

**ORDER**

U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

GL 1800.35

GREAT LAKES REGION

10/1/97

**SUBJ:** The Great Lakes Regional Configuration Management

1. **PURPOSE.** This order establishes policy and assigns responsibility for Configuration Management (CM) issues involved in the change control process, and provides guidelines for accomplishing these activities. It identifies the procedures used in processing National Airspace System (NAS) Change Proposals (NCPs). It focuses on the Great Lakes Region's drawing management procedures and outlines the process used in updating facility baseline drawings. Additionally, it outlines the baseline process for Air Traffic Control Towers (ATCT), Terminal Radar Approach Control (TRACON), Automated Flight Service Station (AFSS) facilities and the activities involved in this program. The appendices to this order contain guidance in the various areas of the CM program, and are listed in paragraph, 10.
2. **DISTRIBUTION.** This order is distributed to the branch level in the Airway Facilities, and Air Traffic Division and to all Airway Facilities and Air Traffic Field Offices/Facilities.
3. **BACKGROUND.** The latest edition of FAA Order 1800.8, NAS Configuration Management, extends the Configuration Control Board (CCB) structure to include Regional CCB's with authority delegated by the NAS CCB. The Great Lakes Region AGL Regional Configuration Control Board (RCCB) is chartered and assigned specific responsibility for managing configuration items (CI's) under the cognizance of the NAS CCB. All other NAS change proposals NOT granted by the Charter shall be submitted in accordance with the latest edition of FAA Order 1800.8 and NAS-MD-001, NAS Master Configuration Index. This local order also identifies the procedures to be followed when updating facility baseline drawings for Air Route Traffic Control Centers, AFSS's and the currently baselined ATCT/TRACON facilities.
4. **AUTHORITY.** The AGL RCCB is authorized by the NAS CCB in accordance with, the latest edition of FAA Order 1800.57, NAS Configuration Control Board, and the policies and procedures established by FAA Order 1800.8, NAS Configuration Management. FAA Order 1800.8, Chapter 1. Par 11f, states that the Manager of Airway Facilities Division has the responsibility to provide the technical and administrative direction to control changes and record configuration and change implementation status to all Configuration Items (CIs) under their control, ARTCC, ATCT/TRACON, AFSS, and FAA/AF joint use ARSR-4 facilities are included as CIs. Program management is then delegated to AGL-471, Operations Section.
5. **REGIONAL CCB RESPONSIBILITIES.** The AGL RCCB shall have responsibilities and perform functions as established in their current Charter. This includes approving and implementing the AGL RCCB procedures. The RCCB Charter and Operating Procedures identify regional responsibilities involved in the operation of the RCCB. These documents are available upon request to the CM Program Office in AGL-471.

**Distribution:**

A-X (AF/AT) -3; A-FAF-0; A-FAT-0 (LTD)

**Initiated By:**

AGL-471A

6. CONFIGURATION MANAGEMENT. Configuration Management is the process of coordinating the review and approval of proposed changes and maintaining status of approved changes to configuration items. NCPs are required for proposing changes to subsystems, equipment and software under configuration management as listed in the current NAS-MD-001. FAA NAS Change Proposal, Form 1800-2, is the form used to propose changes to these CIs.

7. INITIATION OF NAS CHANGE PROPOSALS (NCPs). FAA Form 1800-2 is used to establish or propose a change to a NAS baseline CI. The proposed change is a Case File until it has been assigned an NCP number. Case Files that address issues relating to space and equipment management at the Air Route Traffic Control Centers (ARTCC), Automated Flight Service Station (AFSS) and Air Traffic Control Tower (ATCT) facilities are processed locally and routed thru AGL-471A, to the appropriate evaluators within the Regional Office and/or Field Offices. They are reviewed at the monthly RCCB meetings and approved for implementation. Case Files that propose a change to other than those CIs are reviewed locally and then sent to the Office of Primary Responsibility (OPR) for prescreen. After they are approved in prescreen they are sent to Headquarters (HQ) for must evaluation where approval is made by a national CCB. The Configuration Control Decision approving a NCP must be received before implementation. The exception to that approval is an emergency modification, implemented prior to NCP approval and can be referenced in the current version of FAA Order 6032.1 Modifications to Ground Facilities, Systems and Equipment in the NAS. FAA NAS Change Proposal Form 1800-2 is Figures 3 and 4, to this order.

8. DRAWING PROCEDURES. The procedures for updating facility baseline drawings are published as Appendix 2. These procedures outline the steps required for ARTCC, AFSS, and currently baselined ATCT/TRACON facilities.

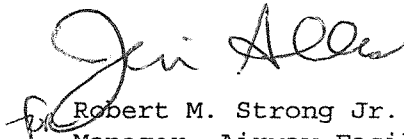
9. PROGRAM RESPONSIBILITIES. In Appendix 1, Configuration Management responsibilities and CM processing procedures are identified. Appendix 2, identifies drawing and notification procedures and Appendix 3, the roles and responsibilities for the baseline activities. The AGL RCCB Charter and Procedures further identify CM responsibilities. The CM Program Manager, AGL-471A, is responsible for processing the documentation associated with Case Files/NCPs and is the OPR involving CM issues.

10. APPENDICES. The Appendix section that is part of this order contains documents that outline specific guidance on a particular area in CM. This collection of CM documents provides the reader the most comprehensive local guidance available. The three appendices attached are:

- a. Appendix (1) The Procedures for Processing Case Files and NCPs.
- b. Appendix (2) Baseline Drawing procedures.
- c. Appendix (3) Regional Baseline activities for ATCT/AFSS/TRACON Facilities.
- d. A listing of CM related documents can be found in FAA Order 1800.8.

11. RECOMMENDATION. The need for current facility configuration data will continue to grow as new and replacement systems are deployed. The CM Program provides the means to establish and maintain facility baselines with minimal impact to regional operations. CM drawings provide those benefits that can be seen as a planning tool for space allocation, cost savings on less duplication, and a source for accurate information readily available. Project checklists or coordination sheets used in installation or construction projects by the engineering groups and the System Management Offices (SMOs) can be adopted to serve as a reminder or to include NCP notification. Ensure that an NCP is generated before a project is implemented as per the National FAA Order 1800.8.

