitions)

INTENT: To delete obsolete front-matter provisions associated with the current Subpart D—Special Operating Rules for Air Tour Operators in the State of Hawaii—and to establish a unified national framework for commercial air tour operations under the revised Parts 136 Subparts A–C.

RATIONALE: Sections 136.71 and 136.73 served only to introduce and define the scope of the Hawaii-specific operating rules contained in Subpart D. With the ARC recommending removal of Subpart D in its entirety, these two sections are redundant and no longer necessary. Their deletion supports the FAA's broader movement toward a single, risk-based, nationwide regulatory framework for commercial air tours.

Key considerations include:

National Standardization.

The Hawaii-specific applicability and definitions were originally adopted before national air-tour safety standards existed. The newly revised Part 136 now provides consistent, performance-based rules applicable to all air tour operations—including those in Hawaii—making location-specific subparts unnecessary.

Duplication and Inconsistency.

The terms “air tour” and “air tour operator” are already defined in § 136.2 of the revised Part 136. Retaining §§ 136.71 and 136.73 would duplicate those definitions and risk inconsistent interpretation of identical terms within the same part.

Integration of Safety Standards.

The unique risks that originally justified Hawaii-specific provisions (terrain, weather, and density of tour activity) are now addressed within the national air tour safety framework and through the Air Tour Management Plan (ATMP) process administered jointly by the FAA and the National Park Service. Consequently, separate applicability language for Hawaii provides no additional safety benefit.

Regulatory Clarity.

Removing §§ 136.71 and 136.73 eliminates unnecessary cross-references to a defunct subpart, simplifies Part 136’s structure, and prevents confusion about whether distinct Hawaii-only rules remain in effect.

APPROACH: The ARC recommends the following:

- Delete §§ 136.71 (Applicability) and 136.73 (Definitions) in their entirety along with the remainder of Subpart D.
- Rely on revised Subpart A (§ 136.1 Applicability and § 136.2 Definitions) for all air tour operations nationwide, including those conducted in the State of Hawaii.
- Note in the preamble that the removal of these sections does not alter or reduce safety requirements for Hawaii operators; it simply aligns them under the same national standards as all other U.S. air tour operations.

iii. Delete § 136.75(a) – Overwater Operations and Flotation Equipment (Hawaii)

INTENT: To remove the Hawaii-specific overwater and flotation equipment requirements in § 136.75(a) and consolidate those provisions under the unified national standards contained in §§ 136.9 and 136.11, ensuring consistent application to all commercial air tour operations regardless of location.

RATIONALE: The ARC determined that § 136.75(a) duplicates the substance of §§ 136.9 (Life Preservers for Operations Over Water) and 136.11 (Rotorcraft Floats for Overwater Operations). Although the Hawaii rule uses slightly different phrasing, its operational intent and safety objectives are identical.

By integrating these requirements into §§ 136.9 and 136.11, the ARC's revision would create a single set of national air tour safety standards applicable to all operators. This consolidation would eliminate geographic distinctions that previously caused confusion, simplify regulatory oversight, and reinforce consistent risk management principles for overwater operations in both airplane and rotorcraft categories.

The unified structure would ensures that overwater safety provisions apply uniformly nationwide, including in Hawaii, while removing unnecessary repetition and outdated references to location-specific rules.

APPROACH: The ARC recommends the following:

- Delete § 136.75(a) in its entirety.
- Rely on §§ 136.9 and 136.11 as the sole governing provisions for overwater operations and flotation equipment requirements under Part 136.
- Clarify in the preamble that this change consolidates identical safety provisions into a single national framework, maintaining equivalent safety outcomes while simplifying compliance.

iv. Delete § 136.75(b) – Performance Plan (Hawaii)

INTENT: To delete the Hawaii-specific rotorcraft performance-planning requirement in § 136.75(b) because it is duplicative of the national performance-plan standard in § 136.13(a), which already applies to all commercial air tour operations, including those conducted in the State of Hawaii.

RATIONALE: Section 136.75(b) requires each operator to prepare a rotorcraft performance plan before conducting an air tour in Hawaii. The ARC reviewed this language and confirmed that it is identical in content and regulatory effect to § 136.13(a) of the national standard. Both provisions require operators to base the plan on the aircraft flight manual and to determine maximum gross-weight, center-of-gravity, and height/velocity parameters considering maximum density altitude.

Because § 136.13(a) already mandates these same calculations for all rotorcraft air tour operations, the Hawaii version is redundant and risks creating inconsistency between otherwise identical requirements. The additional direction in § 136.75(b)(2) that "the pilot in command must comply with the performance plan" is also implicitly required under § 136.13(a) and under general PIC authority provisions (§ 91.3 and § 136.1(f)).

The ARC's objective is to consolidate duplicative regional rules into a single, national performance-based framework. Maintaining two overlapping rules provides no additional safety benefit and increases administrative complexity for operators and inspectors. The national § 136.13(a) already achieves the intended safety outcomes with measurable, RFM-based criteria and is therefore retained as the sole controlling provision.

APPROACH: The ARC recommends the following:

- Delete § 136.75(b) in its entirety.
- Retain § 136.13(a) as the single national standard governing rotorcraft performance planning and PIC compliance.

Clarify in the preamble that this deletion does not reduce safety or change operator obligations; it simply eliminates duplicate language to support the ARC's goal of a unified national air-tour safety standard

v. Delete § 136.75(c) – Rotorcraft Performance and Height/Velocity Avoidance (Hawaii)

INTENT: To remove the Hawaii-specific rotorcraft performance and height/velocity-avoidance provision in § 136.75(c) because its requirements are already encompassed by § 136.13(b) of the national rule, which provides a clearer and more standardized performance-based framework applicable to all rotorcraft air tour operations.

RATIONALE: The ARC reviewed § 136.75(c) and determined that its underlying intent—to ensure that rotorcraft operate with adequate performance margins and avoid flight profiles within the aircraft's height/velocity ("H/V") avoid area—is fully addressed under § 136.13(b) of the revised national standard.

Although the language in § 136.75(c) differs stylistically, the two provisions are functionally equivalent in scope and safety objective. The ARC concluded that retaining the national version in § 136.13(b) is preferable because:

- It directly references the approved rotorcraft flight manual (RFM) height/velocity diagram, providing a definitive, manufacturer-validated performance reference rather than descriptive text;
- It ensures consistency of interpretation across all air tour operations nationwide; and

- It avoids redundant or conflicting requirements that could result from maintaining two differently worded rules addressing the same operational performance concern.

By consolidating these provisions into § 136.13(b), the FAA would maintain the same level of safety assurance through quantifiable performance data, while eliminating unnecessary regional duplication.

APPROACH: The ARC recommends the following:

- Delete § 136.75(c) in its entirety.
- Retain § 136.13(b), Performance Plan, as revised and as the controlling national standard for rotorcraft operations.
- Clarify in the rule preamble that this deletion does not alter safety intent or compliance expectations; it merely consolidates identical safety provisions into a single, nationally applicable rule using precise RFM-referenced criteria.

vi. Delete § 136.75(d) – Minimum Flight Altitudes (Hawaii)

INTENT: To remove Hawaii-specific minimum-altitude restrictions that conflict with the general operating rules of Part 91 and that introduce operational risk and workload disproportionate to their safety benefit.

RATIONALE: Section 136.75(d) prescribes a fixed 1,500-foot minimum altitude and distance requirement for all air tour operations in Hawaii. The ARC determined that this blanket restriction is unnecessary and potentially counterproductive when compared to the flexibility afforded under § 91.119, which already governs safe minimum altitudes nationwide.

Key considerations include:

Operational density and terrain complexity. Hawaii's air tour operations traverse congested, high-traffic airspace in proximity to mountainous terrain and coastal weather phenomena. Mandating a uniform 1,500-foot minimum altitude compresses all tour operations into the same vertical stratum, increasing mid-air collision risk, pilot workload, and exposure to inadvertent IMC (IIMC) events.

Existing national standards provide adequate protection. Section 91.119 already ensures minimum altitudes sufficient to prevent hazards to persons or property, while allowing pilots to maintain appropriate clearance from terrain and weather. Requiring

Hawaii operators to adhere to both § 91.119 and § 136.75(d) creates regulatory conflict without enhancing safety.

Consistency with the ARC's national framework. The ARC's objective is to establish uniform air tour safety standards applicable across all U.S. operating environments, replacing geographically unique requirements with performance-based criteria that scale by risk rather than location.

The ARC therefore concluded that § 136.75(d) is obsolete, redundant with Part 91, and inconsistent with risk-based safety management principles.

APPROACH: The ARC recommends the following:

- Delete § 136.75(d) in its entirety.
- Default to the minimum-altitude requirements of § 91.119 for all Part 136 operations nationwide.
- Clarify in the preamble that this removal does not reduce safety requirements but harmonizes altitude rules for all air tour operations, reducing congestion and supporting pilot situational awareness and collision avoidance.

vii. Delete § 136.75(e) – Passenger Briefing Requirements (Hawaii)

INTENT: To remove redundant passenger-briefing requirements that duplicate national standards already contained in § 136.7 and in Parts 91, 121, and 135, thereby streamlining the regulation and eliminating unnecessary repetition within Part 136.

RATIONALE: Paragraph (e) of § 136.75 requires passenger briefings for air tour flights in Hawaii that include segments beyond the ocean shore, referencing §§ 91.107, 121.571, and 135.117. The ARC reviewed these requirements and determined that this paragraph provides no additional safety or operational value beyond what is already mandated elsewhere.

Specifically:

- The briefing elements in § 136.75(e)—water ditching procedures, flotation equipment use, and emergency egress—are already required nationally under § 136.7, which applies to all commercial air tour operations.
- The cross-references to §§ 91.107, 121.571, and 135.117 are redundant and confusing, as each already requires comprehensive passenger briefings tailored to the type of operation.

- The use of “or” in this paragraph makes the briefing standard elective, allowing an operator to select among 91/121/135 briefing provisions without providing measurable safety improvement.
- All Part 91 operators conducting commercial air tours are already required to perform passenger briefings by default; therefore, retaining a Hawaii-specific reiteration adds no incremental safety protection.

For these reasons, the ARC concluded that paragraph (e) is duplicative, unnecessary, and inconsistent with the unified national structure envisioned in the Part 136 overhaul. Removing this paragraph would maintain equivalent safety while simplifying compliance.

APPROACH: The ARC recommends the following:

- Delete § 136.75(e) in its entirety.
- Rely on § 136.7, as revised, for all overwater and emergency briefing provisions.
- Clarify in the rule preamble that this removal does not diminish passenger safety standards but consolidates them under existing national requirements for all commercial air tour operations.

B. Pilot Training

2. Annual Flight Review for CAT Pilots

The FAA should require all CAT pilots not subject to Part 135 or Part 121 tests and competency checks to complete an annual Air Tour Flight Review (ATFR).

INTENT: To ensure consistent pilot proficiency standards through an annual review focused on the unique risks of CAT operations, while avoiding unnecessary duplication for pilots already meeting higher-level checking requirements.

RATIONALE: Currently, pilot recency and competency requirements for CAT operations vary depending on whether operations are conducted under § 91.147 Letters of Authorization or Part 135 certificates. Traditional Part 91 operations, including those under Part 136 and § 91.147, only require a biennial Flight Review under § 61.56, whereas Part 135 and Part 121 operators are subject to more rigorous annual competency and proficiency checks.

The ARC Charter tasked members with examining the feasibility of applying Part 135 Subpart H pilot training and qualification regulations to CAT operations. While that might appear to be a direct solution, the ARC members unanimously agreed that recommendations should be high-impact yet lower-burden. The ARC specifically

determined that subjecting CAT operators to the extensive recordkeeping, training program approvals, and resource-intensive requirements of Part 135 would be disproportionate.

Following the analysis of Subpart H of Part 135 of Title 14 Code of Federal Regulations, the ARC concluded that the operational differences between Parts 91 and 135 are significant and cannot be merged without eliminating many sections of existing regulatory language. The ARC determined that in keeping with paragraph 3 of the ARC Charter, Objectives of the ARC, the rules presently applicable to each part should be enhanced to substantially improve the safety of CAT operations. The ARC considered adopting pilot training standards equivalent to the standards under Subpart H of part 135 to the extent possible.

APPROACH: The ARC developed a "flight review" model — the Air Tour Flight Review (ATFR) — to ensure that CAT pilots receive targeted training in specific risk areas prior to acting as pilot-in-command (PIC). In crafting this recommendation, the group compared the requirements of Parts 61, 135 Subparts H and G, and Part 121. Under Part 61, the ARC recommends the Air Tour Flight Review regulatory text reads as follows:

§ 136.7 Air Tour Flight review.

