U.S. Department
of Transportation
**Federal Aviation
Administration**

Advisory Circular

Subject: Pre-Application Consultation and Lifecycle Overview for Licenses and Permits	Date: D-R-A-F-T Initiated By: AST-1	AC No: 413.5-1

This Advisory Circular (AC) provides guidance on meeting the requirements for pre-application consultation in accordance with Title 14, Code of Federal Regulations (14 CFR) § 413.5. This document assists prospective applicants in obtaining commercial space authorizations from the Federal Aviation Administration (FAA) and provides guidance for operating in compliance with FAA commercial space regulations. In accordance with § 413.5, a prospective applicant must consult with FAA before they submit an application to discuss the application process and possible issues relevant to FAA's licensing or permitting decision. To provide thorough guidance, this AC provides prospective applicants with an overview of the commercial space license and permit process lifecycle. Prospective applicants begin the process with early pre-application consultation and continue through formal pre-application consultation, application submission, and initial application screening. For accepted applications, this AC lays out a high-level outline of FAA's evaluation and determination process for license and permit applications. Additionally, post-determination topics include compliance monitoring and license modification requests. FAA considers this AC an accepted means of compliance (MOC) for complying with the regulatory requirements of § 413.5.

This is a guidance document. Its content is not legally binding in its own right and will not be relied upon by the United States Department of Transportation as a separate basis for affirmative enforcement action or other administrative penalty. Conformity with the guidance document is voluntary only. Nonconformity will not affect rights and obligations under existing statutes and regulations.

If you have suggestions for improving this AC, please use the Advisory Circular Feedback Form at the end of this AC.

Acting Executive Director, Office of Operational Safety
Office of Commercial Space Transportation

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1 INTRODUCTION.

1.1 Early and Formal Pre-Application Consultation.

This Advisory Circular (AC) provides guidance on meeting the requirements of Title 14 of the Code of Federal Regulations (14 CFR) § 413.5, *Pre-application consultation*. This AC provides guidance on the items required throughout the project lifecycle, from the initial discussion with FAA through lifecycle maintenance. Figure 1 and Table 1 of this AC provide an overview of the application process. In accordance with § 413.5, a prospective applicant must consult with FAA before submitting an application to discuss the application process and possible issues relevant to FAA's licensing or permitting decision.

This early consultation helps the applicant identify possible regulatory issues at the planning stage when changes to an application or to proposed licensed or permitted activities are less likely to result in significant delay or costs to the applicant. During the formal pre-application consultation stage, FAA assigns a Team Lead to the applicant, and the applicant begins to prepare the application documentation.

1.2 Application Submission.

An applicant must submit their application in accordance with § 413.7, *Application Submission*. They must ensure all materials are in English and have a consistent measurement system. Section 413.7 details the required administrative information and signature. An applicant may request information be treated as confidential in accordance with § 413.9, *Confidentiality*. For more information, see paragraph 8.3 of this AC.

1.3 Initial Application Screening.

Once FAA receives an application, it performs an initial screening of the application in accordance with § 413.11. FAA then notifies the applicant whether the application is accepted or rejected. For more information, see chapter 9 of this AC.

1.4 Application Evaluation.

This AC explains how FAA evaluates license and permit applications to determine whether it will issue a license or permit. This AC provides an overview of the types of reviews and timelines associated with evaluations. For more information, see chapters 10 and 11 of this AC.

1.5 Post-Determination and Compliance Monitoring.

This AC describes how FAA monitors an operator's compliance with regulations. It also covers post-flight reporting requirements, continuing accuracy of application documentation, modifications, and renewals to authorizations. For more information, see chapter 12 of this AC.

1.6 Applicant Expectations.

Chapter 13 of this AC provides directions on FAA's expectations of an applicant throughout the authorization lifecycle.