12. GUIDANCE. An NCP needs to be generated whenever a change affects the CM drawings of a baselined facility before the project is implemented as per the National FAA Order 1800.8. The engineering groups in the NAS Implementation Branch, AGL-450 that are implementing Facilities & Equipment F&E projects effecting a baselined facility are responsible for creating and submitting an NCP to Program Management Section, AGL-471A. To facilitate the processing of NCPs, Program Management Section, AGL-459 will coordinate with the engineering group responsible for project implementation and provide notification to them to help ensure an NCP is submitted. The SMOs that are implementing projects effecting a baselined facility are responsible for creating and submitting an NCP to AGL-471A, when the project is nationally or locally funded and F&E is not involved in implementation.



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## APPENDIX 1

PROCEDURES FOR PROCESSING REGIONAL CASE-FILES NCPs1. Case Files/NCPs Originated by System Management Office - SMO.

a. All Case Files/NCPs shall be prepared in accordance with paragraph 6 of this Appendix and forwarded to the respective Manager for Technical Support (MTS) for review.

b. All Case Files/NCPs shall be properly coordinated with other local FAA organizations having a primary interest in the subject of a specific Case File/NCP. Each Airway Facilities reviewing office shall coordinate Case Files/NCPs with the local Air Traffic office as required. As a minimum, a copy of all locally submitted Case Files/NCPs shall be forwarded to the local Air Traffic office for concurrence, prior to submitting the signed Case File/NCP to the Regional Office.

c. After the Case File/NCP package has been reviewed by the MTS and signed by the SMO Manager, it shall be forwarded directly to AGL-471A. Employee Suggestions shall be sent to the Executive Staff, AGL-410, for administrative purposes prior to evaluation.

d. A copy of the Case File/NCP package shall be filed in the Sector Facility Reference Data File in accordance with Order 6030.45, Facility Reference Data File.

2. Case Files/NCPs Originated by the ARTCC-Airway Facilities and Tenants.

a. All Case Files/NCPs shall be prepared in accordance with Paragraph 6 and forwarded to the respective MTS for review.

b. All Case Files/NCPs shall be properly coordinated within the ARTCC with units having a primary interest in the subject of a specific Case File/NCP. The MTS shall coordinate Case Files/NCPs with the local Air Traffic office as required. As a minimum, a copy of all locally submitted Case Files/NCPs shall be forwarded to the local Air Traffic office for concurrence, prior to submitting the signed Case File/NCP to the Regional Office.

c. The NAS Coordination Office (NCO) will review/originate all Case Files/NCPs that concern Space Management/Site-Specific Equipment Layout Drawings, and Critical Power Panel Drawings, and ensure that those Case Files/NCPs are coordinated with the local Air Traffic Facility Manager. These types of Case Files/NCPs are under the cognizant review of the RCCB.

d. After the Case Files/NCP package has been reviewed by the MTS and signed by the SMO Manager, it shall be forwarded directly to AGL-471A.

3. Case Files/NCPs Originated by Airway Facilities Branches/Staff.

a. All Case File/NCP packages originated by Branches/Staff within the Division shall be prepared in accordance with Paragraph 6, of this appendix.

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b. After the Case File/NCP package has been reviewed and signed by the originating Branch Manager, it shall be forwarded directly to AGL-471A, to be properly routed as sited below and for additional coordination.

c. All Case File/NCPs will be properly coordinated with the SMO which it effects and that review should be documented on the Case File/NCP form in block 24.

d. Case Files originating from the Airway Facilities divisional branches and staff offices will be properly coordinated with other divisions within the region that have a primary interest in the subject of a specific Case File/NCP. That review should be documented on the Case File/NCP form in Block 25 or where appropriate.

4. Procedures For Processing Headquarters/Other Regional Case File/NCP's.  
Regional responsibilities are:

a. AGL-471A will be the AF Division receiving office for all incoming Case File/NCPs from Headquarters or other Regions.

b. AGL-471A, shall forward the Case File/NCP package to the designated OPR and intra-region evaluators for review as appropriate (reference FAA Form 1800-15, Case Files Transmittal/Evaluation). The OPR will consolidate comments submitted by their evaluators, recommend approval/disapproval of the package and will return their response to AGL-471A. AGL-471A, will ensure the evaluations are combined into one collective position for Airway Facilities Division AGL-400, and for Operations Branch, AGL-470, regional signature.

c. AGL-471A, will coordinate the Case File/NCP package within AGL-470 and with the SMO's when determined necessary. AGL-470, evaluators (as with all Case Files presented for review and evaluation) can coordinate with field offices SMO/Centers and System Support Centers (SSC) that could provide valid input on issues presented in a Case File/NCP. It should be part of the AGL-470 evaluators review and can be reflected as part of the overall evaluation, that field input will be indicated in the comment section of Block 25 of Form 1800.2 or on additional sheets if needed. The AGL-470 evaluator shall comment in Block 25 and obtain appropriate signatures to complete the review and return it to AGL-471A.

5. Operations Group, AGL-471A, Configuration Management Program Office Responsibilities. (GENERAL).

a. Provide clarification to NCP originators in the preparation of NCP/Case Files.

b. Upon receipt of the Case File/NCP package from the SMO/SSC/Branch/Staff, AGL-471A shall review the package and coordinate necessary corrections in accordance with the latest revision of Order 1800.8, NAS Configuration Management, and NAS-MD-001.

c. AGL-471A, shall forward the Case File/NCP package to the designated Office(s) of Primary Responsibility (OPR) within the Regional Office, for evaluation. When required, additional field review may be obtained to supplement

the overall evaluation. Evaluators shall ensure that program concerns and general policy positions are consistent with their organization. The review or evaluation should consider operational effectiveness, including safety. The top grids in block 25 of the NCP form indicating position shall be completed and then forwarded to AGL-471A. The CM group will obtain the signature from AGL-470 as designee for the division and forward as appropriate. When the NCP is national in scope an inter-regional review would be appropriate and all regions are provided a copy for review. (Reference FAA Form 1800-15, Case File Transmittal/Evaluation.) In the case when an NCP is being processed through the RCCB, the signature of AGL-470 can be obtained after it is approved at the RCCB meeting along with the CCD's identifying the actions to be completed.