(a) Except as provided in paragraph (d) of this section, no commercial air tour operator may use a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, that pilot has completed an air tour flight review in the make and model of aircraft to be flown in air tour service, consisting of at least 1 hour of flight training and 1 hour of ground training, given by an FAA-certificated flight instructor familiar with the operating environment, intended to train and evaluate that pilot's knowledge in the following areas—

(1) A review of the current general operating and flight rules of parts 136 and applicable 91 of this chapter; and

(2) A review of the pilot's proficiency in practical skills and techniques in that make and model of aircraft. The review may include any of the maneuvers and procedures currently required for the original issuance of the particular pilot certificate required for the commercial air tour operations authorized and appropriate to the category, class, and make/model of aircraft involved. The extent of the review shall be determined by the authorized instructor conducting the air tour flight review, but must include:

(i) Local Weather Patterns

(ii) Navigation to include terrain awareness and obstacle clearance

(iii) Recovery from inadvertent IMC

(iv) Recovery from unusual flight attitudes

(b) Except as provided in paragraph (d) of this section, if a crewmember who is required to take an air tour flight review under this part, completes that flight review in the calendar month before or after the calendar month in which it is required, that crewmember is considered to have completed the flight review in the calendar month in which it is required.

(c) A logbook endorsement by the authorized instructor who gave the air tour flight review certifies that the pilot has satisfactorily completed the review.

(d) To satisfy the requirement for the air tour flight review, the requirements of §135.293 or § 121.441 may be used as a substitute when those checks are completed in the make and model of aircraft to be flown in air tour service and when completed within the preceding 12 calendar months.

(e) The requirements of this section may be accomplished in combination with the requirements of § 61.56 or § 61.57 and other applicable recent experience requirements at the discretion of the authorized instructor conducting the air tour flight review[18]

[18] The full ARC recommended regulatory text for Part 136 is in Appendix A of this document.

3. Minimum Experience Standards for Pilot-in-Command

The FAA should establish Pilot-in-Command (PIC) minimum experience standards.

INTENT: To establish a baseline of flight experience for pilots serving as pilot-in-command (PIC) in CAT operations, ensuring adequate familiarity and proficiency in the specific aircraft used.

RATIONALE: Current regulations under § 91.147 and Part 136 do not consistently establish minimum experience standards for pilots conducting CAT operations, other than commercial pilot requirements under Part 61. In contrast, Part 135 includes defined qualification and experience thresholds for PICs (§ 135.243). The absence of comparable requirements for CAT operations leaves variability in pilot proficiency, particularly among LOA-holders conducting tours under Part 91.

The ARC considered whether adopting Part 135 subpart H requirements would address this gap. However, consistent with the ARC's guiding principle of creating high-impact but lower-burden recommendations, the subcommittee determined that a narrower, focused requirement would be more appropriate. By requiring a minimum of five (5) hours of PIC experience in the make and model (or type, as applicable), along with a commercial certificate and appropriate type ratings (if applicable), the proposed standard enhances operational safety while minimizing disproportionate training or administrative burdens for small operators.

This recommendation aligns PIC qualifications for CAT operations with the intent of Part 135 standards while tailoring them to Visual Flight Rules (VFR), limited-scope, CAT operations. It enhances safety by ensuring PICs have basic experience in the aircraft they will operate, particularly in terrain- and workload-intensive environments.

APPROACH: The FAA should amend Part 136 to add a new section as follows:

§ 136.6 Pilot in command qualifications.

(a) No Commercial Air Tour operator may use a person, nor may any person serve, as pilot in command of an aircraft under air tour operations unless that person-

(1) Holds at least a commercial pilot certificate with appropriate category and class ratings; an appropriate type rating for that aircraft, if required; and for a powered-lift, a type rating for that aircraft; and

(2) Has had at least 5 hours as a pilot in command in that make and model (or type, as applicable) of aircraft.

C. Maintenance

4. Applicability Standards for Aircraft Airworthiness in Part 136

The FAA should establish clear Applicability Standards for Aircraft Airworthiness in Part 136.

INTENT: To provide clarity and consistency in the application of aircraft airworthiness requirements for CAT operations by consolidating existing standards from Part 91 and Part 43 into Part 136, while avoiding duplicative requirements. This recommendation establishes a dedicated "Applicability" section within the new subpart C of Part 136, ensuring operators and inspectors have a clear reference point.

RATIONALE: CAT operations are currently regulated through a patchwork of references to Part 91 (§ 91.147) and other parts, creating ambiguity for operators and FAA oversight alike. The result has been uneven enforcement, inconsistent application of maintenance standards, and a lack of clarity for operators seeking compliance.

By explicitly stating the applicability of airworthiness requirements within Part 136:

- Operators will have a single reference tailored to CAT operations, reducing confusion and regulatory overlap.
- Safety will be preserved by ensuring Part 91 and Part 43 standards remain applicable, while clarifying that no duplication of equipment requirements is intended.
- Provisions for emergency maintenance will provide necessary flexibility for small and geographically remote operators, while maintaining safety through mandatory re-inspection under Part 120 programs.
- FAA inspectors will benefit from more consistent oversight tools, improving both compliance and enforcement.

This approach aligns with the ARC's broader goal of consolidating CAT regulations into Part 136, replacing § 91.147, and restructuring the regulation into a coherent and stand-alone framework.

The ARC examined each regulation and associated section within subpart J of Part 135 of Title 14 Code of Regulations for applicability across the CAT industry. As previously stated, the operational differences do not easily lend to broad application from one part to another without substantively changing the regulated operation. However, in this task, the ARC was able to significantly increase the maintenance safety by applying some "comparable" requirements from Part 135.

APPROACH: The ARC recommends the FAA adopt the draft language for § 136.19 (Applicability) as the opening provision of subpart C (Aircraft Maintenance Standards) in Part 136. Specifically:

- Clearly reference Parts 91 and 43 as the governing standards for inspection and maintenance.
- Clarify that Part 136 requirements supplement, but do not duplicate, existing equipment standards.
- Include explicit provisions for emergency maintenance, modeled on current FAA allowances for remote operations, requiring subsequent re-inspection under Part 120-compliant programs.
- Ensure that regulatory text uses consistent terminology with Parts 91, 43, and 120 to avoid ambiguity.

This structured Applicability section will serve as the foundation for the remainder of subpart C, ensuring operators understand when and how Part 136 applies, while preserving both operational flexibility and FAA oversight authority.

Sample Regulatory Language—

Subpart C— Airworthiness Standards, Aircraft Maintenance Requirements

§ 136.19 Applicability.

(a) This subpart prescribes aircraft airworthiness requirements for operations under this part. The requirements of this subpart are in addition to the aircraft and equipment requirements of part 91 of this chapter. However, this part does not require the duplication of any equipment required by this chapter.

(b) No Commercial Air Tour operator may operate an aircraft unless that aircraft is:

(1) inspected in accordance with the applicable provisions of § 91.409;

(2) maintained under applicable parts 91 and 43 of this chapter;

(3) equipped in accordance with part 91 of this chapter, as applicable to the operations being conducted in that aircraft; and

(4) in compliance with the requirements of this subpart.

(c) No person may operate an aircraft under this part unless that aircraft and its equipment meet the applicable regulations of this chapter.

(d) Provisions for Emergency Maintenance:

(1) A Commercial Air Tour Operator who operates under the provisions of this part is permitted to use a person who is otherwise authorized to perform aircraft maintenance or preventive maintenance duties and who is not subject to anti-drug and alcohol misuse prevention programs to perform—

(i) Aircraft maintenance or preventive maintenance on the operator's aircraft if the operator would otherwise be required to transport the aircraft more than 50 nautical miles further than the repair point closest to the operator's principal place of operation to obtain these services; or

(ii) Emergency repairs on the operator's aircraft if the aircraft cannot be safely operated to a location where an employee subject to FAA-approved programs can perform the repairs.

(2) An operator who utilizes the provisions of paragraph (d) of this section shall, as soon as practical, have the aircraft re-inspected by a maintenance provider that meets the requirements of part 120 of this chapter.

5. Data on Aircraft Service Difficulties

The FAA should require CAT operators to submit data on aircraft service difficulties during passenger-carrying flights.

INTENT: to provide the FAA with essential safety trend information comparable to what is required of Part 135 air carriers.

RATIONALE: Currently, Part 91 CAT operators are not required to report service difficulties, resulting in a gap in the FAA's ability to identify systemic issues and emerging risks in this sector. Establishing a reporting requirement harmonized with Part 135 would ensure safety data parity across operators conducting commercial passenger operations. The reporting burden is minimal, while the safety value is substantial—allowing regulators to spot patterns early, inform oversight priorities, and support accident prevention. The ARC considers the overall burden of this recommendation to be low/minimal.

APPROACH: The ARC recommends the FAA adopt requirements under 14 CFR 135.415 into Part 136 with necessary tailoring. The ARC believes CAT operators should be required to report defined service difficulties (e.g., in-flight fires, engine shutdowns, structural failures) to FAA within prescribed timelines, and those reports should be standardized, transmitted electronically where possible, and integrated into FAA's existing Oklahoma City collection system.

Sample Regulatory Language—

§ 136.21 Service difficulty reports.

(a) Each Operator shall report the occurrence or detection of each failure, malfunction, or defect in an aircraft concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by related fire-warning system;

(3) False fire-warning during flight;

(4) An exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight because of flameout;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Shutdown of more than one engine during flight;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction or opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA; and

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut-down an engine).

(b) For the purpose of this section, *during flight* means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each Operator shall report any other failure, malfunction, or defect in an aircraft that occurs or is detected at any time if, in its opinion, the failure, malfunction, or defect has endangered or may endanger the safe operation of the aircraft.

(d) Each Operator shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to the FAA offices in Oklahoma City, Oklahoma. Each report of occurrences during a 24-hour period shall be submitted to the collection point within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday.

(e) The Operator shall transmit the reports required by this section on a form and in a manner prescribed by the Administrator, and shall include as much of the following as is available:

(1) The type and identification number of the aircraft.

(2) The name of the operator.

(3) The date.

(4) The nature of the failure, malfunction, or defect.

(5) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since last overhaul, if known.

(6) Apparent cause of the failure, malfunction or defect (e.g., wear, crack, design deficiency, or personnel error).

(7) Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) An Operator that is also the holder of a type certificate (including a supplemental type certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a type certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under § 21.3 or § 37.17 of this chapter or under the accident reporting provisions of 49 CFR part 830 of the regulations of the National Transportation Safety Board.

(g) No person may withhold a report required by this section even though all information required by this section is not available.

(h) When the Operator gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

6. Reporting Mechanical Interruptions

The FAA should require CAT operators to report mechanical interruptions that disrupt CAT operations in multiengine aircraft, paralleling existing Part 135 standards.

INTENT: To require CAT operators to report mechanical interruptions that disrupt CAT operations, paralleling existing Part 135 standards.

RATIONALE: Mechanical interruptions provide critical insight into operator maintenance practices and fleet reliability. Currently, the absence of reporting for part 91 CAT operations prevents FAA and industry from analyzing reliability trends. By aligning with Part 135 requirements, the FAA can close this oversight gap with minimal additional burden, enabling more proactive safety interventions. The ARC considers the overall burden of this recommendation to be low/minimal.

APPROACH: The ARC recommends the FAA incorporate the provisions of 14 CFR 135.417 into Part 136 and require operators to provide monthly summaries of interruptions—such as diversions, unscheduled change of aircraft and in-flight propeller featherings—to the responsible Flight Standards office. Reports should be concise, submitted electronically where feasible, and aggregated by FAA to track reliability trends specific to CAT operations.

Sample Regulatory Language:

§ 136.23 Mechanical interruption summary report.

Each Operator shall mail or deliver, before the end of the 10th day of the following month, a summary report of the following occurrences in multiengine aircraft for the preceding month to the responsible Flight Standards office:

> (a) Each interruption to a flight, unscheduled change of aircraft, route of flight, or unscheduled stop or diversion from a route, caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under § 135.21.
>
> (b) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed. Propeller featherings for training, demonstration, or flight check purposes need not be reported.

7. Manufacturer-Recommended Maintenance

The FAA should require CAT operators to comply with manufacturer-recommended maintenance programs and life limits for engines, propellers, rotors, and emergency equipment, aligning Part 91 CAT operations with established safety practices in Part 135.

INTENT: to require Part 91 CAT operators to comply with manufacturer-recommended maintenance programs and life limits for engines, propellers, rotors, and emergency equipment, aligning CAT operations with established safety practices in Part 135.

RATIONALE: The ARC found that powerplant and system failures are leading contributors to CAT accidents (see Section VII.F of this report). Adherence to manufacturer-specified programs and component life limits is a proven mitigation strategy. Currently, CAT operators are not uniformly bound by these standards, resulting in inconsistent levels of safety. Although compliance will impose moderate costs—particularly for replacement of overdue components—the ARC concluded that the safety benefits outweigh the financial burden.

APPROACH: The ARC recommends the FAA adopt the provisions of 14 CFR 135.421 into Part 136, mandating operator compliance with manufacturer maintenance programs and life-limited component intervals and the FAA provide guidance on implementation to address transition issues, particularly for small operators managing legacy aircraft, to ensure compliance is practical while maintaining safety integrity, with the exception of historic and vintage aircraft as defined in Recommendation 1 under the ARC's proposed language for § 136.2 Definitions.

