

**CHANGE**

**U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION**

**JO 7400.2N  
CHG 2**

Air Traffic Organization Policy

**Effective Date:**  
May 19, 2022

**SUBJ:** Procedures for Handling Airspace Matters

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- 1. Purpose of This Change.** This change transmits revised pages to Federal Aviation Administration Order JO 7400.2N, Procedures for Handling Airspace Matters.
- 2. Audience.** This change applies to all Air Traffic Organization (ATO) personnel and anyone using ATO directives. This order also applies to all regional, service area, and field organizational elements involved in rulemaking and nonrulemaking actions associated with airspace allocation and utilization, obstruction evaluation, obstruction marking and lighting, airport airspace analysis, and the management of air navigation aids.
- 3. Where Can I Find This Change?** This change is available on the FAA website at [http://faa.gov/air\\_traffic/publications](http://faa.gov/air_traffic/publications) and [https://employees.faa.gov/tools\\_resources/orders\\_notices](https://employees.faa.gov/tools_resources/orders_notices).
- 4. Explanation of Policy Change.** See the Explanation of Changes attachment that has editorial corrections and changes submitted through normal procedures.
- 5. Distribution.** This change is available online and will be distributed electronically to all offices that subscribe to receive email notification/access to it through the FAA website at [http://faa.gov/air\\_traffic/publications](http://faa.gov/air_traffic/publications).
- 6. Disposition of Transmittal.** Retain this transmittal until superseded by a new basic order.
- 7. Page Control Chart.** See the page control chart attachment.

Michael R.  
Beckles

Digitally signed by  
Michael R. Beckles  
Date: 2022.04.18  
09:12:25 -04'00'

Michael R. Beckles  
Director A), Policy, AJV-P  
Air Traffic Organization



## Explanation of Changes

### Change 2

**Direct questions through appropriate facility/service center office staff  
to the Office of Primary Interest (OPI).**

- a. 1-1-1. PURPOSE OF THIS ORDER**
- 1-2-6. ABBREVIATIONS**
- 4-3-6. NOTIFICATION AND DISTRIBUTION**
- 6-3-10. EVALUATING EFFECT ON AIR NAVIGATION AND COMMUNICATION FACILITIES**
- 9-2-1. ADMINISTRATIVE PROCESSING**
- 9-2-2. RECOMMENDATIONS**
- 13-1-3. FAA HEADQUARTERS REVIEWS**

This change updates the old organizational names to the current office names. Also, this change only applies to the renaming of Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team.

**b. 6-3-17. CIRCULARIZATION**

The recommended change will better define the list of entities that have been identified from simply, “all known aviation–interested parties” to “self–identified parties through subscription services.”

**c. 11-3-3. ONSITE EVALUATIONS**

This change modifies Flight Standards Service (FS) policy regarding onsite heliport evaluations. Requiring a mandatory onsite evaluation for the establishment of every heliport creates an undue expenditure of limited FS resources for landing site evaluations. Some heliports pose a low risk and FS will take a risk–based approach to determine which

heliports require an onsite evaluation and which heliports can be evaluated via a tabletop evaluation and analysis.

**d. 31-3-1. RESPONSIBILITIES**

**31-3-3. LAUNCH AND REENTRY PROCESS**

**APPENDIX 13. TEMPLATE FOR MEMORANDUM OF ASSESSMENT OF POTENTIAL IMPACT ON THE NAS**

This change corrects and moves a sentence from paragraph 31-3-3 to 31-3-1, makes editorial group name changes, and incorporates Appendix 13, which contains a template of the NAS Impact Memo that is required by the ATO for any proposed Space Operation.

**e. Editorial Changes**

Editorial changes include updating the remaining “Airspace Policy Group” to “Rules and Regulations Group”, the removal of Flight Standards from the circularization of public notices found in JO 7400.2, paragraph 6-3-17, a reference to paragraph 2-5-2 was fixed to paragraph 2-4-2 in paragraph 10-2-2, and the removal of subparagraph 6-2-3b as there is no longer a need to distinguish side mounted microwave antennas from non–microwave antennas.

**f. Entire Publication**

Additional editorial/format changes were made where necessary. Revision bars were not used because of the insignificant nature of these changes.



**FAA Order JO 7400.2N**  
**Change 2**  
**Page Control Chart**  
**May 19, 2022**

<b>REMOVE PAGES</b>	<b>DATED</b>	<b>INSERT PAGES</b>	<b>DATED</b>
Table of Contents i through xix .....	12/2/21	Table of Contents i through xix .....	5/19/22
1-1-1 and 1-1-2 .....	12/2/21	1-1-1 and 1-1-2 .....	5/19/22
2-2-1 .....	6/17/21	2-2-1 .....	5/19/22
2-3-1 through 2-3-3 .....	6/17/21	2-3-1 through 2-3-3 .....	5/19/22
2-5-1 and 2-5-2 .....	6/17/21	2-5-1 and 2-5-2 .....	5/19/22
4-3-1 .....	6/17/21	4-3-1 .....	5/19/22
6-2-1 .....	6/17/21	6-2-1 .....	6/17/21
6-2-2 .....	12/2/21	6-2-2 .....	5/19/22
6-3-21 .....	12/2/21	6-3-21 .....	5/19/22
6-3-22 .....	12/2/21	6-3-22 .....	12/2/21
6-3-27 and 6-3-28 .....	12/2/21	6-3-27 and 6-3-28 .....	5/19/22
9-2-1 .....	6/17/21	9-2-1 .....	5/19/22
10-2-1 .....	6/17/21	10-2-1 .....	5/19/22
11-3-1 .....	6/17/21	11-3-1 .....	5/19/22
13-1-1 .....	6/17/21	13-1-1 .....	5/19/22
31-3-1 and 31-3-2 .....	12/2/21	31-3-1 through 31-3-3 .....	5/19/22
32-2-1 .....	12/2/21	32-2-1 .....	12/2/21
32-2-2 through 32-2-4 .....	12/2/21	32-2-2 through 32-2-4 .....	5/19/22
33-2-1 .....	12/2/21	33-2-1 .....	5/19/22
33-2-2 .....	6/17/21	33-2-2 .....	6/17/21
Appendix 4-3 .....	6/17/21	Appendix 4-3 .....	6/17/21
Appendix 4-4 and Appendix 4-5 .....	6/17/21	Appendix 4-4 and Appendix 4-5 .....	5/19/22
Appendix 4-6 .....	6/17/21	Appendix 4-6 .....	6/17/21
.....	N/A	Appendix 13-1 through Appendix 13-5 ....	5/19/22



# Order JO 7400.2N Procedures for Handling Airspace Matters

## Table of Contents

### Part 1. General Procedures for Airspace Management

#### Chapter 1. General

##### Section 1. Introduction

<b>Paragraph</b>	<b>Page</b>
1-1-1. PURPOSE OF THIS ORDER .....	1-1-1
1-1-2. AUDIENCE .....	1-1-1
1-1-3. WHERE TO FIND THIS ORDER .....	1-1-1
1-1-4. WHAT THIS ORDER CANCELS .....	1-1-1
1-1-5. CHANGE AUTHORITY .....	1-1-1
1-1-6. EXPLANATION OF CHANGES .....	1-1-1
1-1-7. SUBMISSION CUTOFF AND EFFECTIVE DATES .....	1-1-1
1-1-8. DELIVERY DATES .....	1-1-2
1-1-9. RECOMMENDATIONS FOR PROCEDURAL CHANGES .....	1-1-2
1-1-10. DISTRIBUTION .....	1-1-2
1-1-11. SAFETY MANAGEMENT SYSTEM .....	1-1-2

##### Section 2. Authority and Order Use

1-2-1. POLICY .....	1-2-1
1-2-2. AUTHORITY AND APPLICABILITY .....	1-2-1
1-2-3. FUNCTIONAL RESPONSIBILITIES .....	1-2-1
1-2-4. TITLE 14 CODE OF FEDERAL REGULATIONS (CFR) REFERENCES .....	1-2-1
1-2-5. WORD MEANING .....	1-2-2
1-2-6. ABBREVIATIONS .....	1-2-2

##### Section 3. Airspace Planning and Analysis

1-3-1. BACKGROUND .....	1-3-1
1-3-2. POLICY .....	1-3-1

### Chapter 2. Rulemaking/Nonrulemaking Airspace Cases

#### Section 1. Ex Parte Communications

2-1-1. DEFINITION .....	2-1-1
2-1-2. SCOPE .....	2-1-1
2-1-3. POLICY .....	2-1-1
2-1-4. DISCLOSURE .....	2-1-1
2-1-5. PERMITTED CONTACT .....	2-1-1
2-1-6. RECORDING CONTACTS .....	2-1-2
2-1-7. ADVICE FROM COUNSEL .....	2-1-2
2-1-8. RELEASE OF RULEMAKING AND/OR NONRULEMAKING TEXTS .....	2-1-3

<b>Paragraph</b>	<b>Page</b>
2-1-9. ADDITIONAL REFERENCES .....	2-1-3

**Section 2. Executive Order 10854**

2-2-1. SCOPE .....	2-2-1
2-2-2. POLICY .....	2-2-1

**Section 3. Processing Rulemaking Airspace Actions**

2-3-1. PURPOSE .....	2-3-1
2-3-2. RESPONSIBILITY .....	2-3-1
2-3-3. DOCKETS .....	2-3-1
2-3-4. COMMENT PERIODS .....	2-3-1
2-3-5. FLIGHT PROCEDURAL DATA .....	2-3-1
2-3-6. SUBMISSION OF RULEMAKING AIRSPACE CASES TO HEADQUARTERS ...	2-3-2
2-3-7. EFFECTIVE DATE OF FINAL RULES .....	2-3-2
2-3-8. PUBLICATION IN FEDERAL REGISTER .....	2-3-3

**Section 4. Processing Nonrulemaking Airspace Actions**

2-4-1. PURPOSE .....	2-4-1
2-4-2. IDENTIFICATION .....	2-4-1
2-4-3. CIRCULARIZATION .....	2-4-1
2-4-4. CIRCULARIZATION DOCUMENTATION .....	2-4-1
2-4-5. SUBMISSION OF NONRULEMAKING SUA CASES TO RULES AND REGULATIONS GROUP .....	2-4-2
2-4-6. EFFECTIVE DATE OF NONRULEMAKING ACTIONS .....	2-4-2
2-4-7. PUBLICATION OF NONRULEMAKING ACTIONS .....	2-4-2

**Section 5. Informal Airspace Meeting**

2-5-1. PURPOSE .....	2-5-1
2-5-2. POLICY .....	2-5-1
2-5-3. CLASS B AND C INFORMAL AIRSPACE MEETING NOTIFICATION PROCEDURES .....	2-5-1
2-5-4. INFORMAL AIRSPACE MEETING NOTIFICATION PROCEDURES FOR AIRSPACE ACTIONS OTHER THAN CLASS B AND CLASS C .....	2-5-1
2-5-5. LOCATION .....	2-5-2
2-5-6. AGENDA ITEMS .....	2-5-2
2-5-7. RECORD OF MEETINGS .....	2-5-2

**Chapter 3. Aeronautical Information**

**Section 1. General**

3-1-1. POLICY .....	3-1-1
3-1-2. RESPONSIBILITY .....	3-1-1
3-1-3. TRUE/MAGNETIC DIRECTIONS .....	3-1-1
3-1-4. NAVIGATIONAL AID COORDINATES .....	3-1-1
3-1-5. DIRECTIONS .....	3-1-1

**Section 2. Charted Reporting Points**

3-2-1. POLICY .....	3-2-1
---------------------	-------



<b>Paragraph</b>	<b>Page</b>
3-2-2. CHART SERIES SELECTION .....	3-2-1
3-2-3. FAA FORM 8260-2, RADIO FIX AND HOLDING DATA RECORD .....	3-2-1
3-2-4. PREPARATION OF FORM 8260-2 .....	3-2-1

**Section 3. Naming of NAVAIDs, Aeronautical Facilities, and Fixes**

3-3-1. GENERAL .....	3-3-1
3-3-2. RESPONSIBILITY .....	3-3-1
3-3-3. NAMING OF NAVAIDs .....	3-3-1
3-3-4. NAMING OF WAYPOINTS, INTERSECTIONS, AND DME FIXES .....	3-3-1

**Chapter 4. NAVAIDs**

**Section 1. General**

4-1-1. PURPOSE .....	4-1-1
4-1-2. POLICY .....	4-1-1
4-1-3. RESPONSIBILITY FOR FREQUENCY SELECTION .....	4-1-1
4-1-4. GOVERNING CRITERIA .....	4-1-1
4-1-5. LONG-RANGE PLANNING .....	4-1-1
4-1-6. PROPOSED CHANGES .....	4-1-1

**Section 2. FAA NAVAIDs**

4-2-1. POLICY .....	4-2-1
4-2-2. COORDINATION .....	4-2-1
4-2-3. INFORMAL AIRSPACE MEETINGS .....	4-2-1
4-2-4. APPROVAL AUTHORITY .....	4-2-1
4-2-5. DISTRIBUTION .....	4-2-1
4-2-6. COMMISSIONING DATE .....	4-2-1
4-2-7. PROCESSING REGULATORY ACTIONS .....	4-2-2

**Section 3. Military NAVAIDs**

4-3-1. POLICY .....	4-3-1
4-3-2. COORDINATION WITH MILITARY .....	4-3-1
4-3-3. EVALUATION BY TECHNICAL OPERATIONS SERVICES OFFICE .....	4-3-1
4-3-4. CIRCULARIZATION .....	4-3-1
4-3-5. DETERMINATION RESPONSIBILITY .....	4-3-1
4-3-6. NOTIFICATION AND DISTRIBUTION .....	4-3-1

**Section 4. Non-Federal NAVAIDs**

4-4-1. POLICY .....	4-4-1
4-4-2. REQUEST FOR ESTABLISHMENT .....	4-4-1
4-4-3. RESPONSIBILITY .....	4-4-1
4-4-4. EXTERNAL COORDINATION .....	4-4-2
4-4-5. INFORMAL AIRSPACE MEETING .....	4-4-2
4-4-6. APPROVAL AND NOTIFICATION PROCESS .....	4-4-2
4-4-7. DISTRIBUTION .....	4-4-2

## **Section 5. Discontinuance of FAA NAVAIDs**

<b>Paragraph</b>	<b>Page</b>
4-5-1. POLICY .....	4-5-1
4-5-2. RESPONSIBILITIES .....	4-5-1
4-5-3. COORDINATION OF PROPOSALS .....	4-5-1
4-5-4. OBTAINING APPROVAL .....	4-5-1
4-5-5. DISCONTINUANCE ACTION .....	4-5-1
4-5-6. CANCELLATION OF CONTROLLED AIRSPACE AND INSTRUMENT PROCEDURES .....	4-5-1
4-5-7. DECOMMISSIONING DATE .....	4-5-1
4-5-8. DISCONTINUANCE OF NAVAIDs INCLUDED IN ICAO PLANS .....	4-5-2
4-5-9. INTERNATIONAL STAFF NOTIFICATION .....	4-5-2

## **Section 6. Discontinuance of Military and Non-Federal NAVAIDs**

4-6-1. POLICY .....	4-6-1
4-6-2. RESPONSIBILITY .....	4-6-1
4-6-3. ACTION PRIOR TO DISCONTINUANCE .....	4-6-1
4-6-4. DISCONTINUANCE OF NAVAIDs INCLUDED IN ICAO PLANS .....	4-6-1

## **Part 2. Objects Affecting Navigable Airspace**

### **Chapter 5. Basic**

#### **Section 1. General**

5-1-1. PURPOSE .....	5-1-1
5-1-2. AUTHORITY .....	5-1-1
5-1-3. POLICY .....	5-1-1
5-1-4. SCOPE .....	5-1-1
5-1-5. RESPONSIBILITY .....	5-1-1
5-1-6. SENSITIVE CASES REFERRED TO WASHINGTON .....	5-1-2
5-1-7. AUTOMATION .....	5-1-2
5-1-8. OE/AAA AUTOMATED SYSTEM AIRPORT/RUNWAY DATABASE .....	5-1-2
5-1-9. TRAINING .....	5-1-2
5-1-10. RELEASE OF INFORMATION .....	5-1-2

#### **Section 2. Notices**

5-2-1. REQUIREMENTS .....	5-2-1
5-2-2. PROCESSING .....	5-2-1
5-2-3. FAA FORMS .....	5-2-1

### **Chapter 6. Aeronautical Studies**

#### **Section 1. General**

6-1-1. POLICY .....	6-1-1
6-1-2. AERONAUTICAL STUDY NUMBERS .....	6-1-1
6-1-3. STUDY OF EXISTING STRUCTURES .....	6-1-1
6-1-4. PROPOSALS UNDER CONSTRUCTION .....	6-1-2
6-1-5. STRUCTURES EXCEEDING 2,000 FEET .....	6-1-2

<b>Paragraph</b>	<b>Page</b>
6-2-1. VERIFICATION/E-FILING .....	6-2-1
6-1-6. FEASIBILITY STUDIES .....	6-1-2
6-1-7. TOWER OWNERSHIP .....	6-1-3

**Section 2. Initial Processing/Verification**

6-2-2. VERIFICATION/PAPER-FILING .....	6-2-1
6-2-3. DIVISION COORDINATION .....	6-2-2
6-2-4. ADDITIONAL COORDINATION .....	6-2-2

**Section 3. Identifying/Evaluating Aeronautical Effect**

6-3-1. POLICY .....	6-3-1
6-3-2. SCOPE .....	6-3-1
6-3-3. DETERMINING ADVERSE EFFECT .....	6-3-1
6-3-4. DETERMINING SIGNIFICANT VOLUME OF ACTIVITY .....	6-3-1
6-3-5. SUBSTANTIAL ADVERSE EFFECT .....	6-3-2
6-3-6. RESPONSIBILITY .....	6-3-2
6-3-7. AIRPORT SURFACES AND CLEARANCE AREAS .....	6-3-11
6-3-8. EVALUATING EFFECT ON VFR OPERATIONS .....	6-3-11
6-3-9. EVALUATING EFFECT ON IFR OPERATIONS .....	6-3-18
6-3-10. EVALUATING EFFECT ON AIR NAVIGATION AND COMMUNICATION FACILITIES .....	6-3-21
6-3-11. EVALUATING PLANNED OR FUTURE AIRPORT DEVELOPMENT PROGRAMS .....	6-3-23
6-3-12. EVALUATING TEMPORARY CONSTRUCTION .....	6-3-23
6-3-13. CONSIDERING SHIELDING .....	6-3-24
6-3-14. CONSIDERING SHADOW PLANE .....	6-3-24
6-3-15. RECOMMENDING MARKING AND LIGHTING OF STRUCTURES .....	6-3-25
6-3-16. NEGOTIATIONS .....	6-3-26
6-3-17. CIRCULARIZATION .....	6-3-27