d. AGL-471A, will notify the originator when the Case File has received a non-concur or a disapproval. The originator, along with the designated OPR should provide a Resolution Of Comments (ROC) that address the non-concurs and the evaluators comments. This ROC will further explain the proposal and recommend approval or disapproval of the Case File. If a ROC is not provided and notification is not given to AGL-471A, the originator will be informed of the option of NCP withdrawal, indicating to drop the proposal. The ROC process may also be initiated at any stage of NCP processing and is designed to give the originator or OPR another opportunity to provide a more detailed narrative of the conditions of the change or modification. When no additional input is provided by the originator after notification is made it is understood to mean the proposal is no longer valid and may be withdrawn. It is further understood that without the NCP approval it will not be implemented as per the current version of FAA Order 1800.8.

e. If the Case File is recommended for approval and identified as requiring headquarters approval, it is forwarded to the National Airway Systems Engineering Division, AOS-200, the appropriate prescreening organization or to ASD-220, Configuration Management Branch, for NCP processing. The package will then be reviewed by designated Must Evaluators in HQ and submitted to the National Level Configuration Control Board for issuance of a Configuration Control Decision (CCD).

f. An approved CCD will identify the required actions to be taken and will be sent to the office of origination or actionee to implement the change. Upon completion, notification is required by submitting a signed verification grid or its equivalent to the AGL-471A, office. FAA Form 1800-49 NAS Configuration Control Decision form along with the backside "Verification grid" are Figures 1 and 2 to this appendix.

g. For NCPs that affect equipment placement or space allocation at the ARTCC, ATCT and AFSS facilities, the CM group in AGL-471A will assign an NCP number to the Case File. After RCCB review and approval a CCD is then issued to the originator/ actionee to assign action items to implement the change. AGL-471A, will track the accomplishment of the NCP and hold the CCD in suspension until notification is received. The verification grid or its equivalent is the vital link that closes out the original proposal in the CM databases. If the actual equipment or space changes are not installed in accordance with the Case File, the originator or group responsible for installation shall submit a redline adjustment showing the actual change. This adjustment, showing actual placement, can be submitted on a portion of or the entire drawing and returned to AGL-471A with the CCD verification grid for further updating of the baseline drawings.

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6. INSTRUCTION FOR COMPLETING FAA FORM 1800-2. The Case File/NCP prepared on FAA Form 1800-2 is used to propose changes to or establish baselines of NAS systems/subsystems and their associated documentation.

a. General Instructions. All pages of the Case File/NAS Change Proposal (NCP) should be numbered and clearly marked page (A) of (B), where (A) is the actual page number and (B) is the total number of pages. Blocks 1 through 22 are to be completed by the originator, using additional sheets if necessary. If a block is not applicable, designate with "N/A." Whenever possible, all information should be typed on the form. See Figures 3 and 4 of this appendix for an sample of Form 1800-2. A copy of the NCP form is available on automated hard disk, by contacting the AGL-471A, office.

b. Detailed Instructions.

(1) BLOCK 1, CASE FILE NUMBER. This number should be a unique identification number with a standard format, i.e. GRBAF-ILS-001.

(a) The first five characters will identify the affected facility and originating division, i.e. GRBAF, CLEAT, HONAF, ORDAT. The Case Files originated within the Regional Office (RO) will use the affect facility ident with either RF (Regional Airway Facilities Division) or RT (Regional Air Traffic Division) added to it, i.e. ORDRT, HONRF, MSNRT, MSPRF. This method will remove the possibility of duplicate Case File numbers, to better manage the many changes that occur at each site, and keep uniformity in the process. Case Files having a national impact should contain the individual SMO identifier that the facility is located in, i.e. SUPAF, DMSAF, OHIRT, etc.

(b) The center group can consist of five characters or spaces that represent the acronym for the subsystem the Case File proposal is affecting. In most cases this will correspond to the Facility Master File (FMF) acronym for the subsystem or the Configuration Item (CI) as identified in the NAS-MD-001 document, i.e. ILS, AFSS, PAMRI, ASR, DMN, etc.

(c) The last group of three digits denotes consecutive number assigned by the originator's organization for the specific subsystem identified in the center group (e.g., 001, 027, etc.).

**NOTE:** Numbers are assigned consecutively for the life of the system, do not start over again at the beginning of the calendar year.

(d) A capital letter added at the end of a Case File number denotes an amendment to that Case File (e.g., A, B, C, etc.).

(2) BLOCK 2, PRESCREENING OFFICE. Required field for all field-initiated Case Files and headquarters-initiated Case Files affecting the top level NAS documents. Prescreening offices perform reviews for technical merit and feasibility of each change. The prescreening offices are found in the NAS-MD-001 document.

(a) Other (BLANK). Used when other than a regular prescreening office is identified (e.g., Regional prescreening office of Regional Configuration Control Board (RCCB), AGL-470, or ASD-220 for the installation and siting criteria waivers).

(3) BLOCK 3, SCOPE OF CHANGE. Select one applicable scope of change.

(a) Local. Case File is local in scope (i.e., applies to one or more identified sites--not nationally applied) and can be approved by either a Headquarters Configuration Control Board (CCB) (e.g., ANF-200 or ME) or a Regional CCB (AT software Case Files are approved at the national level).

(b) Test. Case File is for a limited duration and site(s) must be specified (approved by a Headquarters CCB).

(c) National. Case File is national in scope (applicable to all items of type specified) and is approved by a Headquarters CCB.

(d) Capital Investment Plan. Case File affects items under the Capital Investment Plan (should require F & E funding).

(4) BLOCK 4, PROGRAM ELEMENT. Represents a broad functional area of the NAS as defined in the NAS Level 1 Design Document (NAS-DD-1000) or the Master Configuration Index (MCI). Check only one Program Element indicating the functional area to which the Configuration Item (CI) affected by the Case File belongs. (Refer to NAS-MD-001 for additional information.)

(5) BLOCK 5, LIFE-CYCLE BASELINE. Select one applicable life-cycle baseline.

(a) Requirements Determination. For Case Files affecting NAS System Requirements Specification (NAS-SR-1000), Level 1 Design Document (NAS-DD-1000), or NAS System Specification (NAS-SS-1000).

(b) Acquisition. There are four baselines which may apply to a subsystem in the acquisition process:

1 Functional. A CI's functional baseline will include the system/segment specification and interface documentation (interface requirements and interface control documents).