Sample Regulatory Language—

§ 136.25 Additional maintenance requirements.

(a) Except as provided in paragraph (c) of this section, each Commercial Air Tour Operator must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.

(b) For the purpose of this section, a manufacturer's maintenance program is one which is contained in the maintenance manual or maintenance instructions set forth by the manufacturer as required by this chapter for the aircraft, aircraft engine, propeller, rotor or item of emergency equipment.

(c) The following are excepted from this requirement:

(1) All aircraft considered “Vintage Aircraft.”

(2) All operations considered “Historic Operations.”

(3) Aircraft for which the manufacturer no longer exists, provides airworthiness support, or has no current recommendations or maintenance instructions in place (i.e., orphaned aircraft).

D. FDM

8. Flight Hour Activity Data

The FAA should establish a mandatory, standardized method to collect and record flight hour activity data, i.e., the GA Survey, from all commercial Part 91 and Part 135 operators, including those conducting commercial air tours, ensuring that these data support accurate, state-specific safety analysis across the United States.

INTENT: To calculate credible risk and evaluate interventions, the FAA and industry need reliable exposure data. This recommendation modernizes the activity survey and reporting granularity, enabling CAT operations to be measured and compared objectively at the state level.

The current GA survey data results are not representative of actual activity in the on-demand commercial aviation sector. This inaccurate representation of flight activity creates misconceptions about safety data across the entire aviation industry.

To enable accurate measurement of exposure and risk for commercial Part 91 and Part 135 operations by requiring consistent reporting of flight hour activity data, reliable, geographically-detailed information will allow the FAA, industry, and researchers to calculate credible accident rates, compare performance by region and operation type, and develop targeted, evidence-based safety improvements.

RATIONALE: Currently, the FAA's data-collection tool, specifically the General Aviation and Part 135 Activity Survey, is not mandatory. As a result, the data presented in the survey report are incomplete and inaccurate, and the survey results do not accurately depict the accident rate per 100,000 flight hours for commercial Part 91 and Part 135 operations. Further, only Alaska currently benefits from state-level activity reporting; data for the remaining states are aggregated into broad regional summaries, which limits analytical value.

These gaps prevent accurate comparisons between operational segments and obscure the true risk profile of the commercial air-tour community. Enhanced reporting would enable the calculation of meaningful accident rates per 100,000 flight hours and allow both regulators and operators to assess risk mitigations with objective data.

The ARC also reviewed the Vertical Aviation Safety Team (VAST) initiative to develop unified rotorcraft accident-data standards and supports adopting similar principles (standardization, transparency, and interoperability) to improve the quality of FAA safety data without requiring proprietary information.

APPROACH: The ARC recommends the following:

1. **Survey modernization –** Use the existing *General Aviation and Part 135 Activity Survey* framework as the foundation for mandatory reporting by all commercial Part 91 operators and Part 135 certificate holders.
2. **Finetune reporting –** Modify data-reporting methodology to provide state-specific outputs for all 50 states and territories while retaining regional roll-ups where appropriate (e.g., New England).
3. **Stakeholder coordination –** Work with *VAST* and other safety organizations to harmonize data definitions and accident-data standards.
4. **Transparency and accessibility –** Publish aggregated, non-proprietary results annually to support research, policy development, and industry benchmarking.

9. FDM Programs

The FAA should require commercial air tour (CAT) operators, with defined exceptions, to develop and maintain Flight Data Monitoring (FDM) programs designed solely for operational and maintenance risk reduction.

INTENT: Exposure data alone is not enough; operators also need routine, non-punitive analysis of flight information inside their SMS. This recommendation establishes scalable FDM programs that use flight data for trend detection, compliance assurance, and targeted risk mitigation.

The ARC aims to institutionalize the routine use of flight data for proactive risk management across all CAT operations. The intent is to ensure that operators of all sizes use quantifiable flight information, collected through scalable, cost-effective means, to identify hazards, monitor procedural compliance, and enhance operational oversight within their Safety Management Systems (SMS). The ARC envisions "scalable, cost-effective means" to imply the use of modular, portable, and removable FDM equipment as an acceptable means of compliance for this recommendation. The ARC intends CAT FDM requirements to be in line with the FDM requirements of the ARC's charter.

The recommendation emphasizes a non-punitive, data-driven safety culture in which FDM information is used exclusively for risk reduction and continuous improvement, while recognizing limited-exposure "line-of-sight" operations that warrant proportional treatment.

RATIONALE: With the requirement of Part 5 SMS programs for all CAT operators, quantitative flight data are essential for identifying trends and assessing risk. In the absence of an FDM program, safety decisions often rely on anecdotal or reactive information. FDM data provides objective evidence of operational behaviors (such as operational non-compliance) and allows operators to address issues before an incident occurs. FDM data also supports fleet management, maintenance forecasting, pilot training, and noise-abatement verification, yielding both safety and economic benefits. Further, the ARC believes there is no additional safety benefit in requiring equipment installations that are "approved" by the manufacturer or the FAA versus those "installations" that are modular, portable, or removable equipment.

Some air-tour operations are conducted entirely within visual range of their departure point—so-called line-of-sight (LOS) flights. Because these missions remain in constant view of ground observers and cover a limited distance and duration, they present significantly less reactivity in data analysis and the feedback cycle—meaning immediate and real-time analysis of flight operations. The Working Group, therefore, supports tailored FDM requirements that exempt such operations from full-scale data-recording mandates.

APPROACH: The ARC recommends the following:

1. **Regulatory Framework**
   - Amend 14 CFR Part 136 to add a new section, *§136.14 Flight Data Monitoring System and Program,* requiring that, two years after the final rule's effective date, no CAT operation be conducted without an accepted means of flight data collection and monitoring.
   - Define FDM as *"the collection of aircraft performance or flight-parameter data by the operator for the sole purpose of operational and maintenance risk reduction."*
   - Integrate flexibility by allowing operators to determine the specific data to be collected through their SMS Safety Risk Management (SRM) process.

2. **Tailoring and Exceptions**
   - Provide exclusions for:
     - Vintage Aircraft, as defined in proposed § 136.2.
     - Historic Operations, as defined in proposed § 136.2.
     - Aircraft whose configuration or manufacturer support precludes installation.
     - Open-cockpit or single-aircraft owner/operator operations where installation is impractical.
     - Aircraft limited to "line-of-sight" operations as defined in proposed § 136.2.

3. **Technology Flexibility**
   - Accept all credible data-collection methods, including portable recording devices, integrated avionics outputs, ADS-B data, and GPS-based systems.
   - Encourage collaboration with avionics manufacturers to expand lightweight recording solutions and minimize nuisance alerts.

4. **Data Protection**
   - Establish FDM programs as protected data under 14 CFR Part 193 to ensure information shared with the FAA cannot be used for enforcement or disclosed under FOIA.
   - Reinforce that FDM data are to be used solely for safety purposes within an SMS-oriented "just-culture" framework.

5. **Guidance and Implementation Support**
   - Develop an Advisory Circular (AC) that details acceptable FDM architectures, data analysis processes, and sample implementation models suitable for small and large operators alike.
   - Promote voluntary early adoption through industry outreach and partnerships with insurance providers and data-analysis vendors.

A proposed regulatory framework for integrating FDM into the regulatory overhaul is presented below:

136.2 Definitions.

Flight Data Monitoring (FDM) - Collection of aircraft performance and/or flight parameter data by the operator for the sole purpose of operation and maintenance risk reduction.
Note: Each individual operator will determine how and what Information is collected by using SMS processes (i.e. analysis of operation using SRM) to collect aircraft data as part of the FDM process.

136.15 Flight Data Monitoring System and Program

(a) Two years after the effective date of the final rule, no person may operate a commercial air tour aircraft unless it is equipped with a flight data monitoring system capable of collecting flight data for the sole purpose of operational risk reduction, except for any of those operations listed under paragraph (b) of this part.

(b) The following are excepted from this requirement :

(1) All aircraft considered Vintage Aircraft.

(2) All operations considered Historic Operations.

(3) Aircraft whose date of manufacture or configuration will not allow installation of the required equipment.

(4) Aircraft for which the manufacturer does not support the installation of the required equipment (i.e., orphaned aircraft) and the use of portable equipment is not practical (i.e., open cockpit).

(5) Aircraft that do not fly beyond line of sight.

(6) A single aircraft owner/operator type operation.

(c)The data collection system must be operated from before takeoff until after termination of flight and can be portable or hardwired to the aircraft.

10. High Traffic Tour Areas

The FAA should define the term "High Traffic Tour Area" (HTTA) and formally identify locations within the National Airspace System (NAS) where there are high concentrations of commercial air-tour activity and general aviation air traffic viewing the same ground features, resulting in an elevated risk of traffic conflicts.

INTENT: Concentrated aerial sightseeing activity creates persistent collision-risk environments that warrant common terminology and visibility. This recommendation defines "High Traffic Tour Areas" and outlines how they should be identified and maintained.

Although the Commercial Air Tour Aviation Rulemaking Committee's official charter identifies the term "High Traffic Tour Area" in the context of ADS-B application, this term is not defined in the current regulatory frameworks.

Defining and identifying "High Tour Traffic Areas" would enhance situational awareness and reduce collision risk in areas where multiple commercial air-tour operations and other aircraft routinely share confined airspace at similar altitudes.

By clearly defining and publicizing High Traffic Tour Areas, the FAA can enable both tour operators and transient pilots to recognize, plan for, and safely transit these regions using standardized communications and procedures.

RATIONALE: The FAA has recognized that many geographic locations consistently experience dense air tour traffic. Certain areas, such as scenic corridors, national park regions, coastal routes, and metropolitan skylines, experience high levels of commercial air tour and general aviation air traffic.

In these confined environments, aircraft of varying performance capabilities operate in close proximity, often with limited ability to disperse or maintain vertical separation. Creating a definition to identify such areas is necessary.

Defining the term "High Traffic Tour Area" is the starting point to address an identified risk among the commercial air tour sector and general aviation as a whole.

APPROACH: The ARC recommends the following:

1. **Definition**
    - Add the following definition to § 136.2:

    High Traffic Tour Area *– An airspace region or route segment in which multiple commercial air tour operations and general aviation aircraft are*

concentrated within a geographically limited area, frequently at lower altitudes, with limited dispersal opportunities and mixing of different aircraft types, resulting in a heightened risk of traffic conflict. In such areas, enhanced procedures, communications, and traffic-awareness measures are required.

2. **Identification Process**
    - Direct each Flight Standards District Office (FSDO), in coordination with local air-tour operators and air-traffic facilities, to identify and validate High Traffic Tour Areas within their jurisdiction.
    - Review and update the list periodically to reflect operational changes and seasonal variations.

3. **Industry Coordination**
    - Encourage collaboration among industry groups, local pilot associations, and the FAA to maintain accurate HTTA data and disseminate recommended procedures.

11. Alert Text Boxes

The FAA should standardize the depiction of "High Traffic Tour Areas" as Alert Areas on Visual Flight Rules (VFR) sectional charts to clearly identify those areas.

INTENT: Definitions only help if they're communicated consistently to pilots. This recommendation standardizes how High Traffic Tour Areas are depicted on VFR charts so information is clear, uniform, and actionable.

This recommendation also is intended to improve situational awareness for all airspace users by ensuring information about high-density air traffic regions is presented clearly, consistently, and prominently on FAA-published aeronautical charts. A standardized "Alert Area" format will help pilots anticipate areas of concentrated air traffic, reduce midair-collision risk, and foster greater predictability among air tour operators.

Providing clear information to pilots about areas of high air traffic and integrating the "High Tour Traffic Area" (HTTA) definition into the existing Alert Area framework will enhance flight safety for all participants in affected airspace.

By clearly defining and publicizing High Traffic Tour Areas within the VFR Aeronautical Chart's existing Alert Area framework, the FAA can enable both tour operators and transient pilots to recognize, plan for, and safely transit these regions using standardized communications and procedures.

RATIONALE: Current sectional charts inconsistently identify areas of "high traffic" tour and other flight activity. These identified areas are inconsistent in content, presentation, and application. For example, some charts display certain areas with varying colors and incomplete information, while other well-known high traffic areas (such as Las Vegas) omit them entirely. A clear example of these inconsistencies is found on the Cheyenne and Honolulu sectionals. Each of these charts shows traffic areas, but their formats, color schemes, and information vary, creating confusion and reducing the chart's effectiveness as safety tools.

Standardizing how these "high traffic" areas are depicted across the National Airspace System will ensure consistent communication of essential information. This includes highlighting areas of concentrated air traffic, suggested altitudes, and frequency use, all of which improve situational awareness.

Consistent charting benefits both local and transient pilots by providing predictable and uniform information, which enhances mutual awareness, improves air-to-air communication, and promotes vigilance during flight operations in and around areas of high air traffic.