**Chapter 7. Determinations**

**Section 1. Issuing Determinations**

7-1-1. POLICY .....	7-1-1
7-1-2. RESPONSIBILITY .....	7-1-1
7-1-3. DETERMINATIONS .....	7-1-1
7-1-4. DETERMINATION CONTENT AND OPTIONS .....	7-1-2
7-1-5. DETERMINATION DATES .....	7-1-6
7-1-6. EXISTING STRUCTURES .....	7-1-6
7-1-7. DISTRIBUTION OF DETERMINATIONS .....	7-1-6

**Section 2. Extension of Determinations**

7-2-1. AUTHORITY .....	7-2-1
7-2-2. CONDITIONS .....	7-2-1
7-2-3. COORDINATION .....	7-2-1
7-2-4. EXTENSION PERIOD .....	7-2-1
7-2-5. REVIEW PROVISIONS FOR PETITION .....	7-2-1
7-2-6. DISTRIBUTION .....	7-2-1

**Section 3. Revision, Correction, and Termination of Determination**

<b>Paragraph</b>	<b>Page</b>
7-3-1. REVISIONS AND TERMINATIONS BASED ON NEW FACTS .....	7-3-1
7-3-2. CORRECTION .....	7-3-1
7-3-3. STANDARD FORMAT .....	7-3-1
7-3-4. DISTRIBUTION .....	7-3-1

**Chapter 8. Post Determination Action**

**Section 1. Action**

8-1-1. FOLLOW-UP ACTION .....	8-1-1
8-1-2. RECEIPT OF COMPLETED PSR .....	8-1-1
8-1-3. RECEIPT OF COMPLETED FORM 7460-2 .....	8-1-1
8-1-4. PROCESSING PROJECT ABANDONED NOTIFICATION .....	8-1-2
8-1-5. PROCESSING DISMANTLEMENT NOTIFICATION .....	8-1-2

**Chapter 9. Discretionary Review Process**

**Section 1. General**

9-1-1. AUTHORITY .....	9-1-1
9-1-2. OEG RESPONSIBILITY .....	9-1-1
9-1-3. JURISDICTION .....	9-1-1

**Section 2. Petition Processing**

9-2-1. ADMINISTRATIVE PROCESSING .....	9-2-1
9-2-2. RECOMMENDATIONS .....	9-2-1
9-2-3. DISTRIBUTION OF NOTICES TO GRANT DISCRETIONARY REVIEW .....	9-2-1
9-2-4. OEG PARTICIPATION .....	9-2-1
9-2-5. FINAL DECISION .....	9-2-1
9-2-6. DISTRIBUTION OF DECISION .....	9-2-1

**Part 3. Airport Airspace Analysis**

**Chapter 10. Basic**

**Section 1. Policy**

10-1-1. PURPOSE .....	10-1-1
10-1-2. AUTHORITY .....	10-1-1
10-1-3. AIRPORT PROGRAMS .....	10-1-1
10-1-4. FUNDING RESPONSIBILITY .....	10-1-2
10-1-5. RESPONSIBILITY .....	10-1-2

**Section 2. Airport Study**

10-2-1. PURPOSE .....	10-2-1
10-2-2. STUDY NUMBER ASSIGNMENT .....	10-2-1
10-2-3. PROPOSALS SUBJECT TO AERONAUTICAL STUDY .....	10-2-1

**Section 3. Airport Standards**

<b>Paragraph</b>	<b>Page</b>
10-3-1. DESIGN STANDARDS .....	10-3-1
10-3-2. AIRPORT SPACING GUIDELINES AND TRAFFIC PATTERN AIRSPACE AREAS .....	10-3-1
10-3-3. DESIGNATION OF INSTRUMENT RUNWAYS, CHANGES OF AIRPORT STATUS VFR TO IFR AND LOWERING MINIMUMS .....	10-3-2
10-3-4. AIRSPACE FEASIBILITY STUDY .....	10-3-3
10-3-5. ONSITE EVALUATION .....	10-3-3
10-3-6. FORMULATION OF FAA DETERMINATION .....	10-3-3

**Section 4. Airport Charting and Publication of Airport Data**

10-4-1. POLICY .....	10-4-1
10-4-2. RESPONSIBILITY .....	10-4-1
10-4-3. AIRPORT CHARTING .....	10-4-1

**Chapter 11. Evaluating Aeronautical Effect**

**Section 1. General**

11-1-1. EXISTING AND PROPOSED OBJECTS .....	11-1-1
11-1-2. AIRPORT TRAFFIC PATTERNS .....	11-1-1
11-1-3. INSTRUMENT FLIGHT PROCEDURES .....	11-1-1
11-1-4. AIR TRAFFIC CONTROL PROCEDURES .....	11-1-1
11-1-5. SAFETY OF PERSONS AND PROPERTY ON THE GROUND .....	11-1-1
11-1-6. NOISE CONSIDERATION .....	11-1-2
11-1-7. AERONAUTICAL ACTIVITY .....	11-1-2
11-1-8. WIND ROSE DATA .....	11-1-2
11-1-9. HELICOPTER INGRESS-EGRESS ROUTES .....	11-1-2
11-1-10. DISPLACED THRESHOLDS AND CHANGING THE RUNWAY END .....	11-1-2
11-1-11. EXISTING AIRPORTS .....	11-1-2

**Section 2. Processing of Airport Proposals By Regional Airports  
Offices**

11-2-1. PROPOSALS .....	11-2-1
11-2-2. AIRPORT LAYOUT PLANS (ALP) .....	11-2-2
11-2-3. NON-PART 157 PROPOSED CONSTRUCTION OR ALTERATION ON NON-OBLIGATED PUBLIC-USE AIRPORTS .....	11-2-2
11-2-4. FAA COORDINATION .....	11-2-2
11-2-5. NEGOTIATION WITH SPONSOR .....	11-2-3
11-2-6. CIRCULARIZATION .....	11-2-3
11-2-7. EVALUATE COMMENTS AND AERONAUTICAL EFFECT .....	11-2-4
11-2-8. INFORMAL AIRSPACE MEETINGS .....	11-2-4
11-2-9. ISSUE DETERMINATION .....	11-2-4

**Section 3. Processing of Airport Proposals By Regional Flight  
Standards Offices**

11-3-1. EFFECT ON SAFETY OF FLIGHT .....	11-3-1
11-3-2. EFFECT ON SAFETY OF PERSONS AND PROPERTY ON THE GROUND ....	11-3-1
11-3-3. ONSITE EVALUATIONS .....	11-3-1

**Section 4. Processing of Airport Proposals By Operations Support Group Flight Procedures Teams**

<b>Paragraph</b>	<b>Page</b>
11-4-1. EFFECT ON INSTRUMENT PROCEDURES .....	11-4-1
11-4-2. CHANGE OF AIRPORT STATUS FROM VFR TO IFR .....	11-4-1
11-4-3. EVALUATION OF INSTRUMENT RUNWAY DESIGNATIONS .....	11-4-1

**Section 5. Processing of Airport Proposals By Technical Operations Services Area Offices**

11-5-1. ELECTROMAGNETIC OR LINE-OF-SIGHT INTERFERENCE .....	11-5-1
11-5-2. EVALUATION OF INSTRUMENT RUNWAY DESIGNATION .....	11-5-1
11-5-3. CHANGE IN AIRPORT STATUS FROM VFR TO IFR .....	11-5-1
11-5-4. AIRPORT PROPOSALS .....	11-5-1

**Section 6. Processing of Airport Proposals By Service Area Offices**

11-6-1. EFFECT ON AIR TRAFFIC CONTROL OPERATIONS .....	11-6-1
11-6-2. COORDINATION .....	11-6-1
11-6-3. AIRPORT TRAFFIC PATTERNS .....	11-6-1
11-6-4. PART 77 REVIEW .....	11-6-2
11-6-5. DESIGNATION OF INSTRUMENT RUNWAY/CHANGE IN AIRPORT STATUS VFR TO IFR .....	11-6-2
11-6-6. ONSITE EVALUATION .....	11-6-2

**Chapter 12. Airport Determinations**

**Section 1. General**

12-1-1. RESPONSIBILITY .....	12-1-1
12-1-2. TERMINOLOGY .....	12-1-1
12-1-3. CONDITIONAL DETERMINATIONS .....	12-1-1
12-1-4. EXPIRATION DATES .....	12-1-2
12-1-5. STATEMENT IN DETERMINATIONS .....	12-1-2
12-1-6. AIRPORT MASTER RECORD .....	12-1-3
12-1-7. ADVISE FEDERAL AGREEMENT AIRPORT SPONSORS .....	12-1-3
12-1-8. DISSEMINATION OF STUDY RESULTS .....	12-1-3
12-1-9. REVIEW OF SENSITIVE OR CONTROVERSIAL CASES AND PART 157 DETERMINATIONS .....	12-1-3
12-1-10. DISPOSAL OF FEDERAL SURPLUS REAL PROPERTY FOR PUBLIC AIRPORT PURPOSES .....	12-1-4

**Chapter 13. Military, NASA, and Other Agency Airport Proposals**

**Section 1. General**

13-1-1. PRIOR NOTICE TO FAA .....	13-1-1
13-1-2. FORM OF NOTICE .....	13-1-1
13-1-3. FAA HEADQUARTERS REVIEWS .....	13-1-1
13-1-4. REGIONAL/SERVICE AREA OFFICE REVIEW .....	13-1-1
13-1-5. MILITARY PROPOSALS OTHER THAN MCP .....	13-1-1

## **Part 4. Terminal and En Route Airspace**

### **Chapter 14. Designation of Airspace Classes**

#### **Section 1. General**

<b>Paragraph</b>	<b>Page</b>
14-1-1. PURPOSE .....	14-1-1
14-1-2. CONTROLLED AIRSPACE .....	14-1-1
14-1-3. UNCONTROLLED AIRSPACE .....	14-1-2
14-1-4. FRACTIONAL MILES .....	14-1-2
14-1-5. AIRSPACE LEGAL DESCRIPTION .....	14-1-2
14-1-6. EXAMPLES OF TERMINAL AIRSPACE LEGAL DESCRIPTIONS .....	14-1-3

#### **Section 2. Ad Hoc Committee Procedures for Class B and Class C Airspace Actions**

14-2-1. BACKGROUND .....	14-2-1
14-2-2. POLICY AND PURPOSE .....	14-2-1
14-2-3. COMMITTEE FORMATION .....	14-2-1
14-2-4. FAA PARTICIPATION .....	14-2-1
14-2-5. COMMITTEE PROCESS .....	14-2-1
14-2-6. FAA ACTION ON COMMITTEE RECOMMENDATIONS .....	14-2-2

### **Chapter 15. Class B Airspace**

#### **Section 1. General**

15-1-1. PURPOSE .....	15-1-1
15-1-2. NONRULEMAKING ALTERNATIVES .....	15-1-1
15-1-3. RESPONSIBILITIES .....	15-1-1
15-1-4. SERVICE CENTER EVALUATION .....	15-1-1

#### **Section 2. Class B Airspace Planning**

15-2-1. CRITERIA .....	15-2-1
15-2-2. DESIGNATION .....	15-2-1
15-2-3. CONFIGURATION .....	15-2-1
15-2-4. IFR TRANSITION ROUTES .....	15-2-2
15-2-5. VFR CONSIDERATIONS .....	15-2-2
15-2-6. CHART ENHANCEMENTS .....	15-2-2

#### **Section 3. Class B Airspace Processing**

15-3-1. OVERVIEW .....	15-3-1
15-3-2. STAFF STUDY .....	15-3-1
15-3-3. PRE-NPRM AIRSPACE USER COORDINATION .....	15-3-2
15-3-4. NPRM PHASE .....	15-3-2
15-3-5. POST-NPRM PROCESSING .....	15-3-3
15-3-6. REVOKING CLASS B AIRSPACE .....	15-3-3

## Chapter 16. Class C Airspace

### Section 1. General

<b>Paragraph</b>	<b>Page</b>
16-1-1. PURPOSE .....	16-1-1
16-1-2. NONRULEMAKING ALTERNATIVES .....	16-1-1
16-1-3. RESPONSIBILITIES .....	16-1-1
16-1-4. SERVICE CENTER EVALUATION .....	16-1-1

### Section 2. Class C Airspace Planning

16-2-1. CRITERIA .....	16-2-1
16-2-2. DESIGNATION .....	16-2-1
16-2-3. CONFIGURATION .....	16-2-1
16-2-4. TIME OF DESIGNATION .....	16-2-1

### Section 3. Class C Airspace Processing

16-3-1. STAFF STUDY .....	16-3-1
16-3-2. PRE-NPRM AIRSPACE USER COORDINATION .....	16-3-2
16-3-3. NPRM PHASE .....	16-3-2
16-3-4. POST-NPRM PROCESSING .....	16-3-2
16-3-5. PUBLICITY .....	16-3-2

## Chapter 17. Class D Airspace

### Section 1. General

17-1-1. PURPOSE .....	17-1-1
17-1-2. REGIONAL/SERVICE AREA OFFICE EVALUATION .....	17-1-1
17-1-3. DESIGNATION .....	17-1-1
17-1-4. TIME OF DESIGNATION .....	17-1-1
17-1-5. PART TIME SURFACE AREAS .....	17-1-1

### Section 2. Class D Airspace Standards

17-2-1. CONFIGURATION .....	17-2-1
17-2-2. AIRPORT REFERENCE POINT/GEOGRAPHIC POSITION .....	17-2-1
17-2-3. SATELLITE AIRPORTS .....	17-2-1
17-2-4. ADJOINING CLASS D AIRSPACE AREAS .....	17-2-1
17-2-5. DETERMINING CLASS D AREA SIZE .....	17-2-1
17-2-6. DEPARTURES .....	17-2-1
17-2-7. ARRIVAL EXTENSION .....	17-2-1
17-2-8. VERTICAL LIMITS .....	17-2-2
17-2-9. COMMUNICATIONS .....	17-2-2
17-2-10. WEATHER OBSERVATIONS AND REPORTING .....	17-2-2
17-2-11. LOSS OF COMMUNICATION OR WEATHER REPORTING CAPABILITY ...	17-2-2



## Chapter 18. Class E Airspace

### Section 1. General

<b>Paragraph</b>	<b>Page</b>
18-1-1. INTRODUCTION .....	18-1-1
18-1-2. CLASS E SURFACE AREAS .....	18-1-1
18-1-3. DESIGNATION .....	18-1-1

### Section 2. Transitional Airspace

18-2-1. PURPOSE .....	18-2-1
18-2-2. 700/1,200-FOOT CLASS E AIRSPACE .....	18-2-1
18-2-3. 700-FOOT CLASS E AIRSPACE .....	18-2-1
18-2-4. 1,200-FOOT CLASS E AIRSPACE .....	18-2-1
18-2-5. CLASS E AIRSPACE FLOORS ABOVE 1,200 FEET .....	18-2-1
18-2-6. COORDINATION OF MISSED APPROACH ALTITUDES .....	18-2-1

### Section 3. Transitional Airspace Area Criteria

18-3-1. DEPARTURE AREA .....	18-3-1
18-3-2. LENGTHY DEPARTURE CLASS E AIRSPACE EXTENSIONS .....	18-3-1
18-3-3. ARRIVAL AREA .....	18-3-1
18-3-4. ARRIVAL EXTENSION .....	18-3-1
18-3-5. PROCEDURE TURN PROTECTION .....	18-3-2
18-3-6. DETERMINING BASE ALTITUDES .....	18-3-2

## Chapter 19. Other Airspace Areas

### Section 1. General

19-1-1. EN ROUTE DOMESTIC AIRSPACE AREAS .....	19-1-1
19-1-2. OFFSHORE/CONTROL AIRSPACE AREAS .....	19-1-1
19-1-3. DESIGNATION .....	19-1-1
19-1-4. PROCESSING .....	19-1-1

## Chapter 20. Air Traffic Service Routes

### Section 1. General

20-1-1. PURPOSE .....	20-1-1
20-1-2. CONTROLLED AIRSPACE .....	20-1-1
20-1-3. DESIGNATION OF ATS ROUTES .....	20-1-1
20-1-4. RESPONSIBILITIES .....	20-1-1
20-1-5. ROUTE IDENTIFICATION .....	20-1-1
20-1-6. BASE ALTITUDES .....	20-1-2
20-1-7. MINIMUM EN ROUTE ALTITUDES .....	20-1-2
20-1-8. PROCEDURAL REQUIREMENTS .....	20-1-2
20-1-9. ACTION TO RAISE BASE OF TRANSITION AREAS .....	20-1-2

### Section 2. Flight Inspection Requirements

20-2-1. FLIGHT INSPECTION REQUESTS .....	20-2-1
20-2-2. REQUEST FOR FLIGHT INSPECTION DATA .....	20-2-1

<b>Paragraph</b>	<b>Page</b>
20-2-3. FLIGHT INSPECTION REPORT .....	20-2-1
20-2-4. FLIGHT INSPECTION DATA DISTRIBUTION .....	20-2-1

**Section 3. Federal Airways**

20-3-1. DEFINITION .....	20-3-1
20-3-2. NAVAID SPACING .....	20-3-1
20-3-3. VERTICAL AND LATERAL EXTENT .....	20-3-1
20-3-4. WIDTH REDUCTIONS .....	20-3-2

**Section 4. Jet Routes**

20-4-1. DEFINITION .....	20-4-1
20-4-2. NAVAID SPACING .....	20-4-1
20-4-3. JET ROUTE WIDTH .....	20-4-1

**Section 5. Area Navigation (RNAV) Routes**

20-5-1. PURPOSE .....	20-5-1
20-5-2. RNAV ROUTE CRITERIA .....	20-5-1
20-5-3. WAYPOINTS .....	20-5-1
20-5-4. LATERAL PROTECTED AIRSPACE CRITERIA FOR RNAV EN ROUTE SEGMENTS .....	20-5-1
20-5-5. RNAV ROUTE DESCRIPTIONS .....	20-5-1