2 Allocated. A CI's allocated baseline may include a development specification, a software requirements specification, an interface requirements specification, and an operational concept document.

3 Design. This baseline is usually applied to software development programs, although hardware may be included. It consists of the preliminary software product specification in interface control documents.

4 Product. This baseline consists of the approved technical documentation defining the configuration of a CI during production, operation, maintenance and logistics support.



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(c) Operational. For Case Files affecting operational/fielded NAS subsystems. Most field-initiated Case Files affect the operational baseline.

(6) BLOCK 6, PRIORITY. Select only one priority. If time-critical or urgent, justification MUST be provided in Block 22g. See the current version of FAA Order 6032.1 Modifications to Ground Facilities, Systems, and Equipment in the NAS for authorization of emergency modifications.

(a) Normal. Classification for Case Files that do not meet criteria of urgent or time-critical.

(b) Time-Critical. Classification restricted to changes truly requiring expeditious processing (e.g., need CCD by certain date, to support schedule of other projects, budget related, etc.). Reason and required date must be specified in Block 22g.

(c) Urgent. Classification for changes which will prevent a prolonged outage or catastrophic failure to operational systems or correct unsafe conditions (per FAA Order 6032.1). Include explanation under justification in Block 22g.

(7) BLOCK 7, SUPPLEMENTAL CHANGE FORM. Used to identify initiating change documentation, such as Engineering Change Request (ECR), Engineering Change Proposal (ECP), Technical Employee Suggestion (TES) or other change forms such as the Hardware Discrepancy Report (HDR). If a change form other than ECR/ECP or TES is used, place a check mark in the "blank box" and write the name of the form on the line next to the box. A copy of the change form used to initiate the Case File must be attached. If not applicable, this block is marked N/A.

(a) Supplemental Change Number. If either ECR/ECP, TES or "blank box" is checked in the upper portion of Block 7, then the corresponding ECR/ECP, TES or other number must be supplied as the Supplemental Change Number.

(b) Supplemental Change Initiation Date. The date of initiation of either the ECR/ECP, TES or other supplemental change is entered here.

(8) BLOCK 8, CASE FILES ORIGINATOR. Case File originator's full name must be printed in this block.

(9) BLOCK 9, ORIGINATOR ORGANIZATION. The organization of the originator identified in Block 8 must be entered in this block.

(10) BLOCK 10, TELEPHONE NUMBER. The commercial telephone number of the originator identified in Block 8 must be entered in this block.

(11) BLOCK 11, CASE FILES INITIATION DATE. The date of initiation of the Case File is entered here.

(12) BLOCK 12, BASELINE DOCUMENT TYPE. At least one baseline document type MUST be selected. Multiple selections can be made only if multiple types of baseline documents are being changed by a Case File. (Reference NAS-MD-001.)

- (a) CPFS = Computer Program Functional Specification
- (b) TI = Technical Instruction Book
- (c) SPEC = Specification
- (d) DWG = Drawing
- (e) MTBK = Maintenance Technical Handbook
- (f) IRD/ICD = Interface Requirements Document/Interface Control Document

(13) BLOCK 13, BASELINE DOCUMENT NUMBER(S). The document number of each baseline document must be provided. In most cases, Case Files without identified documentation cannot be processed. (Reference NAS-MD-001.)

(14) BLOCK 14 - CI SUBSYSTEM DESIGNATOR.

(a) For hardware or software subsystems in the operational support phase, the CI subsystem designator is the FMF facility acronym (e.g., ARSR, CD, COM, DF, VOR). If an FMF/FSEP facility acronym does not exist for the CI, the FAA project acronym is used (ARSR-2, ASR-7, and ATCBI-5). CI designators for software include program category designators (i.e., CPF, CPH and CPT) or subsystem designators (i.e., AR2, AR3, EARTS and MPS).

(b) For hardware or software subsystems in the acquisition phase, the FAA project acronym is the CI subsystem designator (TDWR, WMSCR, AFSSWS).

(c) For changes that apply to the top level NAS documents, the CI designator "NAS" is used, as well as the CI subsystem designators for specific CI's (TCCC, ACCC, ISSS, etc.).

(15) BLOCK 15, FA TYPE. A number (format: FA-00000). Whenever equipment or software having an assigned FA type number is affected by the proposed change, that FA type number should be provided.

(16) BLOCK 16, CI COMPONENT DESIGNATOR. Equipment or software component CI's of NAS subsystems may appear in NAS-MD-001, although they do not have assigned FA type numbers. If the component CI affected by a proposed change appears in NAS-MD-001, the corresponding CI component designator should be cited on the Case File as it appears in NAS-MD-001 (e.g., 2-1-6-1-2, - 352103, Type 55 Localizer).

(17) BLOCK 17, FACILITY IDENTIFIER (FACID). For Local and Test Case Files. (Format: AABBBBBCCCC) This is an eleven character field (i.e., GLASRGRB) with the first two characters "GL" representing the Region, the second set of up to five characters identify the system or CI being effected, and the third group of up to four characters "GRB" representing the Location per the FMF/FSEP. The identifier is entered on the form the same way it is entered into DOCCON, each character has a place and if there is no character for a given place then a space is the proper character. Enter "N/A" for National and Capital Investment Plan (CIP) Case Files.

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(18) BLOCK 18, FACILITY CODE (FACCODE). For Local and Test Case Files. This is a five digit code which breaks the facility down to its lowest unit as per FAA Order 1375.4 Standard data elements, Facility Identification and Supplements (ASDE-2 would be entered 45512). Enter "N/A" for National and CIP Case Files.

**NOTE:** This field does not apply to Air Traffic operational Case Files.

(19) BLOCK 19, COST CENTER CODE. (Format: 00000) Five character alphanumeric code indicating cost center which change implementation is to be charged against. This should be provided for Local and Test Case Files.

(20) BLOCK 20, SOFTWARE SYSTEM VERSION. When making a change to software the specific system version of the software being proposed for change is to be provided (i.e., Version 4.2). In addition, if known, the system version in which the change is expected to be implemented is to be provided.

(21) BLOCK 21, TITLE. Indicate the subject of the change, being as descriptive as possible. Spell out all acronyms fully. For waivers to installation and siting criteria, include location and runway if applicable.

(22) BLOCK 22, DESCRIPTION. Complete information pertaining to items **a** through **g** should be provided. Attach additional pages if necessary.