By identifying, standardizing, and integrating the categorization of these “high traffic” areas and applying the “High Traffic Tour Area” methodology to this categorization initiative (utilizing the FAA’s existing Alert Area framework), the FAA can ensure the standardized delivery of flight and safety information to pilots.

APPROACH: The ARC recommends the following:

1. **Standardization of Chart Depiction**
    - Direct the FAA’s Aeronautical Information Services and Charting Group to develop a uniform Alert Area template for High Traffic Tour Areas on all sectional charts.
    - Clearly label these areas to alert both tour and non-tour pilots to the potential for dense traffic and the need for heightened vigilance and standard radio communication. Specify standardized content elements, including:
        - Identification of the area as a High Traffic Tour Area.
        - Recommended altitudes or flight corridors.
        - Radio frequencies to monitor;.
        - Notes on seasonal or operational variations, as applicable.
2. **Coordination and Data Source**
    - Base Alert Area placement and content on the FAA’s official list of High Traffic Tour Areas developed under Recommendation 10.
    - Require coordination between FSDOs, charting authorities, and local air-tour operators to validate information prior to publication.
3. **Publication and Maintenance**
    - Update Alert Areas during regular chart-cycle revisions and ensure new HTTAs are incorporated in a timely manner.
    - Provide digital chart equivalents for electronic flight bag (EFB) applications to maintain consistency across platforms.

12. Requiring and Implementing ADS-B

The FAA should require all commercial air tour (CAT) operators to equip tour aircraft with Automatic Dependent Surveillance–Broadcast (ADS-B) In and Out in all airspace. Furthermore, the FAA should expedite its expansion of ADS-B infrastructure and service coverage to support low-altitude and "High Traffic Tour Area" operations in heavily utilized airspace.

INTENT: Situational awareness is strengthened when pilots can see traffic and receive timely alerts. This recommendation requires ADS-B In/Out for CAT (with targeted exceptions) and accelerates service coverage along low-altitude tour routes.

Requiring ADS-B In and Out equipage in CAT aircraft would improve collision avoidance and overall situational awareness by ensuring CAT pilots have access to accurate and real-time traffic and flight information.

Combined with comprehensive ground-station coverage, ADS-B In/Out would enhance pilot decision-making, air-traffic coordination, and safety for both tour and GA aircraft operating in shared high traffic environments. This requirement should apply to all CAT operations, except limited-exposure *line of sight* flights that remain within visual range of their departure point, for which the added equipage burden would not provide a proportional safety benefit.

RATIONALE: Commercial air tour operations are conducted under VFR, where the requirement is to "see and avoid" air traffic. Furthermore, these operations typically occur at low altitudes and within confined airspace, where radar and ADS-B coverage is limited and traffic density can be high. While ADS-B Out equipage is currently required only in certain portions of the National Airspace System, many CAT operations occur outside of those areas. This leaves gaps in situational awareness for all aircraft operating in these areas.

Expanding the requirement for ADS-B In and Out equipage across all CAT operations, supported by reliable ground-station coverage, would provide CAT pilots with real-time air traffic information. This information would enhance pilot situational awareness by allowing them to visualize nearby traffic in addition to the "see and avoid" requirement. Furthermore, aural and visual alerts provided by ADS-B equipment would allow CAT pilots to make more informed avoidance decisions.

The ARC emphasizes that ADS-B data should be used solely for aviation safety purposes, such as enhancing pilot situational awareness and coordination. ADS-B data should not be used for punitive or disciplinary purposes. Its use, however, should be consistent with just-culture and SMS principles, as well as the protections provided by Part 193.

The ARC believes certain short-range operations that never leave the immediate vicinity of their departure point should be excepted from this ADS-B recommendation. Pilots conducting these operations maintain direct visual contact with surrounding traffic. In these cases, full ADS-B equipage may not yield a commensurate safety return. The ARC, therefore, supports a targeted exception for these operations.

APPROACH: The ARC recommends the following:

1. **Regulatory Requirement**
    - Amend 14 CFR Part 136 to add *§ 136.17 Automatic Dependent Surveillance–Broadcast (In and Out),* requiring all CAT aircraft to operate with ADS-B In and Out capability within two years of the final rule's effective date.
    - Apply the requirement in all airspace, with limited exceptions defined below.
2. **Excepted Aircraft**
    - Aircraft meeting any of the following conditions are excepted from the ADS-B recommendation:
        - Vintage Aircraft, as defined in proposed § 136.2.
        - Historic Operations, as defined in proposed § 136.2.
        - Aircraft whose configuration or manufacturer support precludes installation.
        (1) Open-cockpit aircraft where installation is impractical.
        - Aircraft for which ADS-B technology is not yet available.
        - Aircraft conducting tours solely outside designated High Traffic Tour Areas.
        - Aircraft limited to "line-of-sight" operations as defined in proposed § 136.2.
3. **Infrastructure Expansion**
    - Accelerate deployment of ADS-B ground stations and high-quality service coverage for low-altitude corridors, including Alaska and Hawaii.
    - Prioritize infrastructure along recognized High Traffic Tour Areas identified under Recommendation 10**.**
4. **Performance and Flexibility**

- Permit use of both installed and portable ADS-B In and Out devices, including beacon-based solutions, provided they meet established performance standards.
- Encourage development of lightweight, low-cost systems suitable for smaller aircraft.

5. **Non-Punitive Data Use**
   - Reinforce that ADS-B data collected under this requirement is to be used exclusively for safety, training, and operational safety/efficiency purposes within the context of SMS and FDM programs.
   - Prohibit use of ADS-B data for enforcement actions or punitive evaluation of individual pilot performance.

Below is a proposed regulatory framework for integration into the regulatory overhaul:

136.16 Automatic Dependent Surveillance-Broadcast (ADS-B) In and Out

(a) Two years after the effective date of the final rule, no person may operate a commercial air tour aircraft unless it is equipped with an Automatic Dependent Surveillance-Broadcast (ADS-B) In and Out system regardless of the airspace within which the commercial air tour is flown, except for any of those operations listed under paragraph (b) of this section.

(b) The following are excepted from this requirement:

(1) All aircraft considered Vintage Aircraft.

(2) All operations considered Historic Operations.

(3) Aircraft whose date of manufacture or configuration will not allow installation of the required equipment.

(4) Aircraft for which the manufacturer does not support the installation of the required equipment (i.e., orphaned aircraft) and the use of portable equipment is not practical (i.e., open cockpit).

(5) If ADS-B technology is not available for the aircraft flown.

(6) Aircraft flying tours in areas not designated as High Traffic Tour Areas.

(7) Aircraft that do not fly beyond line of sight from the point of departure.

(c) The ADS-B In and Out system must be operated from before takeoff until after termination of flight and can be portable or hardwired to the aircraft.

Recommendation for Additional Definitions under Part 136

Historic Operations – A flight for compensation or hire in which the purpose is to experience flight onboard a historically-significant aircraft due to its legacy or heritage. The viewing of ground sites that add to the historic element of the flight experience is acceptable in this definition.

Note: The ARC asserts that marketing and promotional efforts must reflect this as the primary purpose of the flight experience for "Historic Operations." Further, the ground sites that add to the historic element of the flight experience is an imperative qualifier for this definition. Specifically, the ARC intends to achieve inapplicability of the proposed § 136.1(a)(2) for operations that fall under this definition. The purpose of the flight is the experience of flight in a historic aircraft. Unlike conventional air tours, these operations do not emphasize ground-based sightseeing but instead center on the aircraft's historical and operational significance.

Line of Sight – The aircraft must be visible throughout the entire flight, without the aid of any device other than corrective lenses, to a person standing within 500 feet of the flight's point of origin/point of return. Adjacent buildings and obstacles to the point of origin that may obstruct the "line of sight" aspects of the operation do not disqualify the operation meeting the definition of "line of sight." Normal aircraft operations within the Airport Traffic Area (ATA), or equivalent geographical area surrounding an off-airport landing zone (LZ), are considered line-of-sight operations for the purpose of this definition.

Vintage Aircraft – An aircraft constructed by the original manufacturer (or licensee) on or before December 31, 1970.[19]

[19] Adapted from: Experimental Aircraft Association, *Vintage Aircraft Association Official Judging Standards*, July 24, 2017.

IX. Appendices

Appendix A – Full Recommended Part 136 Regulatory Text

PART 136— NATIONAL AIR TOUR STANDARDS

Subpart A—General Requirements and Authorizations

§ 136.1 Applicability.

(a) This part prescribes rules governing commercial air tour flights conducted for compensation or hire, as defined in § 136.2(a) of this subpart. Such operations must comply with the provisions of this part and with the applicable provisions of part 91 of this chapter. When any requirement of this part is more stringent than any other requirement of this chapter, the person operating the commercial air tour must comply with the requirement in this part. The FAA may consider the following factors in determining whether a flight is a commercial air tour for purposes of this subpart:
  (1) Whether there was a holding out to the public of willingness to conduct a sightseeing flight for compensation or hire;
  (2) Whether the person offering the flight provided a narrative that referred to areas or points of interest on the surface below the route of the flight;
  (3) The area of operation;
  (4) How often the person offering the flight conducts such flights;
  (5) The route of the flight;
  (6) The inclusion of sightseeing flights as part of any travel arrangement package; and
  (7) Whether the flight in question would have been canceled based on poor visibility of the surface below the route of the flight.

(b) This part applies to each person operating or intending to operate a commercial air tour, as defined in 136.2(a) of this part, and as provided in paragraph (c) of this section and except as provided in (d) of this section, and, when applicable, to all occupants of those aircraft engaged in Commercial Air Tour operations.

(c) Except as provided in paragraph (d) of this section, this part applies to:
  (1) Part 121 or 135 operators conducting a commercial air tour and holding a part 119 certificate.
  (2) Part 91 operators conducting flights as described in § 136.3(d); and
  (3) Part 91 operators conducting flights as described in 14 CFR 91.146, except that those operations are subject only to §§ 136.7 and 136.13 of this part.

(d) This subpart does not apply to operations conducted in balloons, gliders (powered and unpowered), parachutes (powered and unpowered), gyroplanes, or airships.

(e) In an in-flight emergency requiring immediate action, the pilot in command may deviate from any rule of this subpart to the extent required to meet that emergency.

(f) Additional requirements for powered-lift operations are set forth in part 194 of this chapter.

§ 136.2 Definitions.

For the purposes of this part, the following definitions apply:

Commercial air tour means a flight conducted for compensation or hire in an airplane, powered-lift, or rotorcraft where the sole purpose of the flight is sightseeing.

Commercial air tour operator means any person who conducts a commercial air tour, as defined in this part.

Flight data monitoring (FDM) means the collection of aircraft performance or flight parameter data by the operator for the sole purpose of flight operation and aircraft maintenance risk reduction.

High traffic tour area means an airspace region or route segment in which multiple commercial air tour operations and general aviation aircraft are concentrated within a geographically limited area, frequently at lower altitudes, with limited dispersal opportunities and mixing of different aircraft types, resulting in a heightened risk of traffic conflict. In such areas, enhanced procedures, communications, and traffic-awareness measures are required.

Historic operations refer to flight operations in aircraft of historical significance that are held out and conducted for educational, commemorative, or preservation purposes, and are offered for compensation or hire.

Life preserver means a flotation device used by an aircraft occupant if the aircraft ditches in water. If an inflatable device, it must be uninflated and ready for its intended use once inflated. In evaluating whether a non-inflatable life preserver is acceptable to the FAA, the operator must demonstrate to the FAA that such a preserver can be used during an evacuation and will allow all passengers to exit the aircraft without blocking the exit. Each occupant must have the physical capacity to wear and inflate the type of device used once briefed by the commercial air tour operator. Seat cushions do not meet this definition.

Line of sight means the aircraft must be visible throughout the entire flight, without the aid of any device other than corrective lenses, to a person standing within 500 feet of the flight's point of origin/point of return. Adjacent buildings and obstacles to the point of origin that may obstruct the “line of sight” aspects of the operation do not disqualify an operation meeting the definition of “line of sight”. Normal aircraft operations within the Airport Traffic Area (ATA), or equivalent geographical area surrounding an off-airport landing zone (LZ), are considered line-of-sight operations for the purpose of this definition.

Raw terrain means any area on the surface, including water, devoid of any person, structure, vehicle, or vessel.

Shoreline means that area of the land adjacent to the water of an ocean, sea, lake, pond, river or tidal basin that is above the high water mark and excludes land areas unsuitable for landing such as vertical cliffs or land intermittently under water during the particular flight.

Vintage Aircraft means an aircraft constructed by the original manufacturer (or licensee) on or before December 31, 1970.

§ 136.3 Authorizations.

(a) ***General requirements.*** A Commercial Air Tour operator, conducting passenger-carrying flights for compensation or hire, must meet the following requirements. The Commercial Air Tour operator must:
  (1) Register and implement its drug and alcohol testing programs in accordance with part 120 of this chapter.
  (2) Comply with the applicable requirements of part 5 of this chapter.