**Part 5. Special Use Airspace**

**Chapter 21. General**

**Section 1. Policy**

21-1-1. PURPOSE .....	21-1-1
21-1-2. SCOPE .....	21-1-1
21-1-3. DEFINITION AND TYPES .....	21-1-1
21-1-4. CATEGORIES .....	21-1-1
21-1-5. SUA APPROVAL AUTHORITY .....	21-1-1
21-1-6. MINIMUM VOLUME AND TIMES .....	21-1-1
21-1-7. OPTIMUM USE OF AIRSPACE .....	21-1-2
21-1-8. JOINT-USE POLICY .....	21-1-2
21-1-9. ENVIRONMENTAL ANALYSIS .....	21-1-2
21-1-10. CONTROLLING AGENCY .....	21-1-2
21-1-11. USING AGENCY .....	21-1-3
21-1-12. WAIVERS .....	21-1-3
21-1-13. PUBLIC NOTICE PROCEDURES .....	21-1-3
21-1-14. SUA NONRULEMAKING CIRCULARS .....	21-1-3
21-1-15. CHARTING AND PUBLICATION REQUIREMENTS .....	21-1-4
21-1-16. CERTIFICATION OF SUA GEOGRAPHIC POSITIONAL DATA .....	21-1-5
21-1-17. LEAD SERVICE CENTER .....	21-1-5

**Section 2. SUA Legal Descriptions**

<b>Paragraph</b>	<b>Page</b>
21-2-1. GENERAL .....	21-2-1
21-2-2. BOUNDARIES .....	21-2-1
21-2-3. ALTITUDES .....	21-2-1
21-2-4. TIME OF DESIGNATION (RULEMAKING SUA) / TIMES OF USE (NON-RULEMAKING SUA) .....	21-2-2
21-2-5. CONTROLLING AGENCY .....	21-2-3
21-2-6. USING AGENCY .....	21-2-3
21-2-7. SUA LEGAL DESCRIPTION AMENDMENTS .....	21-2-3

**Section 3. SUA Proposals**

21-3-1. GENERAL .....	21-3-1
21-3-2. CLASSIFIED INFORMATION .....	21-3-1
21-3-3. PROPOSAL CONTENT .....	21-3-1
21-3-4. ABBREVIATED PROPOSALS .....	21-3-3

**Section 4. Coordination of Proposals**

21-4-1. POLICY .....	21-4-1
21-4-2. PRE-PROPOSAL COORDINATION .....	21-4-1
21-4-3. ATC FACILITY COORDINATION .....	21-4-1
21-4-4. SUBMISSION OF PROPOSALS .....	21-4-1

**Section 5. Service Center OSG Actions**

21-5-1. GENERAL .....	21-5-1
21-5-2. SERVICE CENTER OSG PROCESSING REQUIREMENTS .....	21-5-1
21-5-3. AERONAUTICAL IMPACT CONSIDERATION .....	21-5-2
21-5-4. ENVIRONMENTAL DOCUMENT REVIEW .....	21-5-2
21-5-5. SERVICE CENTER DETERMINATION .....	21-5-2
21-5-6. DISAPPROVAL OF PROPOSALS .....	21-5-2
21-5-7. SUBMISSION OF APPROVAL RECOMMENDATIONS TO FAA HEADQUARTERS .....	21-5-2
21-5-8. HANDLING OF PROPOSALS TO REDUCE OR REVOKE SUA .....	21-5-3
21-5-9. FAA INITIATED SUA PROPOSALS .....	21-5-3

**Section 6. Aeronautical Study**

21-6-1. PURPOSE .....	21-6-1
21-6-2. POLICY .....	21-6-1
21-6-3. CONTENT OF STUDY .....	21-6-1

**Section 7. Restricted Area and MOA Annual Utilization Reports**

21-7-1. PURPOSE .....	21-7-1
21-7-2. REPORTING REQUIREMENTS .....	21-7-1
21-7-3. SUPPLEMENTARY REPORTS .....	21-7-1
21-7-4. UTILIZATION REPORT TERMS .....	21-7-1
21-7-5. REVIEW REQUIREMENT .....	21-7-2
21-7-6. REVIEW SUMMARY .....	21-7-2

**Section 8. SUA Review and Analysis**

<b>Paragraph</b>	<b>Page</b>
21-8-1. GENERAL .....	21-8-1
21-8-2. POLICY .....	21-8-1
21-8-3. SOURCES OF INFORMATION .....	21-8-1
21-8-4. UTILIZATION STANDARDS .....	21-8-1
21-8-5. SUA REVIEW GUIDE .....	21-8-2
21-8-6. SUA REVIEW FOLLOW UP ACTION .....	21-8-3

**Chapter 22. Prohibited Areas**

**Section 1. General**

22-1-1. DEFINITION .....	22-1-1
22-1-2. PURPOSE .....	22-1-1
22-1-3. IDENTIFICATION .....	22-1-1
22-1-4. DESCRIPTION .....	22-1-1
22-1-5. WAIVERS/AUTHORIZATION .....	22-1-1
22-1-6. USING AGENCY .....	22-1-1

**Section 2. Processing**

22-2-1. SUBMISSION OF PROPOSALS .....	22-2-1
---------------------------------------	--------

**Chapter 23. Restricted Areas**

**Section 1. General**

23-1-1. DEFINITION .....	23-1-1
23-1-2. PURPOSE .....	23-1-1
23-1-3. IDENTIFICATION .....	23-1-1
23-1-4. RESTRICTED AREA FLOOR .....	23-1-1
23-1-5. JOINT-USE .....	23-1-1
23-1-6. TEMPORARY RESTRICTED AREAS .....	23-1-2

**Section 2. Processing**

23-2-1. SUBMISSION OF PROPOSALS .....	23-2-1
23-2-2. TEMPORARY RESTRICTED AREA PROPOSALS .....	23-2-1

**Chapter 24. Warning Areas**

**Section 1. General**

24-1-1. BACKGROUND .....	24-1-1
24-1-2. DEFINITION AND PURPOSE .....	24-1-2
24-1-3. POLICY .....	24-1-2
24-1-4. IDENTIFICATION .....	24-1-2
24-1-5. JOINT-USE .....	24-1-2

**Section 2. Processing**

<b>Paragraph</b>	<b>Page</b>
24-2-1. SUBMISSION OF PROPOSALS .....	24-2-1
24-2-2. EXECUTIVE ORDER 10854 COORDINATION .....	24-2-1
24-2-3. ENVIRONMENTAL REVIEW .....	24-2-1

**Chapter 25. Military Operations Areas**

**Section 1. General**

25-1-1. DEFINITION .....	25-1-1
25-1-2. PURPOSE .....	25-1-1
25-1-3. IDENTIFICATION .....	25-1-1
25-1-4. MOA FLOOR .....	25-1-1
25-1-5. LOCATION .....	25-1-1
25-1-6. JOINT USE .....	25-1-1
25-1-7. TEMPORARY MOAs .....	25-1-1
25-1-8. MOAs IN CLASS G AIRSPACE .....	25-1-2

**Section 2. Processing**

25-2-1. SUBMISSION OF PROPOSALS .....	25-2-1
25-2-2. TEMPORARY MOA PROPOSALS .....	25-2-1

**Chapter 26. Alert Areas**

**Section 1. General**

26-1-1. DEFINITION .....	26-1-1
26-1-2. PURPOSE .....	26-1-1
26-1-3. IDENTIFICATION .....	26-1-1
26-1-4. LOCATION .....	26-1-1
26-1-5. ACTIVITIES .....	26-1-1

**Section 2. Criteria**

26-2-1. ESTABLISHMENT .....	26-2-1
26-2-2. TYPES OF OPERATIONS .....	26-2-1

**Section 3. Processing**

26-3-1. ALERT AREA PROPOSALS .....	26-3-1
26-3-2. SUBMISSION OF PROPOSALS .....	26-3-1

**Chapter 27. Controlled Firing Areas**

**Section 1. General**

27-1-1. DEFINITION .....	27-1-1
27-1-2. PURPOSE .....	27-1-1
27-1-3. CRITERIA .....	27-1-1
27-1-4. CHARTING .....	27-1-1
27-1-5. DIMENSIONS .....	27-1-1

<b>Paragraph</b>	<b>Page</b>
27-1-6. ACTIVITIES .....	27-1-1
27-1-7. APPROVAL .....	27-1-1
27-1-8. SUSPENSION OR REVOCATION .....	27-1-1

**Section 2. Processing**

27-2-1. SUBMISSION REQUIREMENTS .....	27-2-1
27-2-2. CFA PROPOSALS .....	27-2-1
27-2-3. SERVICE CENTER OSG ACTION .....	27-2-1
27-2-4. APPROVAL LETTER .....	27-2-1

**Section 3. Safety Precautions**

27-3-1. USER RESPONSIBILITIES .....	27-3-1
27-3-2. PRECAUTIONARY MEASURES .....	27-3-1
27-3-3. AREA SURVEILLANCE .....	27-3-1

**Chapter 28. National Security Areas**

**Section 1. General**

28-1-1. DEFINITION .....	28-1-1
28-1-2. PURPOSE .....	28-1-1
28-1-3. CRITERIA .....	28-1-1
28-1-4. DIMENSIONS .....	28-1-1
28-1-5. CHARTING .....	28-1-1
28-1-6. REVOCATION .....	28-1-1

**Section 2. Processing**

28-2-1. SUBMISSION OF PROPOSALS .....	28-2-1
---------------------------------------	--------

**Part 6. Miscellaneous Procedures**

**Chapter 29. Outdoor Laser Operations**

**Section 1. General**

29-1-1. PURPOSE .....	29-1-1
29-1-2. AUTHORITY .....	29-1-1
29-1-3. POLICY .....	29-1-1
29-1-4. RESPONSIBILITIES .....	29-1-1
29-1-5. DEFINITIONS .....	29-1-1

**Section 2. Evaluating Aeronautical Effect**

29-2-1. SERVICE CENTER COORDINATION .....	29-2-1
29-2-2. AERONAUTICAL REVIEW .....	29-2-1
29-2-3. LOCAL LASER WORKING GROUP (LLWG) .....	29-2-1
29-2-4. PROTECTION DISTANCE CALCULATIONS .....	29-2-2
29-2-5. CONTROL MEASURES .....	29-2-2

### Section 3. Aeronautical Determinations

Paragraph	Page
29-3-1. FINDINGS .....	29-3-1
29-3-2. CONTENT OF DETERMINATIONS .....	29-3-1
29-3-3. PUBLICATION OF LASER OPERATIONS IN THE NAS .....	29-3-1

### Section 4. Notices to Air Missions

29-4-1. ISSUANCE OF NOTICES TO AIR MISSIONS (NOTAM) .....	29-4-1
-----------------------------------------------------------	--------

### Section 5. Aircraft Illumination Actions

29-5-1. PROCEDURES .....	29-5-1
--------------------------	--------

## Chapter 30. High Intensity Light Operations

### Section 1. General

30-1-1. PURPOSE .....	30-1-1
30-1-2. POLICY .....	30-1-1
30-1-3. AUTHORITY .....	30-1-1
30-1-4. DEFINITIONS .....	30-1-1

### Section 2. Aeronautical Review/Determinations

30-2-1. EVALUATION OF AFFECTED AIRSPACE AREAS .....	30-2-1
30-2-2. AERONAUTICAL STUDY .....	30-2-1
30-2-3. CONTENT OF DETERMINATION .....	30-2-1

## Chapter 31. Amateur Rocket and Commercial Space Operations

### Section 1. General

31-1-1. PURPOSE .....	31-1-1
31-1-2. AUTHORITY .....	31-1-1
31-1-3. POLICY .....	31-1-1
31-1-4. CONTROLLING FACILITY .....	31-1-1
31-1-5. DEFINITIONS .....	31-1-1
31-1-6. RESOURCES .....	31-1-2

### Section 2. Amateur Rockets

31-2-1. RESPONSIBILITIES .....	31-2-1
31-2-2. GENERAL OPERATING LIMITATIONS .....	31-2-1
31-2-3. AMATEUR ROCKET PROCESS .....	31-2-1
31-2-4. AERONAUTICAL ANALYSIS .....	31-2-2
31-2-5. AIRSPACE MANAGEMENT .....	31-2-3
31-2-6. WAIVER/AUTHORIZATION FORMAT AND CONTENT .....	31-2-3
31-2-7. NOTIFICATION TO AIR TRAFFIC FACILITIES .....	31-2-4
31-2-8. NOTAMS .....	31-2-4

**Section 3. Launch and Reentry Vehicle Operations**

<b>Paragraph</b>	<b>Page</b>
31-3-1. RESPONSIBILITIES .....	31-3-1
31-3-2. NOTICE TO AIR MISSIONS (NOTAM) .....	31-3-2
31-3-3. LAUNCH AND REENTRY PROCESS .....	31-3-2

**Chapter 32. Environmental Matters**

**Section 1. General Information**

32-1-1. PURPOSE .....	32-1-1
32-1-2. POLICY .....	32-1-1
32-1-3. BACKGROUND .....	32-1-1
32-1-4. DELEGATION OF AUTHORITY .....	32-1-2
32-1-5. RESPONSIBILITIES .....	32-1-2

**Section 2. Environmental Processing**

32-2-1. THE PROCESS .....	32-2-1
32-2-2. ENVIRONMENTAL REVIEW OF FLIGHT PROCEDURES AND OTHER AIR TRAFFIC ACTIONS .....	32-2-6
32-2-3. SPECIAL USE AIRSPACE (SUA) .....	32-2-8
32-2-4. CFR PART 150 STUDIES .....	32-2-8

**Section 3. Environmental Impact Categories and Other Topics**

32-3-1. ENVIRONMENTAL IMPACT CATEGORIES TO BE INCLUDED IN ANALYSIS	32-3-1
32-3-2. ENVIRONMENTAL IMPACT CATEGORIES EXCLUDED FROM ANALYSIS ..	32-3-2
32-3-3. ENVIRONMENTAL SCREENING AND MODELING TOOLS .....	32-3-4
32-3-4. RECORDS RETENTION .....	32-3-5

**Section 4. Air Traffic-Specific Environmental Guidance and Requirements**

32-4-1. DEPARTMENT OF TRANSPORTATION (DOT) ACT SECTION 4(f) (RECODIFIED AS 49 USC SECTION 303(c)) .....	32-4-1
32-4-2. ENVIRONMENTAL JUSTICE (TITLE VI/NEPA) .....	32-4-1
32-4-3. COMMUNITY INVOLVEMENT .....	32-4-1
32-4-4. SEGMENTATION, INDEPENDENT UTILITY, AND CUMULATIVE IMPACTS .	32-4-1
32-4-5. DIVERSE VECTOR AREAS (DVA) .....	32-4-2
32-4-6. NATIONAL SECURITY AREAS (NSAs) .....	32-4-2
32-4-7. PROHIBITED AREA AND ALERT AREA DESIGNATIONS .....	32-4-2
32-4-8. RECORDS RETENTION .....	32-4-3
32-4-9. APPENDICES .....	32-4-3
32-4-10. MEMORANDUMS AND EMAILS SUPERSEDED BY THIS ORDER .....	32-4-3

**Chapter 33. Parasail Operations**

**Section 1. General**

33-1-1. PURPOSE .....	33-1-1
33-1-2. AUTHORITY .....	33-1-1
33-1-3. POLICY .....	33-1-1



<b>Paragraph</b>	<b>Page</b>
33-1-4. CONTROLLING FACILITY .....	33-1-1
33-1-5. RESOURCES .....	33-1-1

**Section 2. Waivers**

33-2-1. RESPONSIBILITIES .....	33-2-1
33-2-2. GENERAL OPERATING LIMITATIONS .....	33-2-1
33-2-3. WAIVERS .....	33-2-1
33-2-4. WAIVER PROCESS .....	33-2-1
33-2-5. AERONAUTICAL ANALYSIS .....	33-2-2
33-2-6. FACILITY COORDINATION .....	33-2-2
33-2-7. WAIVER/AUTHORIZATION FORMAT AND CONTENT .....	33-2-2

Appendix 1. Environmental Study Process Flow Chart .....	Appendix 1-1
Appendix 2. FAA Procedures for Processing SUA Actions .....	Appendix 2-1
Appendix 3. Procedures for Processing SUA Actions Aeronautical Process Flow Chart ...	Appendix 3-1
Appendix 4. FAA Procedures for Processing SUA Actions: Aeronautical and Environmental Summary Table .....	Appendix 4-1
Appendix 5. Air Traffic Initial Environmental Review (IER) .....	Appendix 5-1
Appendix 6. Sample DOT FAA Categorical Exclusion Declaration .....	Appendix 6-1
Appendix 7. FAA/DOD Memorandum of Understanding .....	Appendix 7-1
Appendix 8. FAA Special Use Airspace Environmental Processing Procedures .....	Appendix 8-1
Appendix 9. Noise Policy for Management of Airspace Over Federally Managed Lands ...	Appendix 9-1
Appendix 10. Community Involvement Policy .....	Appendix 10-1
Appendix 11. Federal Aviation Administration (FAA) Notification of Proposed Project(s) Template .....	Appendix 11-1
Appendix 12. Evaluating Air Traffic Impacts for Wind Turbine Farm Proposals .....	Appendix 12-1
Appendix 13. Template for Memorandum of Assessment of Potential Impact on the NAS ..	Appendix 13-1



# Part 1. General Procedures for Airspace Management

## Chapter 1. General

### Section 1. Introduction

#### 1-1-1. PURPOSE OF THIS ORDER

a. This order prescribes policy, criteria, guidelines, and procedures applicable to the System Operations Services; Mission Support Services; Aeronautical Information Services; Technical Operations Services; Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team; Technical Operations Technical Services; the Office of Airport Planning and Programming, (APP); the Office of Airport Safety and Standards, (AAS); Airports District Office (ADO); and the Flight Standards Service.

b. While this order provides procedures for handling airspace matters, additional procedures and criteria to supplement those contained herein may be set forth in other directives and should be consulted.

#### 1-1-2. AUDIENCE

a. This order applies to all ATO personnel and anyone using ATO directives.

b. This order also applies to all regional, Service Centers, Instrument Flight Procedure (IFP) Service Providers, and field organizational elements involved in rulemaking and nonrulemaking actions associated with airspace allocation and utilization, obstruction evaluation, obstruction marking and lighting, airport airspace analysis, and the management of air navigation aids. States that participate in the State Block Grant Program (SBGP) assist the Office of Airport Safety and Standards in these actions, but the overall responsibility remains with the Office of Airports. Participating states include Georgia, Illinois, Michigan, Missouri, New Hampshire, North Carolina, Pennsylvania, Tennessee, Texas, and Wisconsin.