(a) Identification of Problem. Provide complete information identifying nature of problem, length of time it has existed, etc. Include a statement on the NCP form (whenever equipment is being moved into a location designated for end-state equipment) indicating that this is an interim move and the estimated date that the equipment will be relocated.

(b) Proposed Change. Identify proposed solution(s) to the problem (include was/now pages for document or drawing changes as applicable). State precisely the intended change. Include a copy of the baseline, as-built drawing showing the new equipment location "as it will be" when the proposal is implemented. If the move requires the relocation of other equipment, include a statement indicating where it will be moved to.

(c) Interface Impact. Identify any and all interface impacts involved with the proposed change.

(d) Cost. This is a requirement and needs to be written into each case file so that it is apparent where the funding source is and the breakdown. (It is not acceptable to just state there are no costs or that they are covered by program funding). The cost estimate must contain a statement as to whether its been approved in the workplan and identify the fiscal year it was approved for.

(e) Benefits. State the benefits of this change (i.e., specific cost savings to the government, increased efficiency, safety, etc.).

(f) Schedule. Provide a schedule for the change to be implemented whenever possible.

(g) Justification of Time-Critical/Urgent Status. Required field when Block 6 of the Case File is checked as being time-critical or urgent. N/A should be entered if the Case File has normal priority.

(23) BLOCK 23, NAME AND TITLE OF ORIGINATOR'S IMMEDIATE SUPERVISOR. Required field. Title and name must be typed or printed clearly in the first section of this block. The supervisor's legal signature goes in the second section of the block and the date signed goes in the third section.

(24) BLOCK 24, FACILITY/SMO REVIEW (AT/AF). Facility/SMO coordination is required for all Case Files originating from a facility or SMO. The SMO Manager and Air Traffic Manager or designee shall sign the block(s) at the bottom of Block 24.

(25) BLOCK 25, REGIONAL REVIEW (AT/AF/FS/AS). Regional coordination is required for all Case Files originating from a facility/SMO/region. The signature of AGL-400 or alternate, and signature of the individual responsible for regional Case File coordination (CM Coordinator or Regional Executive Secretary) is also required in the blocks at the bottom of block 25.

(26) BLOCK 26, PRESCREENING REVIEW AND COMMENTS. Required field. This field is completed by the Prescreening Office and not the originator of the Case File/NCP. Prescreening review MUST be indicated for those Case Files requiring review by a prescreening organization. The prescreening office will accomplish the review, recommend approval or disapproval of the Case File and list the recommended (Must Evaluators) for review. If disapproved, by the prescreening office or the "must evaluators," the Case File will be returned with comments to the originator, through ASD-220 and the Regional CM Coordinator.

(27) BLOCK 27, CONFIGURATION MANAGEMENT USE ONLY. This block is for internal use by ASD-220. This block is also used by the Regional Configuration Managers to indicate the disposition of RCCB controlled NCPs. Besides withdrawals and cancellation of NCPs, it provides notification of Case File status, changes and impacts.

(28) When Case Files and NCPs are submitted identifying equipment or space change(s) current drawings depicting the proposed change should be included with the NCP. A before and after layout should be submitted for clarification.

(29) When Case Files/NCPs are submitted for review, either electrical power panel proposals or other equipment changes, a glossary of acronyms must be included with the NCP. The glossary of acronyms should be provided on the drawing, if appropriate, placed next to the panel schedule being updated. This will ensure a thorough evaluation is completed on this type of proposal.

Figure 1. FAA Form 1800-49, NAS - CCD

NAS CONFIGURATION CONTROL DECISION		
1. Prefix	2. NCP/CCD No.	3. Case File No.
4. NCP Title		
5. Site Location(s) - (For Local or Test NCPs/CCDs only)		6. Configuration Item Designator(s)
7. Action Directed		
8. Remarks or Explanation of Disapproval		
9. NCP Decision	10. Date	11. Chairperson Signature(s) and Title(s)
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	<hr/> <hr/>	<hr/> <hr/>

FAA Form 1800-49 (1/91) Supersedes Previous Edition

Figure 2. (continued) (Back side of) FAA Form 1800-49, NAS - CCD  
"Verification Grid"

NAS CONFIGURATION CONTROL DECISION		
CCD ACTION COMPLETION VERIFICATION		
NCP/CCD NO.	CASE FILE NO.	PAGE 2 OF _____
12. ACTION OFFICE		
NAME	ROUTING SYMBOL	DATE
AUTHORIZING OFFICIAL:		
13. DOCCON/ASE-621		
NAME	DATE	

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Figure 3. FAA Form 1800-2, NCP Form

CASE FILE/NAS CHANGE PROPOSAL <small>(PLEASE TYPE OR PRINT NEATLY)</small>		FOR CM USE	Case File Received Date	NCP Issuance Date	NCP Number	Page 1 of _____
1. Case File Number		2. Prescreening Office <input type="checkbox"/> ASM- <input type="checkbox"/> ASE-500- <input type="checkbox"/> AFE-100 <input type="checkbox"/> _____ <input type="checkbox"/> ATR- <input type="checkbox"/> ANS-200 <input type="checkbox"/> APM-100				
3. Scope of Change <input type="checkbox"/> Local <input type="checkbox"/> National <input type="checkbox"/> Test <input type="checkbox"/> CIP		4. Program Element <input type="checkbox"/> Air Traffic Control <input type="checkbox"/> Interfacility Comm <input type="checkbox"/> _____ <input type="checkbox"/> Ground-to-Air <input type="checkbox"/> Maint & Opns Support				
5. Life-Cycle Change Acquisition: <input type="checkbox"/> Requirements: Determination <input type="checkbox"/> Functional <input type="checkbox"/> Design <input type="checkbox"/> Operational <input type="checkbox"/> Allocated <input type="checkbox"/> Product		6. Priority <input type="checkbox"/> Normal <input type="checkbox"/> Time-Critical <input type="checkbox"/> Urgent		7. Supplemental Change Form <input type="checkbox"/> ECR/ECP <input type="checkbox"/> TES <input type="checkbox"/> _____ 7a. Supplemental Change No. _____ 7b. Supplemental Change Initiation Date _____		
8. Case File Originator		9. Originator's Organization		10. Telephone Number		11. Case File Initiation Date
12. Baseline Document Type <input type="checkbox"/> CPFS <input type="checkbox"/> SPEC <input type="checkbox"/> MTBK <input type="checkbox"/> _____ <input type="checkbox"/> TI <input type="checkbox"/> DWG <input type="checkbox"/> IRD/CD				13. Baseline Document Number(s)		
14. CI Subsystem Designator		15. FA Type			16. CI Component Designator	
17. Facility Identifier (FACID)		18. Facility Code (FACCODE)		19. Cost Center Code		20. Software System Version
21. Title (as descriptive as possible including location and runway number if applicable)						
22. Description: (a) Identification of problem, (b) proposed change, (c) interface impact, (d) cost, (e) benefits, (f) Schedule, (g) justification of time-critical/urgent status						