(b) ***Compliance.*** The Commercial Air Tour operator must apply for and receive a Letter of Authorization from the responsible Flight Standards office and must comply with the provisions of the Letter of Authorization received.

(c) **Application for *Letter of Authorization*.** Each application for a Letter of Authorization must include the following information:
  (1) Name of Operator, agent, and any d/b/a (doing-business-as) under which that Operator does business.
  (2) Principal business address and mailing address.
  (3) Principal place of business (if different from business address).
  (4) Name of person responsible for management of the business.
  (5) Name of person responsible for aircraft maintenance.
  (6) Type of aircraft, registration number(s), and make/model/series.
  (7) Antidrug and Alcohol Misuse Prevention Program registration.

(d) LOA Holders are authorized to conduct nonstop Commercial Air Tours that occur in an airplane, powered-lift, or rotorcraft having a standard airworthiness certificate and passenger-seat configuration of 30 seats or fewer and a maximum payload capacity of 7,500 pounds or less that begin and end at the same airport, and are conducted within a 25-statute mile radius of that airport, in compliance with the Letter of Authorization issued under this section. For nonstop Commercial Air Tours conducted in accordance with part 136, subpart C, of this chapter, National Parks Air Tour Management, the requirements of this part apply unless excepted in § 136.37(g)(2). For Nonstop Commercial Air Tours conducted in the vicinity of the

Grand Canyon National Park, Arizona, the requirements of SFAR 50-2, part 93, subpart U, of the chapter and this part, as applicable, apply.

(e) The provisions of § 119.51 of this chapter apply to the amendment, reconsideration, suspension, or revocation of Letters of Authorization issued under this part.

Subpart B— National Air Tour Standards, Operating Requirements

§ 136.5 General provisions and applicability.

(a) This subpart prescribes rules, in addition to those in part 91 of this chapter, that apply to operations under this part.

(b) This subpart applies to all commercial air tour flights as described in subpart A. Each person operating an aircraft in operations under this part shall comply with the applicable rules of this subpart.

§ 136.6 Pilot in command qualifications.

(a) No Commercial Air Tour operator may use a person, nor may any person serve, as pilot in command of an aircraft under air tour operations unless that person-

(1) Holds at least a commercial pilot certificate with appropriate category and class ratings; an appropriate type rating for that aircraft, if required; and for a powered-lift, a type rating for that aircraft; and

(2) Has had at least 5 hours as a pilot in command in that make and model (or type, as applicable) of aircraft.

§ 136.7 Air Tour Flight review.

(a) Except as provided in paragraph (d) of this section, no commercial air tour operator may use a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, that pilot has completed an air tour flight review in the make and model of aircraft to be flown in air tour service, consisting of at least 1 hour of flight training and 1 hour of ground training, given by an FAA-certificated flight instructor familiar with the operating environment, intended to train and evaluate that pilot's knowledge in the following areas—

(1) A review of the current general operating and flight rules of parts 136 and applicable 91 of this chapter; and

Except as provided in paragraph (d) of this section, no commercial air tour operator may use a pilot, nor may any person serve as a pilot, unless, since the beginning of the 12th calendar month before that service, that pilot has completed an air tour flight review in the make and model of aircraft to be flown in air tour service, consisting of at least 1 hour of flight training and 1 hour of ground training, given by an FAA-certificated flight instructor familiar with the operating environment, intended to train and evaluate that pilot's knowledge in the following areas—

(2) A review of the pilot's proficiency in practical skills and techniques in that make and model of aircraft. The review may include any of the maneuvers and procedures currently required for the original issuance of the particular pilot certificate required for the commercial air tour operations authorized and appropriate to the category, class, and make/model of aircraft involved. The extent of the review shall be determined by the authorized instructor conducting the air tour flight review, but must include:
    (i.) Local Weather Patterns
    (ii.) Navigation to include terrain awareness and obstacle clearance
    (iii.) Recovery from inadvertent IMC
    (iv.) Recovery from unusual flight attitudes

(a) Except as provided in paragraph (d) of this section, if a crewmember who is required to take an air tour flight review under this part, completes that flight review in the calendar month before or after the calendar month in which it is required, that crewmember is considered to have completed the flight review in the calendar month in which it is required.

(b) A logbook endorsement by the authorized instructor who gave the air tour flight review certifies that the pilot has satisfactorily completed the review.

(c) To satisfy the requirement for the air tour flight review, the requirements of §135.293 or § 121.441 may be used as a substitute when those checks are completed in the make and model of aircraft to be flown in air tour service and when completed within the preceding 12 calendar months.

(d) The requirements of this section may be accomplished in combination with the requirements of § 61.56 or § 61.57 and other applicable recent experience requirements at the discretion of the authorized instructor conducting the air tour flight review.

§ 136.8 Passenger briefings.

(a) Before takeoff each pilot in command shall ensure that each passenger has been briefed on the following:
    (1) Procedures for fastening and unfastening seatbelts;
    (2) Prohibition on smoking; and
    (3) Procedures for opening exits and exiting the aircraft.

(b) For flight segments over water beyond the shoreline, briefings must also include:
    (1) Procedures for water ditching;
    (2) Use of required life preservers; and
    (3) Procedures for emergency exit from the aircraft in the event of a water landing.

(c) If any passengers on board a flight conducted under this part are secured with a supplemental restraint system, the pilot in command of that flight must ensure those passengers are briefed in accordance with § 91.108(g) of this chapter.

§ 136.9 Life preservers for operations over water.

(a) Except as provided in paragraphs (b) or (c) of this section, the operator and pilot in command of commercial air tours over water beyond power-off glide distance from the shoreline must ensure that each occupant is wearing a life preserver from before takeoff until flight is no longer over water.

(b) The operator and pilot in command of a commercial air tour over water beyond power-off glide distance from the shoreline must ensure that a life preserver is readily available for its intended use and easily accessible to each occupant if

(1) The aircraft is equipped with floats; or

(2) The aircraft is a multiengine that can be operated with the critical engine inoperative at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the approved aircraft flight manual for that aircraft.

(c) No life preserver is required if the overwater operation is necessary only for takeoff or landing.

§ 136.11 Rotorcraft floats for over water.

(a) A rotorcraft used in commercial air tours over water beyond power-off glide distance from the shoreline must be equipped with fixed floats or an inflatable flotation system adequate to accomplish a safe emergency ditching, if—

(1) It is a single-engine rotorcraft; or

(2) It is a multi-engine rotorcraft that cannot be operated with the critical engine inoperative at a weight that will allow it to climb, at least 50 feet a minute, at an altitude of 1,000 feet above the surface, as provided in the approved aircraft flight manual for that aircraft.

(b) Each rotorcraft that is required to be equipped with an inflatable flotation system under this section must have:

(1) The activation switch for the flotation system on one of the primary flight controls; and

(2) The flotation system armed when the rotorcraft is over water beyond the shoreline and flying at a speed that does not exceed the maximum speed prescribed in the approved aircraft flight manual for flying with the flotation system armed.

(c) Neither fixed floats nor an inflatable flotation system is required for a rotorcraft under this section when that rotorcraft is over water only during the takeoff or landing portion of the flight.

§ 136.13 Rotorcraft performance plan.

(a) Each operator that uses a rotorcraft must complete a performance plan before each commercial air tour or flight operated under this part. The pilot in command must review the performance plan for accuracy and compliance on the day of the flight. The performance plan must be based on information in the approved aircraft flight manual for that aircraft, taking into consideration the maximum density altitude for which the operation is planned, in order to determine:
  (1) Maximum gross weight and center of gravity (CG) limitations for hovering in ground effect;
  (2) Maximum gross weight and CG limitations for hovering out of ground effect; and
  (3) Maximum combination of weight, altitude, and temperature for which height/velocity information in the approved aircraft flight manual is valid.

(b) Except for the approach to and transition from a hover for the purpose of takeoff and landing, or during takeoff and landing, the pilot in command must make a reasonable plan to operate the rotorcraft outside of the caution/warning/avoid area of the limiting height/velocity diagram.

(c) Except for the approach to and transition from a hover for the purpose of takeoff and landing, during takeoff and landing, or when necessary for safety of flight, the pilot in command must operate the rotorcraft in compliance with the plan described in paragraph (b) of this section.

§ 136.15 Flight Data Monitoring System and Program

(a) Two years after the effective date of the final rule no person may operate a commercial air tour aircraft unless it is equipped with a flight data monitoring system capable of collecting flight data for the sole purpose of operational risk reduction, except for any of those operations listed under paragraph (b) of this part.

(b) The following are excepted from this requirement:
  (1) All aircraft considered Vintage Aircraft.
  (2) All operations considered Historic Operations.
  (3) Aircraft whose date of manufacture or configuration will not allow installation of the required equipment.
  (4) Aircraft for which the manufacturer does not support the installation of the required equipment (i.e., orphaned aircraft) and the use of portable equipment is not practical (i.e., open cockpit).
  (5) Aircraft that do not fly beyond line of sight.
  (6) A single aircraft owner/operator type operation.

(c) The data collection system must be operated from before takeoff until after termination of flight and can be portable or hardwired to the aircraft.

§ 136.17 Automatic Dependent Surveillance-Broadcast (ADS-B) In and Out

(a) Two years after the effective date of the final rule, no person may operate a commercial air tour aircraft unless it is equipped with an Automatic Dependent Surveillance-Broadcast (ADS-B) In and Out system regardless of the airspace within which the commercial air tour is flown, except for any of those operations listed under paragraph (b) of this section.

(b) The following are excepted from this requirement:
  (1) All aircraft considered Vintage Aircraft.
  (2) All operations considered Historic Operations.
  (3) Aircraft whose date of manufacture or configuration will not allow installation of the required equipment.
  (4) Aircraft for which the manufacturer does not support the installation of the required equipment (i.e., orphaned aircraft) and the use of portable equipment is not practical (i.e., open cockpit).
  (5) If ADS-B technology is not available for the aircraft flown.
  (6) Aircraft flying tours in areas not designated as High Traffic Tour Areas.
  (7) Aircraft that do not fly beyond line of sight from the point of departure.

(c) The ADS-B In and Out system must be operated from before takeoff until after termination of flight and can be portable or hardwired to the aircraft.

Subpart C— Airworthiness Standards, Aircraft Maintenance Requirements

§ 136.19 Applicability.

(a) This subpart prescribes aircraft airworthiness requirements for operations under this part. The requirements of this subpart are in addition to the aircraft and equipment requirements of part 91 of this chapter. However, this part does not require the duplication of any equipment required by this chapter.

(b) No Commercial Air Tour operator may operate an aircraft unless that aircraft is:
  (1) Inspected in accordance with the applicable provisions of § 91.409;
  (2) Maintained under applicable parts 91 and 43 of this chapter;
  (3) Equipped in accordance with part 91 of this chapter, as applicable to the operations being conducted in that aircraft; and
  (4) In compliance with the requirements of this subpart.

(c) No person may operate an aircraft under this part unless that aircraft and its equipment meet the applicable regulations of this chapter.

(d) Provisions for Emergency Maintenance:
  (1) A Commercial Air Tour Operator who operates under the provisions of this part is permitted to use a person who is otherwise authorized to perform aircraft

maintenance or preventive maintenance duties and who is not subject to anti-drug and alcohol misuse prevention programs to perform—

(i.) Aircraft maintenance or preventive maintenance on the operator's aircraft if the operator would otherwise be required to transport the aircraft more than 50 nautical miles further than the repair point closest to the operator's principal place of operation to obtain these services; or

(ii.) Emergency repairs on the operator's aircraft if the aircraft cannot be safely operated to a location where an employee subject to FAA-approved programs can perform the repairs.

(2) An operator who utilizes the provisions of paragraph (d) of this section shall, as soon as practical, have the aircraft re-inspected by a maintenance provider that meets the requirements of part 120 of this chapter.

§ 136.21 Service difficulty reports.

(a) Each Operator shall report the occurrence or detection of each failure, malfunction, or defect in an aircraft concerning—

(1) Fires during flight and whether the related fire-warning system functioned properly;

(2) Fires during flight not protected by related fire-warning system;

(3) False fire-warning during flight;

(4) An exhaust system that causes damage during flight to the engine, adjacent structure, equipment, or components;

(5) An aircraft component that causes accumulation or circulation of smoke, vapor, or toxic or noxious fumes in the crew compartment or passenger cabin during flight;

(6) Engine shutdown during flight because of flameout;

(7) Engine shutdown during flight when external damage to the engine or aircraft structure occurs;

(8) Engine shutdown during flight due to foreign object ingestion or icing;

(9) Shutdown of more than one engine during flight;

(10) A propeller feathering system or ability of the system to control overspeed during flight;

(11) A fuel or fuel-dumping system that affects fuel flow or causes hazardous leakage during flight;

(12) An unwanted landing gear extension or retraction or opening or closing of landing gear doors during flight;

(13) Brake system components that result in loss of brake actuating force when the aircraft is in motion on the ground;

(14) Aircraft structure that requires major repair;

(15) Cracks, permanent deformation, or corrosion of aircraft structures, if more than the maximum acceptable to the manufacturer or the FAA; and

(16) Aircraft components or systems that result in taking emergency actions during flight (except action to shut-down an engine).