#### 1-1-3. WHERE TO FIND THIS ORDER

This order is available on the FAA website at [http://www.faa.gov/air\\_traffic/publications](http://www.faa.gov/air_traffic/publications) and

[http://employees.faa.gov/tools\\_resources/orders\\_notices](http://employees.faa.gov/tools_resources/orders_notices).

#### 1-1-4. WHAT THIS ORDER CANCELS

FAA Order JO 7400.2M, Procedures for Handling Airspace Matters, dated February 28, 2019, and all changes to it are canceled.

#### 1-1-5. CHANGE AUTHORITY

The Director of Policy (AJV-P) will issue changes to this directive after obtaining concurrence from the affected Headquarters offices/services/service units on the cover of this order.

#### 1-1-6. EXPLANATION OF CHANGES

a. The significant changes to this order are identified in the Explanation of Changes page(s). It is advisable to retain the page(s) throughout the duration of the basic order.

b. If further information is desired, please direct questions through the appropriate facility/service area/regional office to the headquarters office of primary responsibility.

#### 1-1-7. SUBMISSION CUTOFF AND EFFECTIVE DATES

This order and its changes are scheduled to be published to coincide with AIRAC dates. However, due to the infrequent nature of changes submitted for this order, publishing may be postponed.

Publication Schedule		
Basic or Change	Cutoff Date for Submission	Effective Date of Publication
JO 7400.2N	12/31/20	6/17/21
Change 1	6/17/21	12/2/21
Change 2	12/2/21	5/19/22
Change 3	5/19/22	11/3/22

JO 7400.2P	11/3/22	4/20/23
Change 1	4/20/23	10/5/23
Change 2	10/5/23	3/21/24
Change 3	3/21/24	9/5/24

### 1-1-8. DELIVERY DATES

This order will be available on the FAA website 30 days prior to its effective date.

All organizations are responsible for viewing, downloading, and subscribing to receive electronic mail notifications when changes occur to this order.

Subscriptions can be made at [http://www.faa.gov/air\\_traffic/publications](http://www.faa.gov/air_traffic/publications).

### 1-1-9. RECOMMENDATIONS FOR PROCEDURAL CHANGES

**a.** The responsibility for processing and coordinating revisions to this order is delegated to the Rules and Regulations Group Manager.

**b.** Proposed changes or recommended revisions must be submitted, in writing, to the Rules and Regulations Group. The proposal should include a description of the change or revision, the language to be inserted in the order, and the rationale for the change or revision.

**c.** The Rules and Regulations Group will review and revise proposed changes as necessary and submit supported proposals to Policy (AJV-P). When appropriate, the Rules and Regulations Group may convene a workgroup for this purpose. Composition of the workgroup will be determined by the subject matter and the expertise required. The Rules and Regulations Group is responsible for the selection of

the members of the workgroup, and for appointing the chairperson of the group.

**d.** The Policy directorate is responsible for ensuring all approved revisions are published.

**e.** When revised, reprinted, or additional pages are issued, they will be marked as follows:

**1.** Each revised or added page will show the change number and effective date of the change.

**2.** Bold vertical lines in the margin of the text will mark the location of substantive procedural, operational, or policy changes (for example, when material that affects the performance of duty is added, revised, or deleted).

### 1-1-10. DISTRIBUTION

This order is available online and will be distributed electronically to all offices that subscribe to receive email notification/access to it through the FAA website at [http://www.faa.gov/air\\_traffic/publications](http://www.faa.gov/air_traffic/publications).

### 1-1-11. SAFETY MANAGEMENT SYSTEM

Every employee is responsible for ensuring the safety of equipment and procedures used in the provision of services within the National Airspace System (NAS).

**a.** Risk assessment techniques and mitigations, as appropriate, are intended for implementation of any planned safety significant changes within the NAS, as directed by FAA Order 1100.161, Air Traffic Safety Oversight.

**b.** Direction regarding the Safety Management System and its application can be found in the Air Traffic Organization Safety Management System Manual; FAA Order JO 1000.37, Air Traffic Organization Safety Management System; and FAA Order 1100.161, Air Traffic Safety Oversight.

## Section 2. Executive Order 10854

### 2-2-1. SCOPE

a. Executive Order 10854 extends the application of 49 U.S.C. § 40103 to the overlying airspace of those areas of land or water outside the United States beyond the 12-mile offshore limit in which the United States, under international treaty agreement or other lawful arrangements, has appropriate jurisdiction or control.

b. Under the provisions of Executive Order 10854, airspace actions must be consistent with the requirements of national defense, international treaties or agreements made by the United States, or

the successful conduct of the foreign relations of the United States.

**NOTE-**

See FIG 2-2-1 for the text of Executive Order 10854.

### 2-2-2. POLICY

Any rulemaking or nonrulemaking actions that encompass airspace outside of the United States sovereign airspace (i.e., beyond 12 NM from the United States coast line) must be coordinated with the Departments of Defense and State. All Executive Order 10854 coordination will be conducted by the Rules and Regulations Group. ■

FIG 2-2-1  
Executive Order 10854

**EXECUTIVE ORDER 10854**

**EXTENSION OF THE APPLICATION OF THE FEDERAL AVIATION ACT OF 1958**

By virtue of the authority vested in me by section 1110 of the Federal Aviation Act of 1958 (72 Stat. 800: 49 U.S.C. 1510), and as President of the United States, and having determined that such action would be in the national interest, I hereby order as follows:

The application of the Federal Aviation Act of 1958 (72 Stat. 731; 49 U.S.C. 1301 et seq.), to the extent necessary to permit the Secretary of Transportation to accomplish the purposes and objectives of Titles III and XII thereof (49 U.S.C. 1341-1355 and 1521-1523), is hereby extended to those areas of land or water outside the United States and the overlying airspace thereof over or in which the Federal Government of the United States, under international treaty, agreement or other lawful arrangement, has appropriate jurisdiction or control: Provided, that the Secretary of Transportation, prior to taking any action under the authority hereby conferred, shall first consult with the Secretary of State on matters affecting foreign relations, and with the Secretary of Defense on matters affecting national-defense interests, and shall not take any action which the Secretary of State determines to be in conflict with any international treaty or agreement to which the United States is a party, or to be inconsistent with the successful conduct of the foreign relations of the United States, or which the Secretary of Defense determines to be inconsistent with the requirements of national defense.

Dwight D. Eisenhower

The White House, November 27, 1959



## Section 3. Processing Rulemaking Airspace Actions

### 2-3-1. PURPOSE

This section prescribes procedures to be followed when taking rulemaking actions to establish, modify, or revoke regulatory airspace.

### 2-3-2. RESPONSIBILITY

a. The Rules and Regulations Group is responsible for processing the following actions: Class A, B, and C airspace areas; special use airspace (except controlled firing areas); offshore airspace areas; air traffic service routes; and those Class D and E airspace areas that overlie U.S. territories and possessions.

b. The Airman Certification and Air Traffic Law Branch, AGC-240, is responsible for ensuring that the airspace cases listed in paragraph a, above, meet the requirements of the Administrative Procedure Act (5 U.S.C. Chapter 5, Section 553) and DOT Order 2100.5, Policies and Procedures for Simplification Analysis and Review of Regulations.

c. Service centers are responsible for processing all Class D and E airspace area cases (except those overlying U.S. territories and possessions).

d. The Assistant Chief Counsel for each region is responsible for ensuring that all regional airspace cases meet the requirements of the Administrative Procedures Act and DOT Order 2100.5.

### 2-3-3. DOCKETS

#### a. Docket Location.

1. The official docket for both Headquarters and Service Center rulemaking cases must be maintained by DOT Docket Operations, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Room W12-140, West Building Ground Floor, Washington, DC 20590.

2. The Federal Docket Management System (FDMS) is the government-wide online database that includes DOT's public dockets. The public may review documents placed in the docket, and submit comments on proposed rules, by accessing the Federal eRulemaking Portal at <http://www.regulations.gov>.

#### b. Docket Identification.

1. Rulemaking cases are identified by two docket numbers. The first, an FAA docket number, consists of the acronym FAA; the current year; and a consecutively assigned number (for example, FAA-2003-14010). The second, an Airspace docket number, includes the last two digits of the calendar year; the appropriate FAA regional abbreviation for the geographic area the airspace action falls within (for example, AEA, ASO, etc.); and a consecutively assigned number within the calendar year (for example, 16-ASW-46). The FAA docket number is assigned by DOT Docket Operations. The Airspace docket number is assigned by the Service Center responsible for the geographic area the airspace action falls within, except for those airspace actions that are required to be originated by Headquarters.

2. Numbers must run consecutively within each calendar year.

c. Docket Content. The official docket must include all petitions, notices, rules, comments, correspondence, available graphics, and related material concerning the case (other than working files).

### 2-3-4. COMMENT PERIODS

Notice of Proposed Rulemaking (NPRM) actions should provide the following public comment periods:

a. Proposed nonsignificant rules (for example, most airspace actions): 45 days.

b. Proposed significant rules (for example, Class B and Class C actions): 60 days.

#### REFERENCE-

*DOT Order 2100.5, Policies and Procedures for Simplification Analysis and Review of Regulations.*

### 2-3-5. FLIGHT PROCEDURAL DATA

a. If an airspace docket requires an instrument procedure change and/or flight inspection, the appropriate Operations Support Group (OSG) must coordinate the proposed effective date with Aeronautical Information Services (AIS). The proposed effective date must consider the time needed to process procedural changes, complete Part 71

rulemaking, and allow ample time for flight inspection, if required. Any problems that could affect the proposed effective date must be coordinated with AIS and the Rules and Regulations Group. See Order 8260.26, Establishing and Scheduling Standard Instrument Procedure Effective Dates, for scheduled charting deadlines and publication dates.

b. If a rule without a prior NPRM is to be issued, and flight check data is required, the OSG must provide details of the change to AIS to request flight inspection and coordinate the planned effective date.

### **2-3-6. SUBMISSION OF RULEMAKING AIRSPACE CASES TO HEADQUARTERS**

a. To initiate Part 71 and Part 73 rulemaking for airspace actions that are processed by Headquarters, the OSG Manager must submit a request memorandum to the Rules and Regulations Group Manager.

b. The request must include the following:

1. A regional docket number (except for Class B and C actions).

2. Background information to include the purpose and need for the proposed action. If an informal airspace meeting is held, provide the meeting summary, public comments, and proposed mitigations.

(a) Provide specific details of the proposed action for inclusion in the NPRM to present the public with enough information to develop effective comments.

(b) For airspace actions, the proposed description of the airspace and aeronautical chart depiction.

**NOTE-**  
*A chart depiction is not required for ATS routes.*

(c) For Air Traffic Service (ATS) route actions, the proposed descriptions of the ATS route and TARGETS track plot.

(d) If radials, courses, or bearings are included as part of an airspace or ATS route description, both True and Magnetic values must be included for the NPRM.

c. If an airspace action needs to be completed by a specific date, the OSG must coordinate with any other FAA offices as necessary to ensure that

sufficient lead time exists for meeting airspace rulemaking, processing and charting requirements, instrument approach procedure development, and flight inspection deadlines (if required).

d. The OSG must review all public comments posted to the Federal eRulemaking Portal ([www.regulations.gov](http://www.regulations.gov)) or submitted directly to the FAA in response to an NPRM. The public comments must be analyzed to identify aeronautical impacts and whether mitigations are appropriate or cannot be adopted for specific reasons.

e. Within 90 days after the NPRM comment period closing, the OSG Manager will submit a memorandum to the Rules and Regulations Group Manager with either a recommendation for further action (for example, proceed to final rule, changes required, withdraw the proposal, etc.), or a status update on the proposal. Include the following information in the memorandum:

1. An analysis of issues raised in the NPRM comments received and how they are being addressed or mitigated. Provide a detailed explanation for issues that cannot be mitigated.

2. Confirmation that the airspace description remains the same as proposed in the NPRM or details of the changes that are required.

**NOTE-**  
*If substantial changes are made to the proposed action, a supplemental NPRM, with a new comment period, could be required.*

3. Copies of public comments received and any additional information that should be considered by the Rules and Regulations Group.

4. The requested airspace effective date.

### **2-3-7. EFFECTIVE DATE OF FINAL RULES**

a. Amendments to Parts 71 and 73 must be made effective at 0901 Coordinated Universal Time (UTC) and must coincide with 56-day en route charting dates published in FAA Order 8260.26, Establishing Submission Cutoff Dates for Civil Instrument Flight Procedures, Appendix A, Data Submission Cutoff Dates. Exceptions are as follows:

1. Safety or national interest actions that require an earlier effective time or date.

2. Editorial changes.

3. Actions that lessen the burden on the public (for example, revocation of restricted areas).



**4.** Class B and C airspace areas must be made effective on the appropriate sectional aeronautical charting date. To the extent practicable, Class D airspace area and restricted area rules should become effective on a sectional chart date. Consideration should be given to selection on a sectional chart date that matches a 56-day en route chart cycle date.

**b.** Cutoff dates are established to allow sufficient time for chart production and distribution. To meet this requirement, final rules must be published in the Federal Register on or before the applicable deadline for en route airspace date for the planned airspace effective date.

*REFERENCE—  
FAA Order 8260.26, Appendix A.*

## **2-3-8. PUBLICATION IN FEDERAL REGISTER**

**a.** The Federal Register accepts both paper and

electronic submissions.

**b.** Paper submissions must have an original NPRM or an original final rule and a CD with two duplicate certified electronic files that are forwarded to AGC-200 for publication in the Federal Register. The Office of the Federal Register requires that all original documents be signed with blue ink.

**c.** Electronic submissions are submitted through the Federal Register web portal at [webportal.fedreg.gov](http://webportal.fedreg.gov). For more information on how to get a digital signature and the submission process, see the Office of the Federal Register's Document Drafting Handbook, Chapter 6.

**d.** All documents must meet the criteria and format established by the Office of the Federal Register as outlined in the Document Drafting Handbook;  
<https://www.archives.gov/federal-register/write/handbook>



## Section 5. Informal Airspace Meeting

### 2-5-1. PURPOSE

This section prescribes the procedures to be followed for informal airspace meetings held before the issuance of a rulemaking or nonrulemaking airspace proposal.

### 2-5-2. POLICY

**a.** Informal airspace meetings may be held when the FAA determines there is a need to obtain additional technical information or facts to assist in the development of a proposal prior to the issuance of an NPRM or a nonrulemaking circular. The number of meetings required will be determined by the Service Center office based on the scope of the proposal.

**b.** Informal airspace meetings are mandatory for any planned Class B and/or Class C airspace proposals prior to issuing an NPRM.

#### **NOTE-**

*Meetings are not required for minor Class B or Class C airspace changes (for example, editorial corrections, ARP updates, etc.). Contact the Rules and Regulations Group if in doubt whether a proposed change requires a meeting.*

**c.** Informal airspace meetings are not a decision-making forum. The purpose is to gather additional information to be considered in developing the proposal. These meetings provide interested parties an opportunity to present views, recommendations, and comments on a proposal. All comments received during these meetings will be considered prior to any revision or issuance of a notice of proposed rulemaking.

**d.** At FAA's discretion, an electronic meeting format (such as webinars, podcasts, etc.) may be used to supplement the traditional meeting format. Electronic meetings must provide a method of posting questions and answers that can be viewed by all participants after the meeting. In addition, instructions for participants to submit written comments after the meeting must be included.

### 2-5-3. CLASS B AND C INFORMAL AIRSPACE MEETING NOTIFICATION PROCEDURES

**a.** The OSG must submit informal airspace meeting details to the Rules and Regulations Group for preparation of the notice and submission to the Federal Register at least 90 days in advance of the first meeting date. The following meeting information is required:

**1.** A general explanation of the proposed action to enable interested persons to prepare comments prior to the meeting.

**2.** The name, address, and telephone number of the person from whom additional information may be obtained.

**3.** Dates and times of the meeting(s).

**4.** Address(es) of meeting location(s).

**5.** Address for submitting written comments following the meeting(s).

**b.** The Federal Register notice must be published a maximum of 60 days and a minimum of 30 days in advance. The comment closing date will be 30 days after the last meeting date.

**c.** In addition to the Federal Register publication, informal airspace meeting notices must be sent to all known aviation interested persons and groups including, but not limited to, state aviation agencies, Service Center military representatives, national and local offices of aviation organizations, local flight schools, local airport owners, managers and fixed base operators, and local air taxi and charter operators within a 100-mile radius of the primary airport for Class B airspace actions and within a 50-mile radius of the primary airport for Class C airspace actions.

### 2-5-4. INFORMAL AIRSPACE MEETING NOTIFICATION PROCEDURES FOR AIRSPACE ACTIONS OTHER THAN CLASS B AND CLASS C

**a.** When additional information is needed, or known/anticipated controversy warrants, the above procedures may also be used for informal airspace meetings concerning airport airspace analysis, SUA,

or commissioning/decommissioning of navigation aids. Every effort must be made to notify all interested aviation organizations and/or persons and groups that may be affected by the proposed action.

**b.** Service centers are responsible for the preparation and distribution of informal airspace meeting notices for airspace actions other than Class B and C. Meeting notices are not required to be published in the Federal Register. The notice of the meeting should be distributed at least 30 days prior to the meeting date.

**c.** The meeting notice must:

**1.** Explain that the purpose of the meeting is to solicit aeronautical comments regarding the proposal's effect on the use of the navigable airspace.

**2.** Provide a general explanation of the proposed action to enable interested persons to prepare comments prior to the meeting.

**d.** Service centers are encouraged to also make use of electronic media, local newspapers, radio, and television to supplement the dissemination of meeting notices.

### **2-5-5. LOCATION**

Informal airspace meetings should be held at locations and times that provide an opportunity for

the public to submit aeronautical comments relative to the proposed action. For larger airspace area proposals, multiple meeting locations and times may be necessary to obtain input from the public over a wider geographic area.

### **2-5-6. AGENDA ITEMS**

Agenda items will be included in the informal airspace meeting notice. Suggested items include, but are not limited to, meeting procedures, FAA presentation on the proposed airspace action, and an opportunity for public presentations/comments. Only presentations or comments from attendees that concern the proposed action will be accepted.

### **2-5-7. RECORD OF MEETINGS**

**a.** Official transcripts or minutes of informal airspace meetings must not be taken or prepared. However, the chairperson must ensure that a memorandum summarizing the discussions and issues raised at the meeting(s) is prepared. A copy of the list of attendees and any written comments submitted at the meeting(s) or during the associated comment period must be attached to the memorandum.

**b.** For airspace actions, a copy of the memorandum and attachments must be included in the OSG recommendation package submitted to the Rules and Regulations Group.