Blocks 1 through 22 are to be completed by originator and/or the NCP coordinator. If a block is not applicable, write n/a. Attach additional sheets if necessary. See current revision of NAS-MD-001 for detailed completion instructions.

FAA FORM, 1800-2 (11-90) - Supersedes Previous Edition

Figure 4. FAA Form 1800-2, NCP Form (page two)

Case File Number					NCP Number					Page 2 of ____				
23. Name and Title of Originator's Immediate Supervisor (Type/Print Clearly)					Signature					Date				
24. Facility/Sector Review (AT/AF)										25. Regional Review (AT/AF/FS/AS)				
Name	Routing Symbol	Date	Concur	Non-Concur	Name	Routing Symbol	Date	Concur	Non-Concur					
					<input type="checkbox"/> Recommend Approval (Enter into CM/STAT. Forward to Prescreening)					<input type="checkbox"/> Disapprove (Return to Originator)				
Routing Symbol	Signature				Routing Symbol	Signature								
Date					Date									
Routing Symbol	Signature				Routing Symbol	Signature								
Date					Date									
24a. Comments					Routing Symbol	Signature/Configuration Mgr/NCP Coordinator/ Reg Exec Sec								
					Date									
					25a. Comments									
										(Attach additional sheets if necessary)				
26. Prescreening Review Organization Comment														
(Attach additional sheets if necessary)														
Reviewers	Routing Symbol	Date	Concur	Non-Concur	<input type="checkbox"/> Recommend Approval <input type="checkbox"/> Recommend Disapproval (Return original to originating office through the Regional NCP Coordinator)									
Recommended Must Evaluators					Routing Symbol	Signature								
					Date									
27. Configuration Management Use Only														



## APPENDIX 2

BASELINE DRAWING PROCEDURES1. PROCEDURES FOR UPDATING AIR TRAFFIC CONTROL TOWER AND AUTOMATED FLIGHT SERVICE STATION, FACILITY BASELINE DRAWINGS.

a. Purpose. This procedure defines the process for updating the Air Traffic Control Tower (ATCT) and Automated Flight Service Station (AFSS) Facility Baseline Drawings. The Facility Baseline Drawings of AFSS and ATCT facilities, under configuration control, require a NAS Change Proposal (NCP) for equipment placement and space management changes. The facility drawings that have been baselined under CM will also be updated in accordance with these procedures. After an NCP is approved by the Regional Configuration Control Board (RCCB), a Configuration Control Decision (CCD) will be issued, listing all action items. One of the CCD action items requests the Engineering Support Section, AGL-458, to update the Facility Baseline Drawing(s) to reflect the proposed change in the NCP.

b. Responsibilities. The Operations Group, AGL-471A will provide AGL-458 with a copy of the approved Case File, CCD and drawing or drawing segment that identifies the equipment or space management change. AGL-458 will update the ATCT or AFSS Facility Baseline Drawing and forward a full size bond print to AGL-471A, for review. AGL-471A, will return the checked print to AGL-458 for final revisions if needed. The drafting date, initials of CM Manager, CCD number and CCD issue date will be added in the revision block. AGL-458, will make drawing distribution in accordance with this appendix.

c. Engineering Support Section, AGL-458, will notify AGL-471A, when a request is made for the electronic version of any drawing related to a facility under CM. The notification should identify the purpose and person making the drawing request. A "Temporary" (T) copy of the electronic baseline drawing can be provided for use in proposed planning and engineering projects. The engineer conducting the project or change must comply with policy and create/submit an NCP in a timely manner. Any AGL-450 engineer responsible for assigning projects to a contract engineering service will also generate an NCP for each project.

d. Establishment Engineering Branch, AGL-450, Section Supervisors will ensure that when any engineer or project manager (under their area of responsibility) is making changes that affect a facility under CM, that an NCP will be generated identifying the change. This NCP will be submitted (in accordance with appendix 1, Par. 3 and 4) to AGL-471A, and approval received from the RCCB before the change is implemented. This process provides evaluators and the RCCB members an opportunity to review the change and identify any concerns or potential conflicts with other proposals. It provides a vehicle for coordinating NAS system changes and allows an equity of review and comments.

e. Program Management Section, AGL-459, is the focal point for F&E programs. AGL-459 is the organization that will indicate the group that is responsible for generating an NCP when the project is part of the F&E workplan. When a project is

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When a project is nationally or locally funded the SMO will coordinate the implementation and will be responsible to generate the NCP when there is no F&E involvement. When there are several groups involved in and responsible for the system being installed, AGL-459 will notify the office most responsible for the equipment placement or space change, and as always, in advance to ensure the NCP is submitted before work authorization is generated. The RCCB minutes will be provided to AGL-459 monthly. Their review will help ensure the information concerning CCD approval and project implementation is accurate, and reflects actual events. The minutes identify the changes and comments that occur through the RCCB.

f. Drawing Distribution. After the drawings are updated, AGL-458 will make the following distribution for Baselined facilities.