(b) For the purpose of this section, *during flight* means the period from the moment the aircraft leaves the surface of the earth on takeoff until it touches down on landing.

(c) In addition to the reports required by paragraph (a) of this section, each Operator shall report any other failure, malfunction, or defect in an aircraft that occurs or is detected at any time if, in its opinion, the failure, malfunction, or defect has endangered or may endanger the safe operation of the aircraft.

(d) Each Operator shall submit each report required by this section, covering each 24-hour period beginning at 0900 local time of each day and ending at 0900 local time on the next day, to the FAA offices in Oklahoma City, Oklahoma. Each report of occurrences during a 24-hour period shall be submitted to the collection point within the next 96 hours. However, a report due on Saturday or Sunday may be submitted on the following Monday, and a report due on a holiday may be submitted on the next workday.

(e) The Operator shall transmit the reports required by this section on a form and in a manner prescribed by the Administrator, and shall include as much of the following as is available:

(1) The type and identification number of the aircraft.

(2) The name of the operator.

(3) The date.

(4) The nature of the failure, malfunction, or defect.

(5) Identification of the part and system involved, including available information pertaining to type designation of the major component and time since last overhaul, if known.

(6) Apparent cause of the failure, malfunction or defect (e.g., wear, crack, design deficiency, or personnel error).

Other pertinent information necessary for more complete identification, determination of seriousness, or corrective action.

(f) An Operator that is also the holder of a type certificate (including a supplemental type certificate), a Parts Manufacturer Approval, or a Technical Standard Order Authorization, or that is the licensee of a type certificate need not report a failure, malfunction, or defect under this section if the failure, malfunction, or defect has been reported by it under § 21.3 or § 37.17 of this chapter or under the accident reporting

provisions of 49 CFR part 830 of the regulations of the National Transportation Safety Board.

(g) No person may withhold a report required by this section even though all information required by this section is not available.

(h) When the Operator gets additional information, including information from the manufacturer or other agency, concerning a report required by this section, it shall expeditiously submit it as a supplement to the first report and reference the date and place of submission of the first report.

§ 136.23 Mechanical interruption summary report.

Each Operator shall mail or deliver, before the end of the 10th day of the following month, a summary report of the following occurrences in multiengine aircraft for the preceding month to the responsible Flight Standards office:

(a) Each interruption to a flight, unscheduled change of aircraft, route of flight, or unscheduled stop or diversion from a route, caused by known or suspected mechanical difficulties or malfunctions that are not required to be reported under § 136.21.

(b) The number of propeller featherings in flight, listed by type of propeller and engine and aircraft on which it was installed. Propeller featherings for training, demonstration, or flight check purposes need not be reported.

§ 136.25 Additional maintenance requirements.

(a) Except as provided in (c) of this section, each Commercial Air Tour Operator must comply with the manufacturer's recommended maintenance programs, or a program approved by the Administrator, for each aircraft engine, propeller, rotor, and each item of emergency equipment required by this chapter.

(b) For the purpose of this section, a manufacturer's maintenance program is one which is contained in the maintenance manual or maintenance instructions set forth by the manufacturer as required by this chapter for the aircraft, aircraft engine, propeller, rotor or item of emergency equipment.

(c) The following are excepted from this requirement:

(1) All aircraft considered Vintage Aircraft.

(2) All operations considered Historic Operations.

(3) Aircraft for which the manufacturer no longer exists, provides airworthiness support, or has no current recommendations or maintenance instructions in place (i.e., orphaned aircraft).

Subpart D—National Parks Air Tour Management

<NO CHANGES PROPOSED>

Subpart E— Grand Canyon National Park

<NO CHANGES PROPOSED>

Appendix B – Air Tour Fatal Accident Rates

Table B.1 – Subset of Air Tour Accident Fatal Accident Rates 2008 – 2023 Analyzed by the ARC

NTSB Number Full	Event Year	Event Date	City	State or Region	Highest Injury Levels	Fatal Injuries	Serious Injuries	Damage Level	Aircraft Category	Aircraft Make	Aircraft Model	Registration Number	Regulation Flight Conducted Under	Flight Scheduled Type	Flight Operation Type	CICTT Phase Name	CICTT Occurrence Name	AT Confirm	PAX Confirm	Notes
ANC13FA054	2013	04-Jun-13	Petersburg	Alaska	Fatal	1	2	Substantial	Airplane	DEHAVILLAND	BEAVER DHC-2 MK.1	N616W	Part 135: Air taxi & commuter	Non-scheduled		Enroute	Loss of Control In-Flight	TRUE	TRUE	LOC in flight - stalled and impacted terrain
CEN13LA325	2013	06-Jun-13	New Braunfels	Texas	Minor	0	0	Substantial	Helicopter	Robinson Helicopter Company	R22 Beta	N137DF	Part 91: General aviation		Aerial observation	Maneuvering	System/Component Failure - Powerplant	FALSE	FALSE	Not a commercial air tour flight
CEN13LA347	2013	08-Jun-13	Arvada	Colorado	Serious	0	1	Substantial	Balloon	AEROSTAR INTERNATIONAL INC	RX 8	N7059U	Part 91: General aviation		Personal	Landing	Collision on Takeoff or Landing			
CEN13LA356	2013	08-Jun-13	Golden	Colorado	Serious	0	1	Minor	Balloon	ULTRAMAGIC	N-250	N753ZF	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
CEN13CA372	2013	24-Jun-13	Windsor	Colorado	Serious	0	2	Minor	Balloon	KUBICEK	BB70Z	N1235J	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
CEN13LA396	2013	28-Jun-13	Lake Ozark	Missouri	None	0	0	Substantial	Helicopter	BELL	47D1	N78900	Part 91: General aviation		Other work use	Enroute	Fuel Related	TRUE	TRUE	Improper maintenance of the fuel system and inspections
WPR13CA333	2013	20-Jul-13	Hood River	Oregon	Serious	0	1	Substantial	Glider	SCHWEIZER	SGS 2-33A	N2052T	Part 91: General aviation		Personal	Approach	Loss of Lift			
WPR13CA342	2013	25-Jul-13	Hilo	Hawaii	None	0	0	Substantial	Helicopter	MCDONNELL DOUGLAS HELICOPTER	369E	N500PH	Part 135: Air taxi & commuter	Non-scheduled		Approach	Fuel Related	TRUE	TRUE	Took off too little fuel and exhausted fuel
ERA13LA433	2013	27-Sep-13	Bloomsburg	Pennsylvania	Fatal	1	0	Minor	Helicopter	ENSTROM	F-28C	N631DP	Part 91: General aviation		Other work use	Standing	Ground Handling	FALSE	FALSE	pilot struck by turning rotor after flight changeover- not a commercial tour flight
WPR14LA049	2013	09-Nov-13	Temecula	California	Serious	0	5	None	Balloon	FIREFLY BALLOONS, INC	FIREFLY 10	N1623L	Part 91: General aviation		Other work use	Unknown	Fire - Non-Impact			
WPR14CA097	2013	29-Dec-13	Napa	California	None	0	0	Substantial	Balloon	CAMERON BALLOONS US	A-400	N65298	Part 91: General aviation		Other work use	Enroute	Windshear/Thunderstorm			
ERA14CA143	2014	10-Feb-14	Orlando	Florida	None	0	0	Substantial	Helicopter	ROBINSON HELICOPTER	R44	N7040U	Part 91: General aviation		Other work use	Standing	Other	FALSE	FALSE	Not a tour flight - was pre-flight activity prior to pax flights
ERA14CA166	2014	23-Mar-14	Saint Petersburg	Florida	None	0	0	Substantial	Airplane	WACO	UIC	N13562	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact	TRUE	TRUE	LOC on landing from ground loop
WPR14CA168	2014	14-Apr-14	Mayer	Arizona	Minor	0	0	Substantial	Balloon	LINSTRAND	240A	N2646Z	Part 91: General aviation		Aerial observation	Enroute	Controlled Flight Into Terrain			
WPR14FA186	2014	10-May-14	Page	Arizona	Fatal	1	1	Substantial	Airplane	CESSNA	T207A	N7311U	Part 91: General aviation		Aerial observation	Enroute	System/Component Failure - Powerplant	TRUE	TRUE	loss of engine power + strong wind shear/gusts
WPR14LA235	2014	07-Jun-14	Page	Arizona	None	0	0	Substantial	Airplane	CESSNA	172N	N5589E	Part 135: Air taxi & commuter	Non-scheduled		Approach	Loss of Control In-Flight	TRUE	TRUE	LOC on landing - improper crosswind technique and go-around technique
ERA14LA290	2014	15-Jun-14	Spring City	Pennsylvania	Fatal	1	0	None	Balloon	CAMERON BALLOONS US	Z-225	N65625	Part 91: General aviation		Business	Landing	Other			
WPR14LA251	2014	17-Jun-14	Wailuku	Hawaii	None	0	0	Substantial	Helicopter	AIRBUS	AS 350 BA FX1	N6094H	Part 135: Air taxi & commuter	Non-scheduled		Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Part 133/Rev Flt. Tour/Strike damage to tailboom during flt.
ERA14LA347	2014	19-Jul-14	Clinton	Massachusetts	Serious	0	3	Minor	Balloon	COLT BALLOONS	160A	N976TC	Part 91: General aviation		Other work use	Approach	Controlled Flight Into Terrain			Ballon flight
WPR14LA313	2014	25-Jul-14	Boulder City	Nevada		0	0	Substantial	Helicopter	EUROCOPTER	EC 130 B4	N154GC	Part 135: Air taxi & commuter	Non-scheduled		Landing	Ground Collision	TRUE	TRUE	ECB 130B4 and Twin Otter collided on ground record 104/105
WPR14LA313	2014	25-Jul-14	Boulder City	Nevada	None	0	0	Minor	Airplane	DEHAVILLAND	DHC 6 300	N190GC	Part 135: Air taxi & commuter	Non-scheduled		Taxi	Ground Collision	FALSE	TRUE	ECB 130B4 and Twin Otter collided on ground record 101/105