## Section 3. Military NAVAIDs

### 4-3-1. POLICY

Military NAVAID proposals may affect airspace or airport utilization and the availability of interference protected frequencies. Consequently, military proposals involving the establishment or relocation of military NAVAIDs are forwarded to the service area office for nonrulemaking studies. Such proposals should contain the following information:

- a. Site of the NAVAIDs using geographical coordinates to the nearest hundredth of a second.
- b. Equipment type.
- c. Power output.
- d. Frequency range.
- e. Any other pertinent information.

### 4-3-2. COORDINATION WITH MILITARY

The service area office is authorized to coordinate with the originating military organization to obtain any additional information needed for the nonrule-making study.

### 4-3-3. EVALUATION BY TECHNICAL OPERATIONS SERVICES OFFICE

The regional Frequency Management Office must evaluate the military proposal to determine frequency availability and frequency protection. This evaluation must be provided to the responsible service area office.

### 4-3-4. CIRCULARIZATION

If the frequency evaluation report is favorable, the service area office must complete coordination with the appropriate Airports, Flight Standards, and other Technical Operations service area offices, and the

FPT. If appropriate, circularize the proposal to user groups and other interested persons for comment. If the public comments indicate further discussion is warranted, then consideration should be given to holding an informal airspace meeting to discuss the proposal.

### 4-3-5. DETERMINATION RESPONSIBILITY

The responsibility to determine the acceptability of the military proposal is delegated to the service area office after coordination with the FPT, Technical Operations service area office, Flight Standards, and Airports Divisions. Any problems with, or objections to, the proposal must be resolved at the regional/service area office level prior to issuance of the decision. The determination must be issued in memorandum form stating that the FAA has “no objections” or “objects” to the installation of the NAVAID. Airports Divisions are cautioned to ensure that site locations for the establishment or relocation of NAVAIDs on obligated airports are in accordance with FAA approved Airport Layout Plans. Any restrictions or reasons why the proposal is objectionable must be clearly set forth in the memorandum.

### 4-3-6. NOTIFICATION AND DISTRIBUTION

The appropriate service area office must normally address the determination to the military organization that originated the proposal. When the request for the study originated from FAA headquarters, then the determination should be directed to the office requesting the study or relayed to the Military Command through FAA/Department of Defense (DOD) coordination procedures. Forward copies of the memorandum to ARN-1, the Technical Operations Spectrum Assignment and Engineering Services, and those regional/service area offices that participated in the study.



## Section 2. Initial Processing/Verification

### 6-2-1. VERIFICATION/E-FILING

a. The OEG must verify each obstruction evaluation case to ensure that the submitted site elevation and coordinates appear to be correct and that all necessary information has been included. Verification must include, as a minimum, the following actions:

1. Compare the submitted site depiction to the submitted coordinates when plotted.

2. Compare the submitted site elevation to the National Elevation Dataset (NED) in the area of the submitted coordinates when plotted. Other resources may include, but are not limited to, the topographical chart contour elevation intervals, publicly available geographic information systems, or nearby prior studies.

3. If a survey is submitted, compare the information contained on the survey, with the submitted information and the site as plotted.

4. If the submission involves an existing structure, compare the submitted information to the digital obstacle file, with the previous aeronautical study (if any), and possibly the FCC tower registration information.

5. Ensure that the submission provides a complete description and clearly explains the reason for submission. The submission should include sufficient information to allow each division/service area office to accomplish its specialized portion of the obstruction evaluation.

6. If the submission involves a structure that would normally radiate frequencies, ensure that the frequencies and effective radiated power are included.

7. If the submission involves a structure over 200 feet AGL, ensure marking and/or lighting preferences are part of the submission. Sponsors must be required to specifically request the type of marking and/or lighting they desire when submitting FAA Form 7460-1. They should be encouraged to become familiar with the different type of lighting systems available. The sponsor should obtain information about these systems from the manufacturers. The

sponsor can then determine which system best meets his/her needs based on purchase, installation, and maintenance costs. The FAA will consider the sponsor's desired marking and/or lighting system when conducting the aeronautical study.

b. If the submission contains errors, discrepancies, or lack of information, the OEG must request resolution by the sponsor and/or the sponsor's representative. If the sponsor does not resolve the issues within 30 days of the written request, the OEG may terminate the aeronautical study.

c. If the submission passes verification and there are no unresolved issues, initiate evaluation by other divisions by changing the status in the OE/AAA automation program to "WRK."

#### **NOTE-**

*It is imperative that all data in the automated OE case file is reviewed and verified for accuracy before proceeding to "Division/Service Area Office Coordination." Any correction or change to the heights and/or coordinates after the divisions/service area offices begin evaluation must require initiating a new aeronautical study.*

### 6-2-2. VERIFICATION/PAPER-FILING

a. Prior to assigning an aeronautical study into the OE/AAA automation program, review the submission for completeness. The following information should be considered:

1. Ground elevation of the site (site elevation).

2. Above ground elevation of the structure (AGL).

3. Latitude and longitude of the structure.

4. A 7.5-Minute U.S.G.S. Topographic Map (Quadrangle Chart) depicting the site of the structure.

b. If the submission package contains all of the required information, assign an aeronautical study number and initiate an obstruction evaluation study. Exceptions may be made for emergency situations in accordance with 77.17(d).

c. If the submission package does not contain the required information, the entire package may be returned to the sponsor with a clear explanation and a request for the sponsor to provide the information necessary to initiate the study.

**d.** For submission packages pertaining to structures that may be time critical, an effort should be made to obtain the required information by telephone. Information received by telephone conversation should be added to case notes. If written confirmation is received from the sponsor, it should be faxed/scanned into the file.

### **6-2-3. DIVISION COORDINATION**

Each division described in paragraph 5-2-2 must evaluate all notices of proposed construction or alteration received regardless of whether notice was required under Part 77, except as follows:

**NOTE-**

*For the purpose of division/service area office coordination, Frequency Management (FM) will be considered separately in addition to Technical Operations Services. It should also be noted that FM responds separately.*

**a.** Side Mounted Antennas. Airports, Flight Standards, IFP Service Providers, Technical Operations Services, and the military normally are not required to review OE cases that involve the addition of antennas to a previously studied structure that does not increase in overall height of the structure. FM will continue to evaluate these cases. The FAA must have previously studied the structure and the data of the present case and it must exactly match the data of the previously studied case.

**b.** Marking and Lighting Changes. Airports, Flight Standards, IFP Service Providers, FM, Technical Operations Services, and the military normally are not required to review OE cases which involve only marking and lighting changes. The FAA

must have previously studied the structure and the data of the present case and it must exactly match the data of the prior case.

**c.** Temporary Structures. Airports, FM, Department of Homeland Security, and the military normally must not be required to review OE cases which involve temporary structures of a 6 months or less duration. All appropriate divisions/service area offices must review temporary structures of a longer duration.

**d.** IFP OIT normally must not be required to review OE cases that are beyond 14 NM from the airport reference point of the nearest public-use or military airport and the height of the structure is not more than 200 feet above ground level.

**e.** Airports normally must not be required to review OE cases that are beyond the lateral limits of the Part 77 conical surface of a public-use or military airport.

**f.** Flight Standards may review OE cases that are circularized for public comment.

**g.** FM normally must only be required to review OE cases, that involve transmitting frequencies.

### **6-2-4. ADDITIONAL COORDINATION**

Air traffic may request any division to review an OE case on a case-by-case basis. For instance, Flight Standards may be requested to review a marking and lighting change, the DOD may be requested to review a temporary structure if the closest airport is a DOD base, or FM may be requested to review a temporary structure if it radiates a frequency.



### **6-3-10. EVALUATING EFFECT ON AIR NAVIGATION AND COMMUNICATION FACILITIES**

**a.** The FAA is authorized to establish, operate, and maintain air navigation and communications facilities and to protect such facilities from interference. During the evaluation of structures, factors that may adversely affect any portion or component of the NAS must be considered. Since an electromagnetic interference potential may create adverse effects as serious as those caused by a physical penetration of the airspace by a structure, those effects must be identified and stated. Proposals will be handled, when appropriate, directly with FCC through Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team.

**b.** Technical operations services personnel must evaluate notices to determine if the structure will affect the performance of existing or proposed NAS facilities. The study must also include any plans for future facilities, proposed airports, or improvements to existing airports.

**c.** The physical presence of a structure and/or the electromagnetic signals emanating or reflecting there from may have a substantial adverse effect on the availability, or quality of navigational and communications signals, or on air traffic services needed for the safe operation of aircraft. The following general guidelines are provided to assist in determining the anticipated interference.

**1.** Instrument Landing System (ILS) – Transmitting antennas are potential sources of electromagnetic interference that may effect the operation of aircraft using an ILS facility. The antenna height, radiation pattern, operating frequency, effective radiated power (ERP), and its proximity to the runway centerline are all factors contributing to the possibility of interference. Normally, any structure supporting a transmitting antenna within the established localizer and/or glide-slope service volume area must be studied carefully. However, extremes in structure height, ERP, frequency, and/or antenna radiation pattern may require careful study of structures up to 30 NM from the ILS frequency’s protected service volume area.

**(a)** ILS Localizer. Large mass structures adjacent to the localizer course and/or antenna

array are potential sources of reflections and/or re-radiation that may affect facility operation. The shape and intensity of such reflections and/or re-radiation depends upon the size of the reflecting surface and distance from the localizer antenna. The angle of incidence reflection in the azimuth plane generally follows the rules of basic optical reflection. Normally, in order to affect the course, the reflections must come from structures that lie in or near the on-course signal. Large mass structures of any type, including metallic fences or powerlines, within plus/minus 15 degrees of extended centerline up to 1 NM from the approach end of the runway and any obstruction within 500 feet of the localizer antenna array must be studied carefully. (Refer to FAA Order 6750.16, Siting Criteria for Instrument Landing Systems).

**(b)** ILS Glide Slope. Vertical surfaces within approximately 1,000 feet of the runway centerline and located up to 3,000 feet forward of the glide slope antenna can cause harmful reflections. Most interference to the glide slope are caused by discontinuities in the ground surface, described approximately as a rectangular area 1,000 feet wide by 5,000 feet long, extending forward from the glide slope antenna and centered at about the runway centerline. Discontinuities are usually in the form of rough terrain or buildings (refer to FAA Order 6750.16, Siting Criteria for Instrument Landing Systems).

**2.** Very High Frequency Omni-Directional Radio Range and Tactical Air Navigation Aid (VOR/TACAN). Usually, there should be no reflecting structures or heavy vegetation (trees, brush, etc.) within a 1,000 foot radius of the VOR or the TACAN antenna. Interference may occur from large structures or powerlines up to 2 NM from the antenna. Wind turbines are a special case, in that they may cause interference up to 8 NM from the antenna. (Refer to FAA Order 6820.10, VOR, VOR/DME, and TACAN Siting Criteria).

**3.** Air Route Surveillance Radar/Airport Surveillance Radar (ARSR/ASR). Normally, there should be no reflecting structures within a 1,500-foot radius of the radar antenna. In addition, large reflective structures up to 3 NM from the antenna can cause interference unless they are in the “shadow” of topographic features. Wind turbines are a special

case, in that they may cause interference up to the limits of the radar line of site.

**4. Air Traffic Control Radar Beacon (ATCRB).** The effects encountered due to reflections of the secondary radar main lobe are more serious than those associated with primary radar. Therefore, it is necessary to ensure that no large vertical reflecting surface penetrates a 1,500-foot radius horizontal plane located 25 feet below the antenna platform. In addition, interference may occur from large structures up to 12 miles away from the antenna. This distance will depend on the area of the reflecting surface, the reflection coefficient of the surface, and its elevation with respect to the interrogator antenna. (Refer to FAA Order 6310.6, Primary/Secondary Terminal Radar Siting Handbook).

**5. Directional Finder (DF).** The DF antenna site should be free of structures that will obstruct line-of-sight with aircraft at low altitudes. The vicinity within 300 feet of the antenna should be free of metallic structures which can act as re-radiators.

**6. Communication Facilities.** Minimum desirable distances to prevent interference problems between communication facilities and other construction are:

(a) 1,000 feet from power transmission lines (other than those serving the facility) and other radio or radar facilities.

(b) 300 feet from areas of high vehicle activity such as highways, busy roads, and large parking areas.

(c) One (1) NM from commercial broadcasting stations (e.g., FM, TV).

**7. Approach Lighting System.** No structure, except the localizer antenna, the localizer far field monitor antenna, or the marker antenna must protrude above the approach light plane. For approach light plane clearance purposes, all roads, highways, vehicle parking areas, and railroads must be considered as vertical solid structures. The clearance required above interstate highways is 17 feet; above railroads, 23 feet; and for all other public roads, highways, and vehicle parking areas, 15 feet. The clearance required for a private road is 10 feet or the highest mobile structure that would normally use the road, which would exceed 10 feet. The clearance for roads and highways must be measured from the

crown of the road; the clearance for railroads must be measured from the top of the rails. For vehicle parking areas, clearance must be measured from the average grade in the vicinity of the highest point. Relative to airport service roads substantial adverse effect can be eliminated if all vehicular traffic is controlled or managed by the air traffic control facility. A clear line-of-sight is required to all lights in the system from any point on a surface, one-half degree below the aircraft descent path and extending 250 feet each side of the runway centerline, up to 1,600 feet in advance of the outermost light in the system. The effect of parked or taxiing aircraft must also be considered when evaluating line-of-sight for approach lighting systems.

**8. Visual Approach Slope Indicator (VASI)/Precision Approach Path Indicator (PAPI).** No structures or obstructions must be placed within the clearance zone for the particular site involved or the projected visual glide path.

**NOTE-**

*VASI and PAPA now fall under the heading of VGSI.*

**9. Runway End Identifier Lights (REIL).** No structures or obstructions must be placed within the established clearance zone.

**d. Factors that modify the evaluation criteria guidelines require consideration.** Some facility signal areas are more susceptible to interference than others. The operational status of some signals may already be marginal because of existing interference from other structures. In addition, the following characteristics of structures must be considered:

**1.** The higher the structure's height is in relation to the antenna, the greater the chance of interfering reflections. Any structure subtending a vertical angle greater than one degree from the facility is usually cause for concern. Tall structures, such as radio towers and grain elevators, can interfere from distances greater than those listed in the general criteria.

**2.** The type of construction material on the reflecting surface of the structure is a factor, with nonmetallic surfaces being less troublesome than metallic or metallic impregnated glass.

**3.** Aircraft hangars with large doors can be a special problem because the reflecting surface of the hangar varies appreciably with changes in the position of the doors.

the structure with other structures of equal or greater heights. Include in the aeronautical study file and determination a record of all the negotiations attempted and the results. If negotiations result in the withdrawal of the OE notice, the obstruction evaluation study may be terminated. Otherwise, the obstruction evaluation must be continued to its conclusion.

### **6-3-17. CIRCULARIZATION**

**a.** Circularizing a public notice allows the FAA to solicit information that may assist in determining what effect, if any, the proposed structure would have to the navigable airspace. The OEG determines when it is necessary to distribute a public notice.

**1.** If a structure first exceeds obstruction standards, then a public notice should be circularized if:

- (a) An airport is affected;
- (b) There is possible VFR effect; or
- (c) There is a change in aeronautical operations or procedures.

**2.** Circularization is not necessary for the following types of studies:

(a) A reduction in the height of an existing structure.

(b) A structure that would be located on a site in proximity to another previously studied structure, would have no greater effect on aeronautical operations and procedures, and the basis for the determination issued under the previous study could be appropriately applied.

(c) A proposed structure replacing an existing or destroyed structure, that would be located on the same site and at the same or lower height as the original structure, and marked and/or lighted under the same provisions as the original structure (this does not preclude a recommendation for additional marking/lighting to ensure conspicuity).

(d) A proposed structure that would be in proximity to, and have no greater effect than, a previously studied existing structure, and no plan is on file with the FAA to alter or remove the existing structure.

(e) A structure that would be temporary and appropriate temporary actions could be taken to accommodate the structure without an undue hardship on aviation.

(f) A structure found to have substantial adverse effect based on an internal FAA study.

(g) A structure that would exceed Part 77.17 (a)(2) and would be outside the traffic pattern.

(h) A structure that would affect IFR operations but would only need FAA comment. For instance a structure that:

- (1) Would raise a MOCA, but not a MEA.
- (2) Would raise a MVA.
- (3) Would raise a MIA.

**3.** Circularization for existing structures will be determined on a case-by-case basis.

**b.** Each public notice (automated letter CIR) must contain:

**1.** A complete, detailed description of the structure including, as appropriate, illustrations or graphics depicting the location of the structure:

(a) On-airport studies. Use airport layout plans or best available graphic.

(b) Off-airport studies. Use the appropriate aeronautical chart. Additional illustrations may be included, as necessary.

**2.** A complete description of the obstruction standards that are exceeded, the number of feet by which the structure exceeds the standards.

**3.** An explanation of the potential effects of the structure in sufficient detail to assist interested persons in formulating comments on how the structure would affect aeronautical operations.

**4.** A date by which comments are to be received. The date established should normally allow interested persons 30 days in which to submit comments, but a shorter comment period may be established depending upon circumstances.

**c.** Public notices should be distributed to those who can provide information needed to assist in identifying/evaluating the aeronautical effect of the structure. As a minimum, the following governmental agencies, organizations, and individuals should be included on distribution lists due to their inherent aeronautical interests:

1. The sponsor and/or his representative.

2. All known aviation interested persons and groups such as state, city, and local aviation authorities; airport authorities; various military organizations within the DOD; and other organizations or individuals that demonstrate a specific aeronautical interest through subscription to notifications. More information about subscribing to notifications regarding structures that may impact a specific airport or airspace area is available at <https://oeaaa.faa.gov>.

3. Airport owners as follows:

(a) All public-use airports within 13 NM of the structure.

(b) All private-use airports within 5 NM of the structure.

4. The specific FAA approach facility, en route facility (ARTCC), and Flight Service Station (FSS) in whose airspace the structure is located.

5. An adjacent regional/service area office if the structure is within 13 NM of the regional state boundary.

6. As appropriate, state and local authorities; civic groups; organizations; and individuals who do not have an aeronautical interest, but may become involved in specific aeronautical cases, must be included in the notice distribution, and given supplemental notice of actions and proceedings on a case-by-case basis. Those involved should clearly understand that the public notice is to solicit aeronautical comments concerning the physical effect of the structure on the safe and efficient use of airspace by aircraft.