	FULL SIZE VEL	FULL SIZE BOND	1/2 VEL	1/2 BOND
FACILITY-AF		2		
AREA - SMO		3		
AGL-451	1		1	
AGL-455		1		1
AGL-459			1	
AGL-471A	1			1

g. The ATCT/AFSS Facility Baseline Drawing title blocks will be standardized in accordance with the following Green Bay ATCT example:

Facility Baseline Layout ATCT/TRACON "Drawing Title" Austin Straubel Field Green Bay, Wisconsin
---

h. Drawing Numbers. The drawing numbers of the AFSS Facility Baseline Drawings will be standardized in accordance with the following Green Bay AFSS example: GL-D-GRB-AFSS-EL01. The drawing numbers of the ATCT/TRACON Baseline Drawings will be standardized in accordance with the following Green Bay ATCT example: GL-D-GRB-ATCT-01 to GL-D-GRB-ATCT-xx.

i. When a facility becomes baselined, the following block will be added to the drawing indicating they are under CM:

THIS DRAWING IS UNDER CONFIGURATION CONTROL CHANGES REQUIRE AN AUTHORIZING CCD.
--

2. YEARLY UPDATE PROCEDURES OF ARTCC FACILITY SITE SPECIFIC BASELINE DRAWINGS.

a. Purpose. This Appendix defines the procedure for updating ARTCC facility site specific baseline drawings, reflecting space and equipment layout changes that have occurred during the previous year.

b. Background. The FAA has developed an Aviation Capital Investment Plan (CIP) to modernize the NAS system. In mid-1980's Implementation Management Division, ANS-220 authorized the preparation of generic ARTCC facility end-state drawings. These drawings provided generic transition schemes for space utilization in the ARTCC's. Site surveys were performed to verify locations of existing equipment at each ARTCC and facility site specific equipment drawings were prepared. The facility site specific baseline drawings were sent to the regions to maintain equipment configuration. The facility site specific baseline drawings are listed in the NAS-MD-001 document, have been placed under configuration control and are revised on a yearly basis.

c. Responsibilities. The On Site Program Managers (OSPM) are responsible for updating the facility site specific baseline drawings at the ARTCC's.

d. Procedure. Autotrol Computer Aided Engineering and Graphics (CAEG) is the preferred method for updating the baseline drawings. The baseline drawing changes will be in accordance with approved NAS Change Proposals (NCP) and the revised baseline drawings will be checked by the On Site Program Manager, (OSPM). The "checked by" area of the title block will contain the OSPM's initials. The revision letter and approval block will not be updated until the baseline drawings are approved by the RCCB.

e. Autotrol Format. NAS Coordination Office (NCO) will revise their facility site specific baseline drawings on site. Lines and fonts of the updated baseline drawings will match the existing drawing format, and will conform to the applicable portions of the AGL-450, CAEG Engineering Guidelines (See Appendix 2, par. 3). The ARTCC's NCO will either forward a cartridge or electronically transmit the files to AGL-458 via ADTN.

f. Schedule. By January 31 of each year, the NCO will send the updated baseline drawing files to AGL-458. The NCO shall keep a copy of the files on site in case the forwarded baseline files are lost or destroyed enroute.

g. Configuration Control. It is the OSPM's responsibility to assure all revisions to the baseline drawings are in accordance with approved Configuration Control Decisions (CCD) issued by the Regional Configuration Control Board (RCCB). The updated baseline drawings will be accompanied by an NAS Change Proposal (NCP) depicting all space layout, equipment placement and as built updates. The NCP will also list the as built updates, and CCD numbers of all approved NCPs incorporated in the facility site specific baseline drawing update. The finished drawing package for each Center will be reviewed and signed off by AGL-471A. After approval by the RCCB, AGL-458 will add the revision letter and approval name to the drawings.

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h. ARTCC Drawing Distribution. Subsequent to RCCB approval, AGL-458 will make distribution to the various organizations as follows:

	FULL SIZE VEL	FULL SIZE BOND	1/2 VEL	1/2 BOND
SMO-AF		3		
ARTCC - NCO		2		
AGL-451	1		1	
AGL-455		1		1
AGL-459			1	
AGL-471A	1			1

i. Drawing Control. The original Vellum and tapes will be controlled and archived by AGL-458. Additional drawings may be obtained by requesting copies from AGL-458 directly. All future broadscope changes in drafting practices, whether proposed in-house or by Technical Support Services Contract (TSSC), must be submitted to the engineering Services Supervisor, AGL-458 for review and approval prior to being implemented.

3. CM DRAWING GUIDELINES. AGL-458, is responsible for notifying AGL-471A, when a request is made for the electronic version of any configuration management drawing. The criteria for Electronic File Transfer of Configuration Control Drawings for Contractor/Engineer drawing modifications, for construction and installation projects is as follows.

a. Responsibility of AGL-458: Prior to delivery of electronic file to contractor/engineer:

(1) The Configuration Management Group, AGL-471A, shall be notified.

(2) Information such as engineer, section, drawing number, will be provided for follow up.

b. All drawing numbers will be controlled, assigned and obtained from AGL-458, drawing manager. When new drawings are created from CM drawings and utilized for engineering and contain engineering notes those notes will be placed on the CM drawing or will be deleted if not considered critical by AGL-471A. If the creation of a new drawing is required that drawing will be entered into the AGL-458 drawing data base with a written reference to the original CM drawing number.

c. The decision to create a new drawing will be made by the design engineer, however, CM drawings should be the primary source used for projects and planning with an effort to reduce duplicate drawings. If a drawing is created from a CM drawing it must contain, a significant change or be created to preserve critical data. Some notes can be captured on the CM drawing to eliminate the need for an additional drawing and to facilitate the evolution of CM drawings. When creating a new original from an existing, a new drawing number must be used.

## APPENDIX 3

REGIONAL BASELINE ACTIVITIES FOR ATCT/AFSS/TRACON FACILITIES

1. PURPOSE. This Appendix identifies the process, responsibilities and requirements developed for baselining Air Traffic Control Tower (ATCT), Automated Flight Service Station (AFSS), Terminal Radar Approach Control Facility (TRACON) and Air Route Surveillance Radar (ARSR-4 JSS) facilities, from their current configuration. This Appendix also identifies the steps involved in baselining these FAA facilities. This process involves gathering and updating various sources of facility data to be baselined. Processing this information into a data base will help develop a history of the facility and will facilitate establishing the baseline document package under configuration management. A facility is considered to be baselined when the facility baseline drawing package has been redlined and the site survey is complete.. Objectives of this appendix are:

a. To provide a document that identifies the planned regional baseline activities, and the responsibilities of the participants in support of tower baseline activities.

b. To define the various tasks required for the baseline process, identify the responsible offices and present a frame of reference to help complete the process.