NTSB Number Full	Event Year	Event Date	City	State or Region	Highest Injury Levels	Fatal Injuries	Serious Injuries	Damage Level	Aircraft Category	Aircraft Make	Aircraft Model	Registration Number	Regulation Flight Conducted Under	Flight Scheduled Type	Flight Operation Type	CICTT Phase Name	CICTT Occurrence Name	AT Confirm	PAX Confirm	Notes
ANC14FA068	2014	24-Aug-14	Coldfoot	Alaska	Serious	0	4	Substantial	Airplane	RYAN	NAVION A	N4827K	Part 135: Air taxi & commuter	Non-scheduled		Maneuvering	Controlled Flight Into Terrain	TRUE	TRUE	Poor judgement decision-making low level maneuvering
WPR14CA396	2014	13-Sep-14	Phoenix	Arizona	Minor	0	0	Substantial	Balloon	ULTRAMAGIC	N250 - NO SERIES	N59EX	Part 91: General aviation		Other work use	Landing	Windshear/Thunder storm			
ERA15CA035	2014	25-Oct-14	Montevallo	Alabama	Serious	0	1	None	Balloon	HEAD	AX8 88B	N20671	Part 91: General aviation		Personal	Landing	Abnormal Runway Contact			
WPR15CA044	2014	17-Nov-14	Wittman	Arizona	Serious	0	1	Substantial	Balloon	ULTRAMAGIC	N-250	N59EX	Part 91: General aviation		Aerial observation	Landing	Collision on Takeoff or Landing			
ERA15LA138	2015	15-Feb-15	Sevierville	Tennessee	None	0	0	Substantial	Helicopter	BELL	206	N3176L	Part 91: General aviation		Aerial observation	Takeoff	System/Component Failure - Powerplant	TRUE	TRUE	Engine failure on takeoff. Mx issue
GAA15LA015	2015	14-Mar-15	Peoria	Arizona	Serious	0	1	Minor	Balloon	ULTRAMAGIC SA	N210	N210UM	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
GAA15CA038	2015	12-Apr-15	Sherwood	Oregon	Minor	0	0	Substantial	Balloon	ULTRAMAGIC	M90 - NO SERIES	N890VB	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
GAA15CA075	2015	12-Apr-15	Intercourse	Pennsylvania	Minor	0	0	Substantial	Balloon	HEAD BALLOONS INC.	AX8 105 - NO SERIES	N3099F	Part 91: General aviation		Other work use	Takeoff	Collision on Takeoff or Landing			
ERA15CA226	2015	23-May-15	LaGrangeville	New York	Serious	0	1	None	Balloon	AEROSTAR INTERNATIONAL	S-60A	N6517X	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
ANC15LA033	2015	31-May-15	Talkeetna	Alaska	Serious	0	1	Substantial	Airplane	CESSNA	185	N1694M	Part 135: Air taxi & commuter	Non-scheduled	Conflict between operator reporting no to revenue sightseeing flight and NTSB report indicating	Approach	Midair	TRUE	TRUE	Pilot landed on top of another airplane.
ANC15MA041	2015	25-Jun-15	Ketchikan	Alaska	Fatal	9	0	Substantial	Airplane	DEHAVILLAND	DHC-3	N270PA	Part 135: Air taxi & commuter	Non-scheduled	revenue sightseeing flight	Enroute	Controlled Flight Into Terrain	TRUE	TRUE	CFIT while enroute
ANC15CA042	2015	27-Jun-15	Anchorage	Alaska	None	0	0	Substantial	Airplane	CESSNA	U206G	N756BW	Part 135: Air taxi & commuter	Non-scheduled	Pilot lost control on landing/conflict between 6120 not scenic/final scenic	Landing	Loss of Control on Ground	FALSE	TRUE	Conflict between Pilot/Operator Report (Not rev. flt. seeing)
CEN15LA300	2015	02-Jul-15	Fort Carson	Colorado	Serious	0	2	None	Balloon	BALONY KUBICEK SPOL	BB60Z	N210GB	Part 91: General aviation		Business	Landing	Abnormal Runway Contact			
GAA15LA195	2015	18-Jul-15	Hidden Valley Lake	California	Serious	0	3	None	Balloon	KUBICEK	BB100Z	N938BS	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
GAA15LA225	2015	31-Jul-15	Peoria	Arizona	Serious	0	1	None	Balloon	ULTRAMAGIC	N250 - NO SERIES	N57EX	Part 91: General aviation		Other work use	Standing	Loss of Control on Ground			
ERA15LA319	2015	15-Aug-15	New Holland	Pennsylvania	Serious	0	2	Minor	Balloon	HEAD	AX9 118	N40104	Part 91: General aviation		Other work use	Standing	Loss of Control on Ground			
GAA16CA014	2015	08-Oct-15	Albuquerque	New Mexico	Serious	0	1	None	Balloon	KUBICEK	BB	N106KB	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
GAA16CA049	2015	14-Nov-15	Carlsbad	California	None	0	0	Substantial	Airplane	CURTISS WRIGHT	Travel Air	N9872	Part 91: General aviation		Other work use	Landing	Loss of Control on Ground	FALSE	TRUE	LOC on landing; pilot's improper recovery from a bounced landing
ERA16LA054	2015	26-Nov-15	Destin	Florida	None	0	0	Substantial	Helicopter	ROBINSON HELICOPTER COMPANY	R44 II	N7512N	Part 91: General aviation		Other work use	Unknown	System/Component Failure - Non-power	TRUE	TRUE	system failure on ground - flex plate sheared
WPR16FA055	2016	17-Jan-16	Hanalei	Hawaii	Serious	0	7	Substantial	Helicopter	AIRBUS	EC130	N11VQ	Part 135: Air taxi & commuter	Scheduled		Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Enroute system failure
WPR16LA070	2016	13-Feb-16	Petaluma	California	Serious	0	1	Minor	Balloon	AEROSTAR INTERNATIONAL	RX8	N3647A	Part 91: General aviation		Business	Landing	Other			
WPR16FA072	2016	18-Feb-16	Honolulu	Hawaii	Fatal	1	3	Substantial	Helicopter	BELL	206B	N80918	Part 91: General aviation		Aerial observation	Enroute	System/Component Failure - Non-power	TRUE	TRUE	Transmission failure
GAA16LA172	2016	12-Mar-16	Rock Hill	South Carolina	Serious	0	1	None	Balloon	BALLOON WORKS	FIREFLY8B	N3180S	Part 91: General aviation		Personal	Landing	Abnormal Runway Contact			

NTSB Number Full	Event Year	Event Date	City	State or Region	Highest Injury Levels	Fatal Injuries	Serious Injuries	Damage Level	Aircraft Category	Aircraft Make	Aircraft Model	Registration Number	Regulation Flight Conducted Under	Flight Scheduled Type	Flight Operation Type	CICTT Phase Name	CICTT Occurrence Name	AT Confirm	PAX Confirm	Notes
ERA16FA144	2016	04-Apr-16	Pigeon Forge	Tennessee	Fatal	5	0	Destroyed	Helicopter	BELL	206	N16760	Part 91: General aviation		Aerial observation	Maneuvering	System/Component Failure - Powerplant	TRUE	TRUE	Engine driven fuel pump failure
ERA16LA172	2016	30-Apr-16	Tyrone	Georgia	None	0	0	Substantial	Airplane	CHAMPION	7BCM	N7620B	Part 91: General aviation		Other work use	Enroute	Other	TRUE	TRUE	Inconclusive - engine power loss but no cause found
CEN16LA183	2016	13-May-16	Edmond	Oklahoma	Serious	0	1	Substantial	Balloon	CAMERON BALLOONS US	Z-150	N6952D	Part 91: General aviation		Business	Landing	Abnormal Runway Contact			
GAA16CA272	2016	23-May-16	Chinita Bay	Alaska	None	0	0	Substantial	Airplane	CESSNA	U206G	N4596U	Part 135: Air taxi & commuter	Non-scheduled		Taxi	Abnormal Runway Contact	FALSE	TRUE	Damage on ground during taxi - subsequent flight uneventful - Part 135 Transportation - unscheduled
ERA16LA210	2016	10-Jun-16	Nunda	New York	Fatal	1	0	None	Balloon	CAMERON	A-225	N69515	Part 91: General aviation		Aerial observation	Standing	Loss of Control on Ground			
CEN16LA254	2016	02-Jul-16	Austin	Texas	Minor	0	0	Substantial	Airplane	WACO	YMF-F5C	N30AB	Part 91: General aviation		Aerial observation	Enroute	Fuel Related	TRUE	TRUE	Fuel exhaustion due to mismanagement of fuel tanks
DCA16MA204	2016	30-Jul-16	Lockhart	Texas	Fatal	16	0	Destroyed	Balloon	KUBICEK	BB85	N2469L	Part 91: General aviation		Business	Approach	Controlled Flight Into Terrain			
CEN16LA294	2016	30-Jul-16	Oshkosh	Wisconsin	None	0	0	Substantial	Helicopter	BELL	47G 2	N975BH	Part 91: General aviation		Other work use	Approach	System/Component Failure - Powerplant	TRUE	TRUE	Throttle assembly separated and came apart
CEN16FA331	2016	24-Aug-16	Telluride	Colorado	Fatal	2	0	Substantial	Glider	STEMME GMBH & CO	S10 VT	N5021	Part 91: General aviation		Business	Enroute	Other			
CEN16LA338	2016	27-Aug-16	New Orleans	Louisiana	Fatal	2	0	Substantial	Airplane	CESSNA	172	N984RA	Part 91: General aviation		Other work use	Approach	Controlled Flight Into Terrain	TRUE	TRUE	CFIT after encountering low-viz due to rain
ERA17LA029	2016	22-Oct-16	Mount Ulla	North Carolina	Serious	0	1	Minor	Balloon	AEROSTAR INTERNATIONAL	RX8	N9015Y	Part 91: General aviation		Other work use	Landing	Abnormal Runway Contact			
GAA17CA082	2016	14-Nov-16	Winters	California	Serious	0	1	None	Balloon	CAMERON	A315	N69520	Part 91: General aviation		Aerial observation	Standing	Loss of Control on Ground			
GAA17CA077	2016	22-Nov-16	San Diego	California	None	0	0	Substantial	Airplane	CURTISS WRIGHT	TRAVEL AIR 4000	N3242	Part 91: General aviation		Business	Taxi	Ground Collision	TRUE	TRUE	Ground collision with other aircraft during taxi
CEN17LA118	2017	20-Feb-17	Albuquerque	New Mexico	None	0	0	Substantial	Balloon	THUNDER & COLT AIRBORNE AMER	AX10 180	N709TC	Part 91: General aviation		Business	Approach	Loss of Control In-Flight			
GAA17CA167	2017	26-Feb-17	Las Vegas	Nevada	None	0	0	Substantial	Helicopter	EUROCOPTER	EC130	N864MH	Part 135: Air taxi & commuter	Non-scheduled		Taxi	Ground Collision	TRUE	TRUE	Ground collision with other aircraft during taxi
ERA17LA163	2017	20-Apr-17	Orlando	Florida	None	0	0	Substantial	Helicopter	ROBINSON	R44	N899GB	Part 91: General aviation		Other work use	Enroute	Loss of Control in flight	TRUE	TRUE	Combination of failure of engine tachometer and pilot improper inputs
GAA17CA262	2017	22-Apr-17	Park City	Utah	None	0	0	Substantial	Balloon	BALONY KUBICEK SPOL SRO	BB70Z	N245DK	Part 91: General aviation		Business	Landing	Loss of Control In-Flight			
WPR17LA097	2017	05-May-17	Santa Barbara	California	Serious	0	3	Destroyed	Helicopter	ROBINSON HELICOPTER	R44	N981RR	Part 91: General aviation		Other work use	Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Total loss of engine power
CEN17LA192	2017	20-May-17	Canon City	Colorado	None	0	0	Substantial	Helicopter	ROBINSON HELICOPTER CO	R66	N778TL	Part 91: General aviation		Other work use	Approach	Loss of Control In-Flight	TRUE	TRUE	Pilot lost control on approach
ANC17LA025	2017	22-May-17	Juneau	Alaska	Minor	0	0	Substantial	Helicopter	AIRBUS	AS350	N207CH	Part 135: Air taxi & commuter	Non-scheduled		Enroute	Unintended Flight Into IMC	TRUE	TRUE	Pilot flew into bad weather CFIT
GAA17CA294	2017	28-May-17	Petersville	Alaska	None	0	0	Substantial	Airplane	DEHAVILLAND	DHC 2	N561TA	Part 135: Air taxi & commuter	Non-scheduled		Landing	Loss of Control on Ground	TRUE	TRUE	Pilot LOC unsuitable terrain
ANC17LA032	2017	18-Jun-17	Ketchikan	Alaska	Minor	0	0	Substantial	Airplane	DEHAVILLAND	DHC-2	N930TG	Part 135: Air taxi & commuter	Non-scheduled		Takeoff	Collision on Takeoff or Landing	TRUE	TRUE	Pilot misjudged take off distance collided with trees
WPR17LA144	2017	23-Jun-17	Page	Arizona	None	0	0	Substantial	Airplane	CESSNA	U206F	N71001	Part 135: Air taxi & commuter	Non-scheduled		Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Power plant system failure