7. A proposed structure that penetrates the 40:1 by 35 feet or more, departure slope must be circularized to the following:

(a) Aircraft Owners and Pilots Association;

(b) National Business Aviation Association;

(c) Regional Air Line Association;

(d) Department of Defense;

(e) Air Transport Association;

(f) Air Line Pilots Association; and

(g) Other appropriate persons and organizations listed in this section.

d. Document and place in the obstruction evaluation file the names of each person and/or organizations to which public notice was sent. Reference to a distribution code, mailing list, or other evidence of circularization is sufficient provided a printout or list of each coded distribution is maintained for future reference. Also record the time period during which each printout or list is used. The retention schedule is listed in Order 1350.15, Records Organization, Transfer, and Destruction Standards.

e. Consider only valid aeronautical objections or comments in determining the extent of adverse effect of the structure. Comments of a non-aeronautical nature are not considered in obstruction evaluation as described in Part 77.

f. If the sponsor agrees to revise the project so that it does not exceed obstruction standards and would have no adverse effect, cancel the public notice, advise interested parties, as necessary, revise the obstruction evaluation study, and proceed as appropriate.

## Section 2. Petition Processing

### 9–2–1. ADMINISTRATIVE PROCESSING

Upon receiving a petition, the FAA will:

a. Assign an OE case number to the petition composed of the last two digits of the calendar year in which the assignment is made, the symbol “AWA” to indicate Washington headquarters, the symbol “OE” to indicate obstruction evaluation, and a serial number. Serial numbers run consecutively within each calendar year.

b. If the petition does not meet the criteria in Part 77, notify the petitioner in writing.

c. If the petition meets the criteria in Part 77, notify the sponsor, the petitioner (or designated representative), the OEG, and, if appropriate, the FCC that the determination is not and will not become final pending disposition of the petition.

d. Distribute a copy of a valid petition and the associated determination to the Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team, NAS Support Group, Flight Procedures Standards Branch, AFS–420, Airport Engineering Division, AAS–100; and the Terminal Procedures and Charting Group for their examination.

e. Coordination and consultation with the Office of the Chief Counsel (AGC) is required for high interest or controversial cases.

f. There are no regulatory time frames for completion of the response to a petition of discretionary review. However, every effort should be made to complete the examination, or review, within six months of receipt of the petition.

### 9–2–2. RECOMMENDATIONS

Based upon the results of the examination of the petition and further coordination with Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team, AFS–420, AAS–100, Terminal Procedures and Charting Group, and, as appropriate, AGC, the Rules

and Regulations Group must recommend to the Director of Mission Support, Policy whether to grant or deny the review, and whether the review should include a public comment period.

### 9–2–3. DISTRIBUTION OF NOTICES TO GRANT DISCRETIONARY REVIEW

The Rules and Regulations Group will distribute the notice to grant discretionary review in writing to the petitioner, the sponsor (or designated representative), interested parties of record, and the FCC, if appropriate. The notice will include, but is not limited to: a statement of the specific issues to be considered; the aeronautical study number; a description of the proposal’s location and height; the obstruction standards that are exceeded; the date the comment period closes (no less than 45 days from issuance of the grant); where to send comments; and a person to contact for more information.

### 9–2–4. OEG PARTICIPATION

When a discretionary review is granted, the Rules and Regulations Group must request the OEG submit written documentation verifying that the electronic case file is complete.

### 9–2–5. FINAL DECISION

Based on the review of the aeronautical study, the petition, current directives and orders, and comments received, the Rules and Regulations Group must draft and coordinate a document for the Director of Mission Support, Policy signature that affirms, reverses, or revises the initial determination, or remands the case to OEG for termination, re–study or other action as necessary.

### 9–2–6. DISTRIBUTION OF DECISION

Copies of the final decision must be distributed by the Rules and Regulations Group to the petitioner(s), sponsor (or designated representative), interested parties of record, OEG, and FCC, if appropriate.



## Section 2. Airport Study

### 10-2-1. PURPOSE

a. The purpose of an aeronautical study is to determine what effect the proposal may have on compliance with Airports Programs, the safe and efficient utilization of the navigable airspace by aircraft, and the safety of persons and property on the ground.

b. A complete study consists of an airspace analysis, a flight safety review, and a review of the proposal's potential effect on air traffic control operations and air navigation facilities.

c. Each phase of the airport aeronautical study requires complete and accurate data to enable the FAA to provide the best possible advice regarding the merits of the proposal on the NAS.

### 10-2-2. STUDY NUMBER ASSIGNMENT

Regional Airports Division personnel must assign a nonrule airports (NRA) aeronautical study number to each airport case in accordance with paragraph 2-4-2. Construction or alteration of navigation and communication aids may either be handled by the specific Technical Operations Services area office as a nonrule (NR) aeronautical study or by the specific Airports Division personnel as a NRA case.

### 10-2-3. PROPOSALS SUBJECT TO AERONAUTICAL STUDY

To the extent required, conduct an aeronautical study of the following:

a. Airport proposals submitted under the provisions of Part 157. Airport proposals on public-use airports, not requiring notice under Part 157, may require notice under Part 77.

b. Construction safety plans as appropriate for Airport Improvement Program requests for aid and the Airports Regional Capital Improvement Program.

c. Notices of existing airports where prior notice of the airport construction or alteration was not provided as required by Part 157.

d. Disposal and Conveyance of Federal surplus and non-surplus real property for public airport purposes.

e. Airport layout plans, including consideration of the effect of structures which may restrict control tower line-of-sight capability and effects upon electronic and visual aids to air navigation.

f. Military proposals for military airports used only by the armed forces.

g. Military proposals on joint-use (civil/military) airports.

h. Proposed designation of instrument runways.

i. Airport site selection feasibility studies and recommendations.

j. Modification of airport design standards.

k. Any other airport case when deemed necessary to assess the safe and efficient use of the navigable airspace by aircraft and/or the safety of persons and property on the ground.





## Section 3. Processing of Airport Proposals By Regional Flight Standards Offices

### 11-3-1. EFFECT ON SAFETY OF FLIGHT

The appropriate Flight Standards Office must perform a flight safety review of airport, heliport, and seaplane base proposals to determine whether aircraft operations can be conducted safely. This review will include an assessment of Visual Flight Rules (VFR) traffic patterns and a review of on airport proposals that affect Instrument Flight Rules (IFR) procedures. The Flight Standards Office will review any proposal with runways, taxiways, and/or ramp surfaces underlying threshold-siting surfaces and proposals for declared distance concepts. Upon completion of the review, the appropriate Flight Standards Office must submit its report to the responsible Airports Office. The report must state whether or not safe operations can be conducted or what conditions are needed to ensure safe operations. Information provided by Technical Operations Aviation System Standards may be used when conducting these reviews.

### 11-3-2. EFFECT ON SAFETY OF PERSONS AND PROPERTY ON THE GROUND

FAA Order 1000.1, Policy Statement of the FAA, states that the agency will pursue a regulatory policy that recognizes the primary right of the individual to accept personal risk. However, the agency balances this right against society's interest in the safety of the individual, and limits the individual's right to incur risk when the exercise of that right creates a risk for others. Therefore, airport aeronautical studies must consider, for example, the proposal's proximity to cities or towns, and its runway alignment with reference to heavily populated areas, schools, hospitals, sports stadiums, and shopping centers, etc.

### 11-3-3. ONSITE EVALUATIONS

**a. Heliports.** For proposals to establish new heliports, Flight Standards Service (FS) will determine when to conduct an onsite evaluation using risk-based analysis. Proposed heliports to be located in congested areas, and/or on a roof-top, should be evaluated by helicopter-qualified operations inspectors or FS-authorized equivalent. Included in the process is the development of recommendations for assignment of ingress and egress routes, where necessary. FS normally conducts on-site heliport evaluations for hospital heliports, heliports with an instrument approach procedure, and general aviation heliports with Title 14, Part 135 operations.

**b. Non-Federal Agreement Airport Proposal.** The Flight Standards Office performing a flight safety review will use information submitted with the FAA Form 7480-1 and any other information as may be available, such as charts, aerial photographs, etc. A flight check or an onsite inspection may be advantageous if the proposal is controversial or additional information is needed.

**c. Federally Assisted Airport Proposal.** The Flight Standards Office should:

1. Review the proposal from the standpoint of safety of flight operations.
2. Conduct an on-site evaluation.
3. Advise the air traffic office when obstructions and/or terrain that prove to cause significant safety problems are identified.

**d. The FSDO reviews Part 157 seaplane base and heliport proposals.**



# Chapter 13. Military, NASA, and Other Agency Airport Proposals

## Section 1. General

### 13-1-1. PRIOR NOTICE TO FAA

49 U.S.C. § 44718 provides, in part, that the Department of Defense (DOD), the National Aeronautics and Space Administration (NASA), or other agencies must not acquire, establish, or construct any military airport, missile or rocket site, or substantially alter any runway layout unless reasonable prior notice is given to the FAA Administrator so that the appropriate committees of Congress, and other interested agencies, may be advised as to the effects of such projects upon the use of airspace by aircraft.

### 13-1-2. FORM OF NOTICE

The DOD forwards military airport or missile site projects to FAA Washington Headquarters in the form of an annual Military Construction Program (MCP). Military projects not involved in the annual program are submitted to the FAA regional office by the individual services or commands through the regional military representatives (see paragraph 13-1-5). NASA and other agencies submit their projects directly to FAA Washington Headquarters.

### 13-1-3. FAA HEADQUARTERS REVIEWS

Annual MCPs and proposals submitted by NASA or other agencies are forwarded to Rules and Regulations Group for review and processing. Rules and Regulations Group must coordinate with appropriate headquarters ATP, Flight Technologies and Procedures, and Technical Operations Spectrum Engineering Services Group/Spectrum Assignment and Engineering Team Offices prior to forwarding the proposal to the regional/service area office for study. Any problems with the proposal at the headquarters level should be resolved prior to requesting regional/service area input.

### 13-1-4. REGIONAL/SERVICE AREA OFFICE REVIEW

Rules and Regulations Group will then forward the projects to the appropriate regional office for

processing in the same manner as civil airport proposals, except that service area offices are responsible for the study. The determination and recommendation on the proposal, plus all pertinent comments and related material, must be forwarded to Rules and Regulations Group by the service area office. The official FAA determination must be formulated by Rules and Regulations Group after review and any required inter-services coordination and forwarded to DOD, NASA, or other agencies as appropriate. A copy of the determination must be forwarded to the affected regional/service area office.

### 13-1-5. MILITARY PROPOSALS OTHER THAN MCP

Other military airport proposals may be submitted by individual services through the appropriate regional military representatives to the regional/service area office. These proposals must be processed in the same manner as civil airport proposals except as indicated below. This exception does not apply to notices on joint-use airports received under Part 157 or AIP projects.

**a.** The regional Airports Division must coordinate with the service area office, Flight Standards Division, technical operations services area office, FPT, and other offices as required for formulation of the official FAA determination. The determination must be issued to the appropriate regional military representative with a copy to Rules and Regulations Group.

**b.** When a controversial proposal is referred to Washington Headquarters for resolution, the airspace finding and official agency determination must be formulated by the AAS-100 in coordination with Rules and Regulations Group and other offices, as required, and forwarded to the appropriate regional military representatives through the regional/service area office.



## Section 3. Launch and Reentry Vehicle Operations

### 31-3-1. RESPONSIBILITIES

**a. Operator.** Prior to conducting a launch or reentry, the operator must obtain a license or permit from the Office of Commercial Space Transportation (AST). With regard to airspace management, the 14 CFR Parts 400–460 regulations for both a license and a permit require an applicant to engage AST in the pre-application consultation and to complete a letter of agreement (LOA) with the ATC facility having jurisdiction of the airspace where the launch or reentry will take place.

**NOTE–**

*Commercial space LOAs are required for each launch site and launch and/or reentry operator for license and permit purposes in accordance with 14 CFR Parts 400–460. The FAA has 180 days to evaluate a complete license application and 120 days to evaluate a complete permit application. AST requires a draft LOA to accompany the submission of a license or permit application to ensure ATO is included in the coordination. The draft LOA submitted with the license or permit application must be acceptable to all signatories and be completed prior to the end of the application process. Each commercial space applicant must have a signed LOA prior to operation in the NAS.*

**b. Air Traffic.** ATO Space Operations (AJR-1800) and ATC facilities have the following responsibilities:

**1.** ATO Space Operations is the ATO Office of Primary Responsibility for launch and reentry operations and any other activity relevant to tactical space operations in the NAS. ATO Space Operations is responsible for:

**(a)** Ensuring that launch and reentry operations are safely and efficiently integrated into the NAS;

**(b)** Working with ATC facilities to develop a memorandum of assessment of potential impacts on the NAS from the proposed site/operation and the identification of any issues or constraints. As the ATO's POC for commercial space operations, ATO Space Operations must provide a memorandum of assessment of potential impacts on the NAS to AST (see Appendix 13).

**(c)** Coordinating with AST, the operator, and the affected air traffic facilities as necessary;

**(d)** Analyzing and evaluating data to produce and distribute an airspace management plan;

**(e)** Serving as the focal point for the coordination and distribution of any hazard mitigation requirements, and information relevant to launch or reentry vehicle operations to affected air traffic facilities;

**(f)** Monitoring, evaluating, and disseminating information in real-time regarding the status of launch and reentry vehicle operations and providing operational support as required;

**(g)** Hosting a mission real-time hotline when required in accordance with an LOA;

**(h)** Performing post launch or reentry analysis of each operation to improve future operations;

**(i)** Archiving captured launch and reentry data and analysis;

**(j)** ATO Space Operations will supply the space launch/re-entry course (expressed in magnetic degrees) to the ATC facility.

**2.** ATC facilities are responsible for:

**(a)** Working with ATO Space Operations to develop a memorandum of assessment of potential impacts on the NAS from the proposed site/operation and the identification of any issues or constraints;

**(b)** Determining and notifying ATO Space Operations of potential effects the launch or reentry operation may have on traffic flows and sector loading;

**(c)** Determining the type and level of assistance needed to support the launch or reentry operation;

**(d)** Developing and executing an airspace management plan in collaboration with ATO Space Operations;

**(e)** Working with ATO Space Operations and other affected facilities during the execution of the launch or reentry. This includes the following duties:

(1) Participating on a real-time communications hotline during the launch or reentry operation when required in accordance with an LOA;

(2) Execution of any safety hazard mitigation efforts.

c. AST. AST is responsible for:

1. Validating AHAs, THAs, and other safety and mission information to ATO Space Operations when necessary;

2. Operating as part of the Joint Space Operations Group (JSpOG), to include onsite computation of AHAs and THAs during operations and other support;

3. Evaluating all commercial space LOAs against 14 CFR Parts 400–460 requirements.

d. Federal range. The process for launches or reentries conducted at Federal ranges is similar to the process at non-Federal launch and reentry sites. Additional opportunities exist in the collaboration between the Federal range and the operator for ATO and AST to obtain necessary information to support the launch and reentry process. Further, the range generally conducts some activities necessary for the operation on behalf of the operator, including safety analyses. Federal ranges also typically have existing letters of agreements with ATC facilities.

### **31–3–2. NOTICE TO AIR MISSIONS (NOT-AM)**

a. NOTAMs issued for space launch and reentry operations will be processed in accordance with current FAA directives.

b. The NOTAM must include the key words “airspace,” “space launch,” or “space reentry;” the launch or reentry site description, effective dates and times, and a chart depicting the area boundaries. It should also include a brief narrative describing the launch or reentry scenario, activities, types of launch or reentry vehicle involved, and the availability of inflight activity status information for nonparticipating pilots.

c. Information regarding the methods of airspace management may also be addressed.

### **31–3–3. LAUNCH AND REENTRY PROCESS**

a. The operator/range or designee submits a request to conduct a launch or reentry operation to ATO Space Operations, facilities and other organizations in accordance with the LOA.

b. The operator/range or designee must distribute AHAs to affected parties, per LOA.

c. Unless otherwise specified in a LOA, the operator coordinates use of airspace outside the U.S. FIR.

d. Unless otherwise specified in a LOA, the operator coordinates use of any special use airspace with the Using Agency.

e. ATO Space Operations must work with affected ATC facilities to conduct a NAS impact analysis of the proposed operation.

f. ATO Space Operations and ATC facility(ies) develop a proposed plan of operation based on the NAS impact analysis and/or any local or national constraints.

g. When necessary, AST verifies the accuracy of the mission AHAs and THAs and coordinates the results with ATO Space Operations.

h. Prior to each launch or reentry, ATO Space Operations shares AHAs and THAs with affected ATC facilities.

i. ATO Space Operations notifies the affected facilities of any additional safety hazard mitigation requirements depending on the unique characteristics of the launch or reentry operation if needed.

j. Prior to each launch or reentry operation, ATO Space Operations coordinates with the ATC facility(ies) to develop and implement an airspace management plan.

k. All affected ATC facilities, ATO Space Operations, and the operator/range or their designee participate on a real-time communications hotline during the launch or reentry operation in accordance with an LOA.

l. Coordination for airspace delegation and control procedures will be conducted in accordance with the LOA.

m. The responsible authority cancels all applicable NOTAMs.

- **n.** ATO Space Operations complete a post-operator analysis of actual space operation impact.





## Section 2. Environmental Processing

### 32-2-1. THE PROCESS

The ARTCC, TRACON, and ATCT facilities, in coordination with the Service Center and Service Center Environmental Specialist, must conduct environmental compliance actions for any proposed air traffic action under their jurisdiction with the potential to impact the human environment. Examples of air traffic actions include, but are not limited to, flight procedure changes that create new flight tracks over noise sensitive areas, flight procedure changes that alter existing flight tracks over noise sensitive areas, lowering altitudes of routes or procedures utilized by aircraft, establishment or modification of certain SUA, and actions affecting operational changes (for example, changes in runway use percentages or headings). Environmental documentation for such actions must be completed prior to approval and implementation. (See Appendix 1, Environmental Study Process Flow Chart, for the steps from action concept to implementation.)

**a.** Questions to ask when considering the potential environmental impact of flight procedures or other air traffic actions may be, but are not limited to:

1. Are there aircraft currently flying over the area of change?
2. Are route altitudes increasing or decreasing?
3. Are the routes moving laterally, and if so, how far from the baseline route?
4. Will the number of operations increase?
5. Are there projected changes in runway use?
6. Will the types of aircraft change?
7. Will nighttime operations increase?

If the FAA is not the proponent of the proposed air traffic action (for example, the Department of Defense or an Airport Sponsor [the proponent] requests the FAA to take the action) then the proponent is responsible for funding and preparation of environmental documentation associated with the proposed action. FAA Order 1050.1, paragraph 2-2.2 discusses the responsibility for preparation of EAs or EISs (respectively) where FAA must approve the project. Signature authority for the environmental documents discussed in this section must be in

accordance with paragraph 32-1-4, Delegation of Authority, of this chapter.