2. ROLES AND RESPONSIBILITIES. The National ATCT/TRACON facility baseline program provides for the establishment and continued management of facility baselines. This is to be accomplished in accordance with the latest revision of FAA Order 1800.8, National Airspace System Configuration Management, the National CM Standard Process Document for Facility Baselining (which is a guidance document establish to set a standard for facility baselining) and the Regional Configuration Control Board charter and procedures.

a. Airway Facilities Division, AGL-400, performs the AGL RCCB functions as established in the regional charters and ensures the adherence to the configuration control procedures and supports CM policies.

b. Executive Staff, AGL-410, is responsible for:

(1) Planning and providing the appropriate support for baselining activities, provided through (FAA/NAS Implementation Support Contract (NISC)).

(2) Coordination with the CM participants will help ensure the contract support is completing the task and providing appropriate deliverables.

c. NAS Implementation Branch, AGL-450, is responsible for:

(1) Supporting the CM program while performing installation engineering and planning in accordance with CIP schedules and develops interim conditions for each phase.

(2) Identifying implementation phases and providing the schedule of new systems and equipment being installed and deployed within the NAS.

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(3) Identifying funding requirements and coordinating project scheduling information with other participants in coordination with equipment delivery schedules, including transition schedules/plans.

(4) Identifying thru AGL-459 the engineering group/SMO/SSC that will generate the required NCPs prior to project implementation.

d. Engineering Support Section, AGL-458, is responsible for:

(1) Providing drawing management of baseline drawings and working with all participants in the CM process.

(2) Establishing and maintaining all CM drawings in the regional drawing data base and processing CM baseline drawings, as built drawings and updates.

(3) Notifying AGL-471A of any redline as build condition that affect CM drawings.

(4) Notifying AGL-471A of any request for CM drawings.

e. Program Management Branch, AGL-459 is responsible for coordinating and funding the systems and projects being implemented at the ATCT/TRACON and AFSS facilities by the F&E work plan. Nationally implemented projects shall be coordinated between the SMO/Facility and AGL-459.

f. Operations Branch, AGL-470 is responsible for:

(1) Configuration management and baselining AFSS/ATCT/TRACON/ARSR-4 JSS facilities.

(2) Implementing the baseline process to capture the configuration of these NAS facilities and placing them under configuration management.

(3) Developing and maintaining an ATC facility database and providing a baseline schedule identifying the tower facilities to be baselined and coordinate the process with all participants.

(4) Providing the required tower interfacility telecommunications.

g. System Requirements Branch, AGL-510 is responsible for:

(1) Managing the terminal transition for the Air Traffic Division.

(2) Identifying ATC configuration planning & standardization data.

(3) Providing Facility Data Reports for facilities being baselined.

(4) Exchanging information on terminal issues effecting baselines.

h. SMO/SSC is responsible for:

(1) Supporting baseline activities and identifying any local and future airport projects and their funding plans.

(2) Providing redline markups and verifying the accuracy of drawings and documents presented by the survey baseline team. Completing facility baseline updates when requested by AGL-471A.

(3) Ensuring NCPs are created and sent through proper channels when identified as the OPR or when a nationally funded, local or airport project is planned and being implemented.

3. ATCT BASELINE PROCESS.

a. Prior to conducting a baseline site survey at a ATCT/TRACON/AFSS/ARSR-4 facility, notification will be sent to the SMO/SSC office personnel who is designated as the CM contact. A copy of the latest facility drawings may be sent to the Airway Facilities personnel at the SMO/SSC/facility office to be redlined/verified. Or, a baseline survey team will conduct a site survey and redline the facility drawings during the visit. Either method can be used to complete the drawing update.

b. To make the most efficient use of resources, AGL-471 can provide assistance by obtaining facility drawings for the site and providing them to the facility or any AF SMO/SSC/field office. The baseline survey team will consist of a minimum of two people from AGL-470, sector or site personnel to provide facility access and information and additional Regional Engineers when appropriate.

4. THE BASELINE SURVEY TEAM.

a. The CM Group will provide draft copies of the baseline drawings. This package will consist of a standard core group of drawings, including:

- (1) Site Plan/Drawing Index
- (2) Facility Layout/floor plan(s)
- (3) Cab Console Layout
- (4) Equipment Room Floor Plan
- (5) Equipment Rack Elevations - COMM.
- (6) TRACON Floor Plan
- (7) TRACON Console Elevation
- (8) Radar/ARTS Equipment Floor Plan
- (9) One Line Power Diagrams
- (10) Antenna Layout

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b. Additional drawings may be required to more accurately define the individual ATCT facility. These drawings will vary due to the type and level of facility, and may include:

- (1) Power Equipment Rooms (E/G) Floor Plan
- (2) Additional Base Building Floor Plans
- (3) Additional Rack Elevations
- (4) Communication Equipment Room Floor Plan (TELCO)
- (5) Tower Section Layouts/Elevation

c. To better plan the implementation of new systems and equipment into the NAS, and to help determine future facilities to be baselined, the latest equipment schedule, the Regional Tracking Program (RTP) and other reports should be reviewed on a continuous basis by personnel involved in the NAS implementation process.

5. The Site Survey Process:

- a. Forward current drawing set to facility for review/possible update.
- b. Make travel arrangements and contact with the site personnel.
- c. Present a briefing to appropriate facility personnel.
- d. Tour facility verifying drawings and completing redlines.
- e. Record problem areas and concerns or recommendations that the facility may have about CM.
- f. The baseline survey team will provide the initial NAS change proposal for baselining the ATCT/TRACON.
- g. Subsequent NCPs for any projects will be generated by the SMO or Engineering Section responsible for the project.
- h. All NAS change proposals will be completed in accordance with Appendix 1 of this order.
- i. The baseline survey team will obtain the NCP signatures of the appropriate AF and AT ATCT/TRACON personnel during the site survey. If additional SMO signatures are needed they will be submitted to AGL-471A no later than one week after the site visit.
- j. Debrief site personnel and identify/assign any action items.



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6. POST SURVEY AND ATCT TRANSITION BASELINE PACKAGE. The NCP along with the drawing package, will be routed to regional evaluators and presented to the RCCB for review and approval. Copies of the updated facility baseline drawings will be distributed in accordance with Appendix 2 of this order and placed under Configuration Management. The baseline survey team will follow up with the site personnel to identify any items outstanding and take action necessary to resolve them.