NTSB Number Full	Event Year	Event Date	City	State or Region	Highest Injury Levels	Fatal Injuries	Serious Injuries	Damage Level	Aircraft Category	Aircraft Make	Aircraft Model	Registration Number	Regulation Flight Conducted Under	Flight Scheduled Type	Flight Operation Type	CICTT Phase Name	CICTT Occurrence Name	AT Confirm	PAX Confirm	Notes
WPR17LA133	2017	27-Jun-17	Boulder City	Nevada	Minor	0	0	Substantial	Helicopter	EUROCOPTER	EC 130 B4	N151GC	Part 135: Air taxi & commuter	Non-scheduled		Enroute	System/Component Failure - Powerplant	TRUE	TRUE	loss of engine power manufacturer did not install oil filter
CEN17LA322	2017	04-Jul-17	Hamilton	Ohio	None	0	0	Substantial	Airplane	CLASSIC AIRCRAFT CORP	WACO YMF	N17XK	Part 91: General aviation		Other work use	Landing	Loss of Control on Ground	FALSE	TRUE	Pilot lost directional control on landing
ERA17LA243	2017	14-Jul-17	Murfreesboro	Tennessee	Serious	0	1	None	Balloon	BALLOON WORKS	FIREFLY 8B 15	N3282P	Part 91: General aviation		Aerial observation	Standing	Ground Handling			
WPR17LA159	2017	21-Jul-17	Van Nuys	California	Serious	0	3	Substantial	Helicopter	ROBINSON HELICOPTER COMPANY	R44 II	N3254E	Part 91: General aviation		Other work use	Enroute	System/Component Failure - Non-power	TRUE	TRUE	Mechanical improper repair magneto
CEN17LA283	2017	22-Jul-17	Austin	Texas	Minor	0	0	Substantial	Airplane	CESSNA	180	N3119D	Part 91: General aviation		Other work use	Initial Climb	Loss of Control In-Flight	TRUE	TRUE	Pilot improper decision to take off
ERA17LA257	2017	24-Jul-17	Myrtle Beach	South Carolina	None	0	0	Substantial	Helicopter	ROBINSON HELICOPTER	R44	N828RD	Part 91: General aviation		Other work use	Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Loss of power main rotor combined with pilot decision to continue flight
WPR17LA216	2017	25-Sep-17	Tamuning		None	0	0	Substantial	Airplane	CESSNA	172P	N5448K	Part 91: General aviation		Other work use	Enroute	System/Component Failure - Powerplant	TRUE	TRUE	Loss of engine power; oil exhaustion
GAA18CA016	2017	06-Oct-17	Albuquerque	New Mexico	Serious	0	1	Substantial	Balloon	ULTRAMAGIC SA	T210	N123UT	Part 91: General aviation		Aerial observation	Standing	Ground Collision			
WPR18MA087	2018	10-Feb-18	Peach Springs	Arizona	Fatal	5	2	Destroyed	Helicopter	EUROCOPTER	EC130	N155GC	Part 135: Air taxi & commuter	Non-scheduled		Approach	Loss of Control In-Flight	TRUE	TRUE	Collision with terrain, gusting tail wind and pilot loss of control
WPR18LA092	2018	19-Feb-18	Obyan	Other Foreign	Minor	0	0	Substantial	Airplane	CESSNA	172	N7328F	Part 91: General aviation		Aerial observation	Enroute	Fuel Related	TRUE	TRUE	Loss of engine power; pilot failed to monitor fuel (Aeriel Observation?)
WPR18CA100	2018	19-Feb-18	Pacific Ocean	Pacific Ocean	Minor	0	0	Substantial	Helicopter	HUGHES	369D	N501VS	Part 91: General aviation		Aerial observation	Maneuvering	Unknown	FALSE	FALSE	Fish spotting
ERA18MA099	2018	11-Mar-18	New York	New York	Fatal	5	0	Substantial	Helicopter	AMERICAN EUROCOPTER CORP	AS350B2	N350LH	Part 91: General aviation		Other work use	Standing	Other	TRUE	TRUE	Engine failure on takeoff. Pax pulled fuel shut-off lever
ERA18LA116	2018	24-Mar-18	Wesley Chapel	Florida	Minor	0	0	Substantial	Balloon	LINDSTRAND BALLOONS	105A	N1517H	Part 91: General aviation		Aerial observation	Landing	Collision on Takeoff or Landing			
GAA18CA185	2018	28-Mar-18	Cave Creek	Arizona	None	0	0	Destroyed	Balloon	ULTRAMAGIC SA	N 300	N64EX	Part 91: General aviation		Business	Taxi	Fire - Non-Impact			
GAA18CA321	2018	01-Jun-18	Ketchikan	Alaska	Minor	0	0	Substantial	Airplane	DEHAVILLAND	BEAVER DHC 2	N203KL	Part 135: Air taxi & commuter	Non-scheduled		Landing	Loss of Control on Ground	TRUE	TRUE	LOC; failure to main pitch and directional control
CEN18FA217	2018	09-Jun-18	Moose	Wyoming	Fatal	2	0	Destroyed	Glider	LET	L 23 SUPER BLANIK	N317BA	Part 91: General aviation		Business	Maneuvering	Loss of Control In-Flight			
CEN18LA309	2018	03-Aug-18	Hartsel	Colorado	Fatal	1	1	None	Balloon	Cameron	A 250	N2025J	Part 91: General aviation		Business	Landing	Cabin Safety Events			
ANC18FA063	2018	04-Aug-18	Talkeetna	Alaska	Fatal	5	0	Substantial	Airplane	De Havilland	DHC-2	N323KT	Part 135: Air taxi & commuter	Non-scheduled		Enroute	CFIT	TRUE	TRUE	Impact with terrain; reason unknown
CEN19MA141	2019	13-May-19	Ketchikan	Alaska	Fatal	6	9	Destroyed	Airplane	De Havilland	DHC-2	N952DB	Part 135: Air taxi & commuter	Non-scheduled		Maneuvering	Midair	TRUE	TRUE	Failure to see and avoid. Collision with aircraft in with line item182
WPR20FA206	2020	05-Jul-20	Coeur d'Alene	Idaho	Fatal	8	0	Destroyed	Airplane	De Havilland	DHC-2	N2106K	Part 91: General aviation		Aerial observation	Enroute	Midair	TRUE	TRUE	Failure to see and avoid causing collision
ANC21FA069	2021	05-Aug-21	Ketchikan	Alaska	Fatal	6		Destroyed	Airplane	DEHAVILLAND	DHC-2 MK.I	N1249K	Part 135: Air taxi & commuter	Non-scheduled		Enroute	CFIT	TRUE	TRUE	IIMC Resulting in a collision with terrain
ANC22LA063	2022	26-Jul-22	Anchorage	Alaska	Serious		2	Substantial	Airplane	DE HAVILLAND	DHC2	N9776R	Part 135: Air taxi & commuter	Non-scheduled	Aerial observation	Initial Climb	Loss of Control In-Flight	TRUE	TRUE	Pilot failed to maintain directional control in winds on takeoff

Appendix C – Acronyms

ADS-B - Automatic Dependent Surveillance-Broadcast

ATA - Air Traffic Area

ATFR - Air Tour Flight Review

ARC - Aviation Rulemaking Committee

CAROL - Case Analysis and Reporting Online (NTSB)

CAT – Commercial Air Tours

CFIT – Controlled Flight Into Terrain

GA- General Aviation

FAA - Federal Aviation Administration

FDM - Flight Data Monitoring

FSDO – Flight Standards District Office

HTTA – High Traffic Tour Area

IMC - Instrument Meteorological Conditions

LOA - Letter of Authorization

LOC - Loss of Control

LOS - Line of Sight

LZ – Landing Zone

NTSB - National Transportation Safety Board

PIC - Pilot in Command

SFAR – Special Federal Aviation Regulations

SMS - Safety Management Systems

VAST – Vertical Aviation Safety Team

VFR – Visual Flight Rules

Appendix D – List of Participants

FAA & Industry Co-Chairs	Organization
Jake Harmon	Maverick Helicopters
Michael Mosher	FAA

CAT ARC Industry Members	Organization
Aaron Singer	Seaplane & Aero Adventures
Bruce J. Mayes	Vintage Aviation LLC Pacific Warbirds
Casey Riemer	Jack Harter Helicopters, Inc.
Clark Frederick Miller	Taquan Air
David Oliver	Commemorative Air Force
Eric Hamp	Blue Hawaiian Helicopters
Jake Harmon	Maverick Helicopters
John Becker	Papillon Helicopters
Mark Andrew Schlaefli	Rushmore Helicopters
Matt Goodrich	Columbus Helicopters
Nicole Battjes	Rainbow Helicopters
Sean Elliott	Experimental Aircraft Association
Suzanne Rust	K2 Aviation
Zac Noble	Vertical Aviation International
Zohrab Grigorian	ALG Group, LLC

SMEs and Contractors	Organization
Loren Groff	NTSB
Eric Emery	NTSB
Corey Stephens	FAA and member of GAJSC
Cade Clark	Vertical Aviation International
David Hays	FAA
Kurt Stiefel	FAA
Tim Harris	FAA
Sandra Ray	FAA
Glen McElroy	FAA
Allison Kendrick	FAA
Eloise Trabka	FAA
John Attebury	FAA
Anastasia Hempel	The Regulatory Group (TRG)
Ann Masse	The Regulatory Group (TRG)
Puja Sardana	The Regulatory Group (TRG)

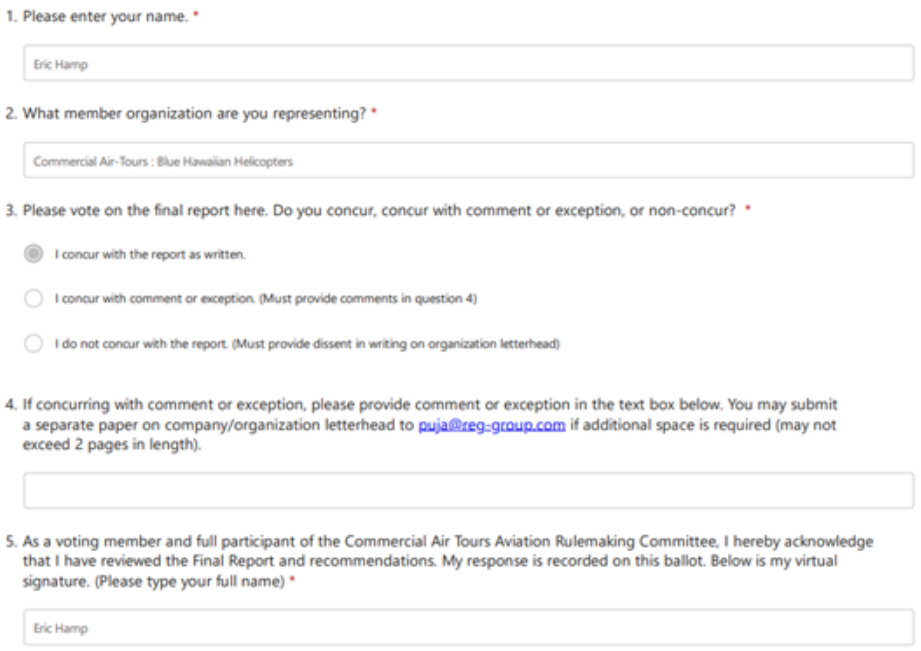
Appendix E – Voting and Ballots

The ARC believes this report fulfills the tasks in the mission of the Charter. The recommendations contained in this report were robustly debated and every voting member of the ARC voted on the report electronically prior to submission to the FAA.

Members were permitted to concur as written, concur with comment/exception, or not concur.

All CAT ARC Industry members listed in Appendix D voted to concur with the report as written. All submissions are included in this report below.

15 – Concur as Written
0 – Concur with Comment/Exception
0 – Non-Concur
0 – Ballot Not Submitted



1. Please enter your name. *

Eric Hamp

2. What member organization are you representing? *

Commercial Air-Tours : Blue Hawaiian Helicopters

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

- (●) I concur with the report as written.
- ( ) I concur with comment or exception. (Must provide comments in question 4)
- ( ) I do not concur with the report. (Must provide dissent in writing on organization letterhead)

4. If concurring with comment or exception, please provide comment or exception in the text box below. You may submit a separate paper on company/organization letterhead to puja@reg-group.com if additional space is required (may not exceed 2 pages in length).

5. As a voting member and full participant of the Commercial Air Tours Aviation Rulemaking Committee, I hereby acknowledge that I have reviewed the Final Report and recommendations. My response is recorded on this ballot. Below is my virtual signature. (Please type your full name) *

Eric Hamp

1. Please enter your name. *

Sean Elliott

2. What member organization are you representing? *

EAA

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Sean Eric Elliott

1. Please enter your name. *

Mark Schlaefli

2. What member organization are you representing? *

Dakota Rotors, LLC

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Mark Schlaefli

1. Please enter your name. *

John Becker

2. What member organization are you representing? *

Papillon Airways Inc.

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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John E. Becker

1. Please enter your name. *

Matt Goodrich

2. What member organization are you representing? *

Columbus Helicopters

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Matthew Ryan Goodrich

1. Please enter your name. *

Bruce J. Mayes

2. What member organization are you representing? *

Vintage Aviation LLC Pacific Warbirds

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Bruce J. Mayes

1. Please enter your name. *

Aaron Singer

2. What member organization are you representing? *

Seaplane & Aero Adventures

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Saul Aaron Singer

1. Please enter your name. *

Casey Riemer

2. What member organization are you representing? *

Jack Harter Heicopters

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Casey Riemer

1. Please enter your name. *

Jake Harmon

2. What member organization are you representing? *

Maverick Helicopters

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Jake Harmon

1. Please enter your name. *

Clark Miller

2. What member organization are you representing? *

Training.

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Clark Miller

1. Please enter your name. *

Suzanne Sloan Rust

2. What member organization are you representing? *

K2 Aviation

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Suzanne Sloan Rust

1. Please enter your name. *

Nicole Battjes

2. What member organization are you representing? *

Rainbow Helicopters

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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Nicole Battjes

1. Please enter your name. *

David Oliver

2. What member organization are you representing? *

Commemorative Air Force

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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David Oliver

1. Please enter your name. *

Zac Noble

2. What member organization are you representing? *

Vertical Aviation International

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

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- ( ) I concur with comment or exception. (Must provide comments in question 4)
- ( ) I do not concur with the report. (Must provide dissent in writing on organization letterhead)

4. If concurring with comment or exception, please provide comment or exception in the text box below. You may submit a separate paper on company/organization letterhead to puja@reg-group.com if additional space is required (may not exceed 2 pages in length).

5. As a voting member and full participant of the Commercial Air Tours Aviation Rulemaking Committee, I hereby acknowledge that I have reviewed the Final Report and recommendations. My response is recorded on this ballot. Below is my virtual signature. (Please type your full name) *

Zachary Q Noble

1. Please enter your name. *

Zohrab Grigorian

2. What member organization are you representing? *

ALG Group, LLC

3. Please vote on the final report here. Do you concur, concur with comment or exception, or non-concur? *

- (●) I concur with the report as written.
- ( ) I concur with comment or exception. (Must provide comments in question 4)
- ( ) I do not concur with the report. (Must provide dissent in writing on organization letterhead)

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Zohrab Grigorian