The FAA or non-FAA proponent must prepare and submit the associated environmental documentation in conjunction with the proposed air traffic action, as follows:

**b.** Determination of Appropriate Level of Environmental Documentation. The appropriate level of environmental documentation required must be determined by the Service Center Environmental Specialist after all portions of a proposed action have undergone the Air Traffic Initial Environmental Review (IER) (see Appendix 5). The IER form must be completed for all projects that:

1. Require the use of computer-based noise screening or modeling tools, or
2. Require Headquarters-level funding for completion of environmental impact analysis and documentation.

For those projects not requiring the use of computer-based noise screening or modeling tools or that are not being funded at the Headquarters level, completion of the IER is optional. Facility personnel and the Service Center Environmental Specialist must coordinate completion of the IER form.

If someone other than the Service Center Environmental Specialist completes the IER form, the completed IER form, along with a recommendation as to whether the proposed action warrants no further environmental review, a CATEX, or preparation of an EA or an EIS, must be forwarded to the Service Center Environmental Specialist for review and incorporation of the proposed project information into the NEPA document. Field personnel must consult FAA Order 1050.1 before recommending the appropriate level of environmental review for a proposed action to the Service Center Environmental Specialist.

For IFP or other actions reviewed through the IFP Environmental Pre-Screening Filter, the OSG FPT should assist the Environmental Specialist in determining the appropriate level of environmental documentation after reviewing of the results from the Filter. If the Filter results indicate that a CATEX is warranted, the OSG FPT must assist the Environmental Specialist in the preparation of a CATEX by

providing information about the action to help ensure that the action is appropriately and thoroughly described in the CATEX. After the CATEX is approved, the action may be implemented.

c. The following are specific sections of FAA Order 1050.1 that must be reviewed:

1. Advisory Actions, paragraph 2–1.2b. A memorandum to the file may be the only documentation necessary.

2. Emergencies, paragraph 5–6.1a.

3. Extraordinary Circumstances, paragraph 5–2.

4. Categorical Exclusions (CATEXs), paragraph 5-6.5, and Extraordinary Circumstances, Paragraph 5-2. Only those categorical exclusions listed in FAA Order 1050.1 may be cited. However, the categorical exclusion referenced in AEE’s Guidance Memo #5 dated December 6, 2012, Guidance for Implementation of the Categorical Exclusion in Section 213(c)(1) of the FAA Modernization and Reform Act of 2012 (known as CATEX 1), (see FAA Order 1050.1, paragraph 5-6.5.q) may also be used.

A review of Categorical Exclusion Documentation, paragraph 5–3, will assist in determining the appropriate level of environmental documentation required for a CATEX (see Appendix 6 of this order for a “Sample Categorical Exclusion Declaration”).

5. Chapter 6 of FAA Order 1050.1 addresses EAs and FONSI. A review of this chapter will assist in determining when to prepare these documents. The FAA may adopt, in whole or in part, an EA prepared by another Federal agency. Consult FAA Order 1050.1 paragraphs 6–3.c and 8–2 to determine if the other agency’s EA meets the criteria for FAA adoption.

6. Chapter 7 of FAA Order 1050.1 addresses EISs and RODs. A review of this chapter will assist in determining when and how to prepare these documents.

7. A review of FAA Order 1050.1, Appendix B, will assist in determining whether a noise analysis is warranted and if so, what type of analysis should be conducted. A noise analysis requires several different types of input data including radar data. This data is available to FAA and other Federal Government personnel. Request for the data should be made

through the Service Center Environmental Specialist assigned to the proposal.

d. Requests for the FAA to release radar data, to other than FAA personnel, for use in noise studies or environmental compliance documents should be via FAA Order 1200.22, External Requests for National Airspace System (NAS) Data, or the Freedom of Information Act (FOIA) process. It may be simpler and more expedient to utilize the FOIA process, as FOIA does not require use of the Data Release Review Committee or a Memorandum of Agreement between the FAA Field Facility and an Environmental Contractor. Consult with the Service Center Environmental Specialist should occur if radar data is needed.

e. Preparation of Environmental Documents. The following are various levels of environmental review and documentation that may be prepared:

1. Actions Not Subject to NEPA Review. See FAA Order 1050.1, paragraph 2–1.2, for a list of actions that do not require an environmental study.

2. No Further Environmental Review Required. Some air traffic actions are subject to NEPA review, but require no further environmental action after the initial environmental review (IER) is completed. These actions involve modifications to airspace and/or procedures and may fit some or all of the following criteria. Special purpose environmental requirements may still apply to airspace and/or procedures that fit some or all of these criteria. No further environmental review is required if the proposed change:

(a) Is over 18,000 ft above ground level (AGL). Currently, there is no need to analyze aircraft noise above 18,000 ft AGL. However, greenhouse gas requirements may require analysis of fuel burn and carbon dioxide (CO<sub>2</sub>) impacts.

(b) Is over 7,000 AGL for arrivals, and/or over 10,000 ft AGL for departures and/or overflights.

(1) Any decision to analyze aircraft noise over 10,000 ft AGL is an exception and should be coordinated with the ATO Rules and Regulations Group at FAA headquarters at the earliest possible time.

(2) Proposed flight procedure changes between 10,000 ft and 18,000 ft AGL should be analyzed for potential impacts when there is a national park or wildlife refuge in the study area that

has a quiet setting that is a generally recognized purpose and attribute, and also in situations when the flight procedure change is likely to be highly controversial.

- (c) Is over a non-noise sensitive area(s).
- (d) Does not alter the current noise footprint.
- (e) Does not cause the following noise level change over noise sensitive areas, as defined in FAA Order 1050.1, paragraph 11-5 (10): +1.5 dB for 65 DNL and higher.

For IFP actions reviewed through the IFP Environmental Pre-Screening Filter, most of these determinations will be made automatically based on the information input into the Filter.

**NOTE-**  
An FAA-approved environmental screening tool or model must be used to confirm the noise data when the project is not processed through the IFP Environmental Pre-Screening Filter.

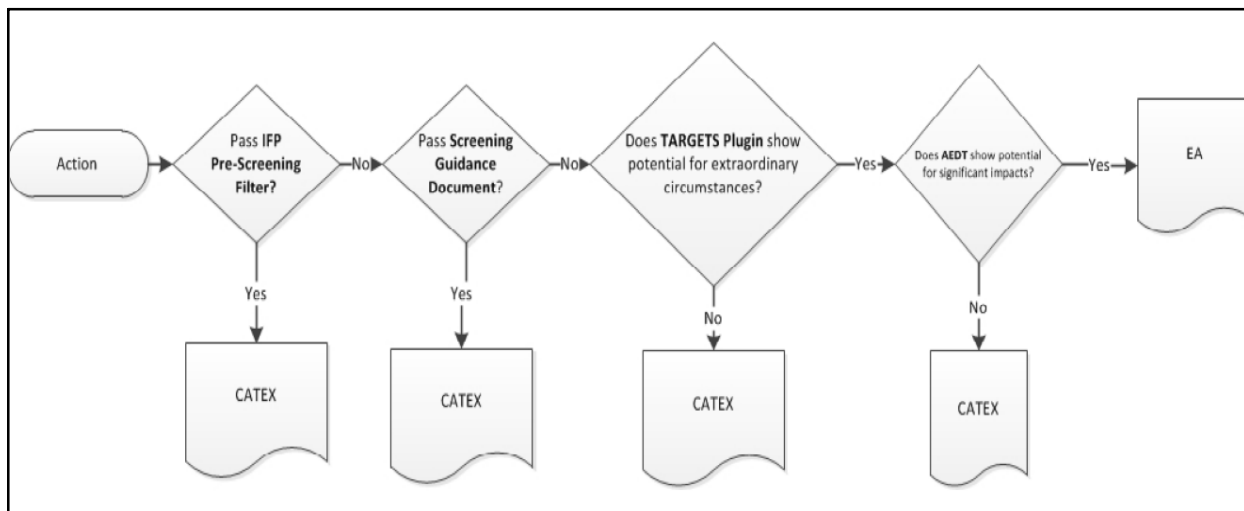
**3. Actions Not Requiring a Noise Analysis.** (See FAA Order 1050.1, Appendix B, Paragraph B-1.)

**4. Following review and consultation, the field facility manager and Service Center Environmental Specialist may agree that no further environmental review is required. When this occurs, the originating facility must prepare a memorandum to the file and attach any supporting documentation, which indicates the basis for the determination (such as a copy of the proposed action that includes references to the above criteria, results of the noise review, etc.).**

The memorandum must include, if applicable, references to the provisions of FAA Order 1050.1 that support the determination (for example, whether the proposed action is administrative or advisory in nature).

**5. Actions Requiring Environmental Modeling for NEPA Compliance.** FIG 32-2-1 shows the levels of environmental screening and modeling that are required for NEPA compliance.

**FIG 32-2-1  
Levels of Environmental Screening and Modeling for NEPA Compliance**



**6. Non-FAA proponents and third party developers.** To meet the requirements of NEPA and other applicable environmental requirements, potential environmental impacts of flight procedures submitted by third party procedure developers must be considered. A proposed procedure development package submitted by a third party developer to an environmental specialist must include (at a minimum) the following information:

- (a) Draft Initial Environmental Review (IER) in accordance with process outlined in Appendix 5 of this this Order.
- (b) Documentation (email or letter) from the responsible FAA facility to the proponent indicating concurrence with the proposed development of the procedure(s).

**7.** The Service Center Environmental Specialist will review the documentation to determine if a categorical exclusion is applicable. If the procedure qualifies for a categorical exclusion, the Environmental Specialist will prepare a Categorical Exclusion Declaration and process it in accordance with the requirements of Appendix 6 of this Order.

**(a)** If necessary, the Service Center Environmental Specialist must use the MITRE Screening Guidance Document referenced in paragraph 32-3-3, below, to assist in determining if the CATEX is applicable.

**(b)** The Service Center Environmental Specialist must contact the proponent if any additional information is needed to support the CATEX.

**8.** If the Guidance for Noise Screening of Air Traffic Actions indicates that additional review is required, the Service Center Environmental Specialist will use one of the following tools, as appropriate, to perform the next level of screening to determine if the CATEX is applicable:

**(a)** Terminal Area Route Generation Evaluation and Traffic Simulation (TARGETS) tool with the Environmental “Plug-in,” or other FAA approved noise screening tool.

**(b)** If that level of screening indicates that a CATEX is applicable, the Environmental Specialist will prepare a CATEX declaration (Appendix 6 of this order) with results from the above screening tool(s) attached.

**(c)** If screening of a flight procedure(s) indicates that a CATEX is not applicable, then an Environmental Assessment (EA) should be completed. Flight procedures requiring an EA will be returned to the proponent for additional information that will enable the Service Center Environmental Specialist to conduct an EA level of environmental impact analysis and documentation.

**(1)** A “focused” EA with required noise analysis may be appropriate in this situation. In coordination and consultation with the Service Center Environmental Specialist, preparation of the EA and any related environmental analysis will be the responsibility of the proponent, and must be completed in accordance with all applicable environmental regulations and requirements.

**(2)** The Service Center Environmental Specialist is responsible for providing advice and assistance to the proponent during the EA preparation; independent review and EA completion; and preparation and completion of a FONSI or decision that an EIS is required.

**9.** Categorical Exclusions. If someone other than an EPS completes an IER (when applicable), the completed IER form, and any other documentation describing the proposed action, must be forwarded to the Service Center Environmental Specialist for review and incorporation into the NEPA document.

**(a)** The Service Center Environmental Specialist must then prepare the CATEX declaration. If the IFP Environmental Pre-Screening Filter is used, then the environmental data is gathered electronically instead of through the IER, and it is forwarded to the appropriate next step in the IFP process.

**(b)** A CATEX does not apply to a proposal if extraordinary circumstances, as described in FAA Order 1050.1, paragraph 5-2, Extraordinary Circumstances, exist.

**10.** Environmental Assessments. Although the facility manager must make a recommendation on the level of environmental review, the Service Center Environmental Specialist must make the final determination as to whether the proposed action warrants preparation of an EA or an EIS. For proposed actions that warrant an EA level of review, the Service Center Environmental Specialist may need to request additional resources, funding, and information to support the proposal.

**(a)** Consultation with the Rules and Regulations Group regarding projects at this stage is recommended.

**(b)** If an independent contractor is to prepare the EA, the Service Center Environmental Specialist must oversee the preparation to ensure compliance with FAA Order 1050.1, Chapter 6, Environmental Assessments and Findings of No Significant Impact.

**(c)** Chapter 6 of FAA Order 1050.1 summarizes and supplements requirements of the Council on Environmental Quality (CEQ) regulations for EAs. The CEQ regulations do not specify a required format for an EA; however, FAA Order 1050.1, paragraph 6-2.1, contains a sample format that will facilitate preparation of an EA, and integrate compliance with other environmental laws, regulations, and Executive Orders with NEPA review.

## Section 2. Waivers

### 33-2-1. RESPONSIBILITIES

a. Air Traffic is authorized to issue waiver/authorizations to Part 101 for parasail operations, and is responsible for integrating those activities into the NAS. The appropriate Service Center is air traffic's point of contact for Part 101 and associated waiver/authorizations, and is responsible for coordinating certain proposals regarding airspace operations and procedures with Flight Standards.

b. The Rules and Regulations Group provides oversight and support to Service Centers for parasail operations.

c. Service Centers must provide approved parasail waivers to the appropriate Flight Standards District Office (FSDO).

### 33-2-2. GENERAL OPERATING LIMITATIONS

a. In accordance with Part 101, a parasail must not operate:

1. Less than 500 feet from the base of any cloud.
2. More than 500 feet above the surface of the earth.
3. From an area where the ground visibility is less than three miles.
4. Within five miles from the boundary of an airport.
5. In a manner that creates a hazard to persons or property.
6. In such a manner to allow an object to be dropped, if such action creates a hazard to other people or their property.

b. Parasail operators must operate in accordance with the provisions of 14 CFR § 101.7. Due to the limited maneuverability of the parasail and its towing vessel, it is inadvisable to place requirements on parasail operators to give way to aircraft. Aircraft operators are expected to comply with 14 CFR § 91.119(c) to ensure minimum distance from parasail operations.

### 33-2-3. WAIVERS

a. a. A waiver/authorization is required for parasail operations conducted outside the requirements defined in 14 CFR Part 101. An applicant must submit its waiver/authorization request to the ATO Service Area operations Support Group (OSG) office. If the applicant submits its request directly to an air traffic facility, the air traffic facility must direct the applicant to submit its request directly to the Service Center.

b. The Service Center OSG office must perform the initial review of the waiver/authorization request.

1. The Service Center OSG office must verify that FAA Form 7711-2, Application for Certificate of Waiver or Authorization (COA), is complete and that the information required in 14 CFR § 101.15, Notice Requirements, has been provided. The Service Center OSG office must return incomplete waiver/authorization requests to the applicant for additional information.

2. Requests that cannot be accommodated will not be coordinated beyond the Service Center.

### 33-2-4. WAIVER PROCESS

a. The applicant must submit FAA Form 7711-2 at least 45 days prior to the event, and must include the required information as outlined in 14 CFR § 101.15.

b. The Service Center OSG office is the focal point for receiving, processing, and signing waiver requests.

c. When a proposal overlaps Service Center geographical jurisdictions, the affected Service Centers must coordinate to determine which office will serve as the lead office for processing the proposal. Coordination between Service Centers is also required when the affected geographical area and the ATC facility are under the jurisdiction of different Service Centers or facilities.

d. Service Centers must provide approved parasail waivers to the appropriate FSDO.

### **33-2-5. AERONAUTICAL ANALYSIS**

Prior to issuing a COA for parasail operations, the Service Center and appropriate facilities must conduct an aeronautical analysis to identify any aeronautical impacts to be resolved or mitigated. The analysis must be specific to the proposed site, and may include, but is not limited to, the following steps:

- a. Details on the parasail operation, such as location, date(s), time, number of operations, and expected altitude.
- b. Identify the operations specified in the COA, as this will determine which sections of 14 CFR Part 101 apply.
- c. Determine the class of airspace where the event is proposed and consider the impact of the parasail operation to local airports, VFR aircraft and routes, IFR routes and procedures, military training routes, special use airspace, etc.

### **33-2-6. FACILITY COORDINATION**

- a. Per 14 CFR § 101.7, the parasail operator is responsible to operate in a manner that does not create a hazard to other persons, or their property.
- b. Facilities should determine impact, if any; meet with the sponsor, if possible; and discuss notification requirements to the flying public to maintain the safety and efficiency of the NAS.

### **33-2-7. WAIVER/AUTHORIZATION FORMAT AND CONTENT**

- a. Use FAA Form 7711-1 to issue the waiver/authorization.
- b. At a minimum, the waiver/authorization must contain the following:
  1. Specific section of Part 101 to be waived or authorized.
  2. Name, address, and telephone number of the applicant.
  3. Location of the approved parasail operating area in coordinates or description of location (for example, west of Pier A).
  4. Approved dates and times of operations.

5. Advance notification requirements to the designated FAA facilities and, if desired, cancellation and termination notification.

6. Approved projected altitudes of the parasail(s).

7. Other provisions or requirements deemed necessary to maintain safety of the NAS. Waivers for parasail operations should be unique and specific to each environment where parasails are operating.

- c. The Service Center office may suspend or revoke a waiver/authorization whenever a question arises about the safety of the operation, compliance with safety precautions or conditions of approval, or if an unforeseen impact on aeronautical operations occurs.

- d. Terms and conditions. In most cases, an attachment containing terms and conditions of the COA will be included. Provisions commonly addressed in terms and conditions may include, but are not limited to, the following:
  1. Cancellation of COA if the operator fails to comply with the conditions or requirements as provided in Part 101.
  2. Any special altitude restrictions specific to the operating area.
  3. The COA must be carried aboard the parasail vessel at all times, and operators briefed on its contents and requirements.
  4. Recommendation to attend an annual operator safety meeting, if available.
  5. The parasail vessel operator is responsible for obtaining current weather information from the nearest air traffic facility.
  6. Operations must not be conducted between sunset and sunrise.
  7. Prior to conducting parasail operations, contact the nearest ATC facility to advise of the proposed area of operation, duration of the activity, and altitude of the parasail.
  8. Any restrictions designed to avoid protected departure or arrival areas to nearby airports, as necessary.
  9. Recommendation for the operator to use ground observers (“spotters”) to maintain operator awareness of nearby aircraft activity.

<p><b>5.</b> The Service Center Airspace Specialist, in accordance with this order, determines the type of airspace action(s) necessary, either Non-Rulemaking or Rulemaking. FAA service center determines if Informal Airspace Meetings are required.</p>	<p><b>7.</b> The DoD proponent reviews the FAA's comments on their Draft EA/FONSI or Draft EIS and prepares responses to comments, in consultation with FAA and other cooperating agencies as necessary, and in accordance with chapter 32 of this order. Proponent then incorporates FAA's comments into their NEPA document and prepares a Draft EA or EIS with a 30 to 45-day public comment period.</p>
	<p><b>8.</b> Proponent prepares and submits their Final EA/FONSI or EIS/ROD to the Service Center Environmental Specialist.</p>
	<p><b>9.</b> The Service Center Environmental Specialist amends, as necessary the Draft FAA Adoption EA-FONSI/ROD or Draft FAA Adoption EIS and ROD and submits the FAA's Adoption document to AJV-P21 for airspace review and to AGC for a final LSR.</p>
	<p><b>10.</b> AGC's comments are incorporated into the final FAA Adoption EA/FONSI or Adoption EIS/ROD by the Service Center Environmental Specialist in coordination with the AJV-P21 Environmental Specialist.</p>
	<p><b>11.</b> The AJV-P21 Environmental Specialist prepares a signature copy of the final FAA Adoption EA/FONSI or Adoption EIS/ROD and submits it for signature by the Headquarters Rules and Regulations Group Manager (AJV-P2). The AJV-P21 Environmental Specialist submits signed copies of the document(s) to the DoD Proponent's POC, to AJV-P21 for final rulemaking action, and to the Service Center Environmental Specialist for their records.</p>
	<p><b>12.</b> The Service Center Environmental Specialist submits the signed Final FAA Adoption EA and FONSI or Adoption EIS and FONSI/ROD with the Proponent's Final EA/FONSI or EIS/ROD to the Service Center Airspace Specialist for inclusion with the airspace proposal package, and provides a courtesy copy of the FAA's final Adoption document to the Service Center Mil Rep.</p>

<b>FOR NON-RULEMAKING</b>	
<b>AERONAUTICAL</b>	<b>ENVIRONMENTAL</b>
<p><b>6.</b> The Service Center Airspace Specialist:</p> <p style="margin-left: 20px;"><b>a.</b> Tasks the ATC facility to conduct an aeronautical study of the proposal;</p> <p style="margin-left: 20px;"><b>b.</b> Sends a circularization with a 45-day public comment period.</p> <p>The Service Center Airspace Specialist reviews and prepares, in consultation with the DoD Proponent, responses to the aeronautical comments from the aeronautical study and circularization in accordance with chapter 21 of this order.</p> <p style="margin-left: 20px;"><b>c.</b> Coordinates with the Service Center Environmental Specialist regarding environmental documentation.</p>	<p>See process above. The environmental documentation review and development process is the same for non-rulemaking as for rulemaking.</p>
<p><b>7.</b> The Service Center Airspace Specialist sends the completed package containing the aeronautical proposal, Aeronautical study, copies of comments, response to comments, DoD Proponent’s Final EA/FONSI, and the Draft FAA FONSI/ROD, and a recommendation for final action to the Headquarters Rules and Regulations Group.</p>	



<b>FOR RULEMAKING</b>	
<b>AERONAUTICAL</b>	<b>ENVIRONMENTAL</b>
<p><b>8.</b> The Service Center Airspace Specialist:</p> <p style="padding-left: 20px;"><b>a.</b> Tasks the ATC facility to conduct an aeronautical study of the proposal;</p> <p style="padding-left: 20px;"><b>b.</b> Sends the proposal to the Rules and Regulations Group who then prepares a Notice of Proposed Rulemaking (NPRM).</p> <p>The Headquarters Rules and Regulations Group submits the NPRM for publication in the Federal Register with a 45-day comment period in accordance with chapter 2 of this order.</p> <p>The Airspace Specialist receives the environmental document from the Service Center Environmental Specialist.</p>	<p>See process above. The environmental documentation review and development process is the same for non-rulemaking as for rulemaking.</p>
<p><b>9.</b> The Service Center Airspace Specialist reviews the comments on <a href="http://www.regulations.gov">www.regulations.gov</a> and coordinates with the proponent, as required, to resolve aeronautical impacts.</p>	
<p><b>10.</b> The Service Center Airspace Specialist then sends the completed package containing the aeronautical study, response to comments, final Service Center recommendation, the proposal, Proponent’s Final EA/FONSI or EIS/ROD, and the Draft FAA FONSI/ROD or Draft FAA Adoption Document/ROD to the Headquarters Rules and Regulations Group (AJV-P21) for preparation of the Final Rule.</p>	
<p><b>11.</b> The Service Center Airspace Specialist, in accordance with this order, determines the type of airspace action(s) necessary, either Non-Rulemaking or Rulemaking. FAA service center determines if Informal Airspace Meetings are required.</p>	<p><b>9.</b> The Headquarters Environmental Specialist (AJV-P21) reviews the draft final rulemaking and draft Federal Register Notice for compliance with FAA Order 1050.1; chapter 32 of this order and this appendix; drafts the environmental compliance paragraph for the Federal Register Notice; then, as necessary, submits the changes to the environmental documentation to AGC-600 for legal sufficiency review.</p>
	<p><b>10.</b> AGC’s comments are incorporated into the rulemaking document, returned to the AJV-P21 Environmental Team for a final review, and forwarded back to the AJV-P21 Airspace and Rules Team.</p>

**10. For Non-rulemaking:**

The Airspace Specialist submits the non-rule-making action to the Aeronautical Information Services (AIS) for publication in the National Flight Data Digest (NFDD).

**11. For Rulemaking:**

The Airspace Specialist submits the Final Rule for publication in the Federal Register. The Final Rule will contain a reference to the decision rendered and location of documentation for the associated environmental process.

Consult the following documents throughout the process for further information:

- A. Council on Environmental Quality Regulations for Implementing the National Environmental Policy Act (NEPA), 40 C.F.R. Parts 1500–1508.
- B. FAA Order 1050.1, Environmental Impacts: Policies and Procedures
- C. FAA Order JO 7400.2, Procedures for Handling Airspace Matters, Part 5, Special Use Airspace
- D. FAA Order JO 7400.2, Chapter 32, Environmental Matters, and the associated appendices (for specific SUA environmental documentation directions).

**NOTE–**

*The documentation time periods below are approximations only, and are for non-controversial aeronautical proposals and associated environmental processes. The documentation time periods are for FAA review/processing only. Documentation schedules for DOD proponent and/or environmental contract support processing must be accounted for during overall document coordination scheduling between FAA and the DOD proponents.*

**ENVIRONMENTAL:** Estimated time of completion for EA processing is 12 to 18 months or, for EIS processing, 18 to 36 months.

**AERONAUTICAL (Non-Rulemaking):** A minimum time period of 8 months is required from submission of the Formal Airspace Proposal by the Proponent to the Service Center through completion of the charting process.

**AERONAUTICAL (Rulemaking):** A minimum time period of 10 months is required from submission of the Formal Airspace proposal by the Proponent to the Service Center through completion of the charting process.

## Appendix 13. Template for Memorandum of Assessment of Potential Impact on the NAS

### Background

Federal Aviation Administration (FAA) Order JO 7400.2, Procedures for Handling Airspace Matters, describes the commercial space launch reentry (L/R) site licensing process. The process includes development of a Memorandum of NAS Impact – Air Traffic Organization Space Operations (ATO Space Ops) must work with affected Air Traffic Control (ATC) facilities to conduct a NAS impact analysis of the proposed operation. As the Air Traffic Organization (ATO) point of contact (POC) for commercial space operations, the ATO Space Ops must provide a Memorandum of Assessment of Potential Impacts on the NAS to the FAA Office of Commercial Space Transportation (AST). The focus of this Memorandum (also referred to as “Memo”) is on the proposed L/R site’s potential impact on the NAS from an airspace perspective. The Memo is ATO’s documentation to communicate this information to the AST. Other organizations within the FAA conduct other analyses associated with the site licensing process, including environmental studies and safety assessments.

### Memo Purpose

The purpose of the Memo is to:

- Identify and document any potential issues early in the site licensing process.
- Describe airspace characteristics (i.e., factors) and associated airspace operational implications to consider when evaluating a proposed commercial L/R site for a license. These factors form the basis for an airspace assessment process that can be:
  - Applied consistently by ATO.
  - Used by AST and ATO as they communicate potential airspace issues with the L/R site applicant.
  - Used to educate L/R site applicants about NAS characteristics and how they can result in potential operational constraints.
- Provide the platform for discussions between air traffic facilities and ATO System Operations Services (AJR) Space Operations to determine whether and what types of operational constraints may be warranted for the proposed L/R site.

[This memo should be developed using the latest FAA template]

**Date:** [Date Memo is issued]

**Subject:** Memorandum of Assessment of Potential Impact on the NAS for Proposed [launch/reentry site name]

**To:** Office of Commercial Space Transportation (AST) [optional, point of contact name, title and/or office within AST]

**From:** Air Traffic Organization (ATO) [optional, point of contact name, title and/or office within ATO]

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## Introduction

This Memo documents the FAA's assessment of the potential impact of the proposed [launch/re-entry site name] on the NAS from an airspace perspective. This Memo and any subsequent License to Operate a Launch/Re-entry Site (as defined in 14 Code of Federal Regulations [CFR] Part 420 and Part 433) do not relieve a licensee of its obligation to comply with all federal, state, and local laws or regulations and do not confer any proprietary, property, or exclusive right in the use of airspace or outer space. Additionally, this Memo does not, in and of itself, authorize a Vehicle Operator to conduct licensed or permitted launch or re-entry operations. It is part of and supplemental to all license and permit requirements, and is in no way intended to circumvent the terms and conditions contained in any license or permit issued.

The findings documented in this Memo are based on information provided by the site applicant. If any of these assumptions change, these findings may not apply and an update to the assessment may be necessary.

Additional information is provided in the following annexes:

- Annex 1, Airspace Assessment Factors
- Annex 2, Airspace Assessment Graphics
- Annex 3, NAS Impact Assessment Detailed Findings

## Annex 1 Airspace Assessment Factors

This section provides details about each of the airspace factors evaluated and documented in this Memo.

**Airports:** This factor addresses the airports that may be affected by the proposed launch/re-entry (L/R) site aircraft hazard area(s) (AHA[s]). The airport types evaluated include: Commercial Federal Aviation Regulation (FAR) 139, public (non-FAR 139), private, and military. These airport types include heliports, seaplane bases, balloonports, glideports, stolports, and flightpark/airport. Operations counts consist of the number of airport arrivals and departures and should be included for FAR 139 and Public (non-FAR 139) airports.

Operational Considerations: Impact to airport operations can cause a ripple effect throughout the NAS. These impacts may include rerouting and delaying operations.

**Airspace Class:** Airspace of defined dimensions within which ATC service may be provided to instrument flight rules (IFR) and visual flight rules (VFR) operations in accordance with airspace classification. Within controlled airspace, all aircraft operators are subject to certain qualifications, operating, and aircraft equipment requirements.

Note: The Memo focuses only on airspace Classes B, C, and D.

**Department of Homeland Security (DHS) Unmanned Aircraft Systems (UAS) Mission:** The assessment identifies whether any DHS UAS missions coincide with the proposed L/R site AHA(s).

Operational Considerations: Regular use of airspace to support DHS UAS missions may limit opportunities for L/R operations that would require the same airspace for their operations.

**Instrument Flight Procedures:** An Instrument Flight Procedure is a published procedure used by aircraft flying in accordance with the Instrument Flight Rules (IFRs) that are designed to achieve and maintain an acceptable level of safety in operations. The procedure types assessed in the Memo include:

- Conventional and Area Navigation (RNAV) Standard Instrument Departures (SIDs)
- Conventional and RNAV Standard Terminal Arrivals (STARs)
- Specials (industry designed procedures)

Operational Considerations:

- Some or all segments of procedures may need to be closed to accommodate L/R site AHA(s). Closure/cessation of these procedures may result in rerouting of traffic, ground delays, and/or airborne holding.
- Some procedures are used for multiple airports and/or are used more frequently than others. Closure of these procedures may have a greater impact than those used less often.

**International Considerations:** The assessment identifies whether the proposed L/R site AHA(s) overlaps or is adjacent to international airspace.

Operational Considerations: L/R site AHA(s) that cross into international airspace will require cooperation and coordination between the FAA's international office and the appropriate Air Navigation Service Provider (ANSP) for that country to permit activation of L/R site AHA(s). For countries where a coordination process is not established, additional planning is required.

**NAS Initiatives:** Includes any current or pending airport, airspace or procedural proposals (e.g., NextGen) that may affect or be affected by the L/R site AHA(s).

Operational Considerations:

- Some NAS initiatives may result in new and/or changes to existing airspace and/or procedures.
- Benefits associated with new and/or modified airspace and/or procedures may be reduced if affected by the L/R site AHA(s).
- During construction initiatives modified routes and/or technologies may be used to/from an airport.

**Other L/R Sites:** This factor addresses the implications of locating the proposed L/R site near other existing L/R sites. The Memo addresses the impact of other L/R sites with AHAs that could intersect with the proposed L/R site AHA(s).

Operational Considerations: If the proposed AHA(s) intersects with airspace used by other L/R sites, close coordination of schedules will be required for L/R operations. This may become more of a constraint if either/both anticipate growth in operations over time.

**Parachute Jump Areas:** Consists of airspace in which parachute jump operations are routinely conducted. Airspace for parachute jump areas may be protected in a variety of ways. Special Use Airspace (SUAs) may be used if the parachute jump area is in support of the military.

Operational Considerations: If the proposed AHA(s) intersects with airspace used for parachute jump areas, close coordination of schedules will be required.

**Published Routes:** Published routes are designed for the management of air traffic operations for the provision of air traffic services. The types of published routes assessed in the Memo include:

- Air Refueling Routes
- International Routes

- Military Training Routes
- T-Routes
- TK-Routes
- Victor Airways

This factor does not include SIDs, STARs, or Standard Instrument Approach Procedures (SIAPs). SIDs and STARs are part of the Instrument Flight Procedures Factor. SIAPs are not evaluated in the airspace assessment process.

Operational Considerations: Closure/cessation of published routes may be needed to accommodate operations at the proposed L/R site. These closures may result in rerouting of traffic, ground delays, and/or airborne holding.

**Special Activity Airspace (SAA):** Consists of airspace of defined dimensions in the NAS wherein activities must be confined because of their nature, or wherein limitations are imposed upon aircraft operations that are not part of these activities, or both. The Memo addresses SAAs that may coincide with the proposed L/R site AHA(s). It does not include temporary SAAs, such as Temporary Flight Restrictions (TFRs), Temporary Military Operation Area (TMOA) and Altitude Reservations (ALTRVs) since they are not routinely activated on a regular basis nor in the same location. SAA types assessed in the Memo include:

- Air Traffic Controlled Assigned Area (ATCAA)
- Alert Area (AA)
- Controlled Firing Area (CFA)
- Military Operations Area (MOA)
- National Security Area (NSA)
- Prohibited Area (PA)
- Restricted Area (RA)
- Warning Area (WA)

Operational Considerations:

- If the proposed L/R site AHA(s) coincide with SAA that is used frequently, it will severely constrain when the L/R site can operate.
- Access to airspace that coincides with SAA requires approval/discussion with the using agency of that SAA. Multiple using agencies associated with SAAs require increased coordination.

**Traffic Management Initiatives (TMIs):** TMIs are techniques used to manage demand with capacity in the NAS. The assessment focuses on existing route flow structures that are maintained and/or used by the Air Traffic Control Systems Command Center (ATCSCC) regularly (e.g., National Severe Weather Playbook and Holiday Airspace Release Plan [HARP]).

Operational Considerations: If the proposed L/R site AHA(s) coincides with areas where TMI route flow structures are regularly used, NAS operations may be further delayed. This impact may have a ripple effect on other NAS users and result in additional TMIs.

**Visual Flight Rules (VFR) Routes/Areas/Flyways:** VFR flyways are general flight paths not defined as a specific course, for use by pilots in planning flight into, out of, through, or near Class B airspace to avoid complex terminal airspace. An air traffic control clearance is not required to fly these routes. Uncharted VFR routes/flyways may follow rivers, coastlines, mountain passes, valleys, and similar types of natural landmarks or major highways, railroads, power lines, canals, and other manmade structures.

Operational Considerations: Identified routes/areas/flyways may require closure of some or all segments to accommodate the proposed L/R site operations. Closure/cessation of these routes/areas/flyways may result in rerouting of traffic, ground delays, and/or airborne holding.

## **Annex 2 Airspace Assessment Graphics**

[Insert graphics that help depict assessment and associated findings. Graphics included may be from the Terminal Area Route Generation, Evaluation and Traffic Simulation (TARGETS) Spaceport Capability and other data sources/tools leveraged for the assessment. When possible, include at least one graphic for each factor. As appropriate, graphics should be labeled as notional.]

*Sample graphics:*

- *Proposed L/R site location (potential sources: TARGETS Spaceport Capability, Google Earth, VFRMAP.com)*
- *Airports (potential source: TARGETS Spaceport Capability)*
- *Airspace classes within the area of interest (potential source: TARGETS Spaceport Capability)*
- *Airways (potential source: TARGETS Spaceport Capability)*
- *SIDs and STARs (potential source: TARGETS Spaceport Capability)*
- *VFR Routes/Areas/Flyways*
- *SUAs (potential source: TARGETS Spaceport Capability)*
- *FAA Facility Airspace Sectors*
- *TRACON boundaries*
- *Chartered Temporary Flight Restrictions (TFRs)*

## **Annex 3 Detailed NAS Impact Assessment Findings**

The purpose of this annex is to archive details associated with each factor. This includes information from the Evaluation of Airspace Factors as well as additional details prescribed in the instructions. These details are the backbone of the Memo and may serve as input into other evaluations, including the L/R Site Letter of Agreement (LOA) and Vehicle Operator License.

This annex is for FAA records only and is not intended to be shared outside the FAA.

**Date:** [Date assessment was completed]

**Prepared by:** [ATO point of contact name, title, and/or office within the ATO]

**Assessment Parameters:** [Data provided by L/R/ Site Applicant from Memo Body]

**Airspace Assessment Findings:** [Insert factor details here. The TARGETS Spaceport Capability contains reports that may be inserted in this section.]