1.7 Level of Imperatives.

This AC presents one, but not the only, acceptable means of compliance (MOC) with the associated regulatory requirements. FAA will consider other MOC(s) that an applicant may elect to present. In addition, an operator may tailor the provisions of this AC to meet its unique needs, provided the changes are accepted as an MOC by FAA during review of the application for a license. Throughout this document, the word "must" characterizes statements that directly follow from regulatory text and therefore reflect regulatory mandates. The word "should" describes an option that, if used, would constitute a means to comply with the regulation; variation from the provisions of this AC is possible but must satisfy the regulation to constitute an MOC. The word "may" describes variations or alternatives allowed within the accepted MOC set forth in this AC.

1.8 Cancellation.

This AC 413.5-1 cancels *License and Permit Application Guide for Applicants,* Version 1.1, dated April 2016.

2 APPLICABILITY.

2.1 The guidance in this AC is for launch and reentry vehicle operator licenses, launch and reentry site operator licenses, and experimental permit applicants and operators required to comply with 14 CFR parts 450, 420, 433, or 437. The guidance in this AC is for those seeking a new license or permit, or for an operator seeking to renew or modify an existing license or permit.

2.2 The material in this AC is advisory in nature and does not constitute a regulation. This guidance is not legally binding in its own right, and FAA will not rely upon this guidance as a separate basis for affirmative enforcement action or other administrative penalties. Conformity with this guidance document (as distinct from existing statutes and regulations) is voluntary only, and nonconformity will not affect rights and obligations under existing statutes and regulations.

2.3 The material in this AC does not change or create any additional regulatory requirements, nor does it authorize changes to, or deviations from, existing regulatory requirements.

3 APPLICABLE REGULATIONS AND RELATED DOCUMENTS.

3.1 Applicable United States Code (U.S.C.) Statute.

- 51 U.S.C. Subtitle V, Chapter 509, *Commercial Space Launch Activities*.

3.2 Related FAA Commercial Space Transportation Regulations.

Information regarding FAA's Commercial Launch and Reentry Licensing process is located here: https://www.faa.gov/space/licenses/licensing_process. The following Title 14 CFR regulations must be accounted for when showing compliance with 14 CFR § 413.5. The full text of these regulations can be downloaded from the U.S. Government Printing Office e-CFR. A paper copy can be ordered from the Government Printing Office, Superintendent of Documents, Attn: New Orders, P.O. Box 371954, Pittsburgh, PA, 15250-7954.

- Section 401.7, *Definitions.*
- Part 413, *License Application Procedures*.
- Part 420, *License to Operate a Launch Site*.
- Part 433, *License to Operate a Reentry Site*.
- Part 437, *Experimental Permits.*
- Part 450, *Launch and Reentry License Requirements*.

3.3 Related FAA Advisory Circulars.

The following ACs are related to the guidance in this AC. You should refer to the latest AC version for guidance, which is available on FAA's Dynamic Regulatory System (DRS) at https://drs.faa.gov. FAA ACs are also available through FAA's website at http://www.faa.gov.

- AC 413.13-1A, *Guidance on Submitting an Application for a Part 450 Vehicle Operator License.*
- AC 450.3-1, *Definition of Launch and Scope of a Vehicle Operator License*.
- AC 450.31-1, *Applying for FAA Determination on Policy or Payload Reviews*.

3.4 Related Government Documents.

- Federal Aviation Administration (FAA) Order 1050.1G, *FAA National Environmental Policy Act Implementing Procedures.* https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.current/documentnumber/1050.1.
- *FAA Getting Started with Licensing*. https://www.faa.gov/space/licenses/licensing_process.
- FAA Part 450 *Launch and Reentry License Requirements*. https://www.ecfr.gov/current/title-14/chapter-III/subchapter-C/part-450.

- FAA Part 450 *Application Compliance Checklist.* https://www.faa.gov/space/streamlinedlicensingprocess/part-450-application-compliance-checklist.
- FAA *Project Overview Planning Tool.* https://www.faa.gov/media/87871.

The government documents referenced in this chapter refer to the current revisions or regulatory authorities' accepted revisions.

4 DEFINITION OF TERMS.

For this AC, the terms from 14 CFR § 401.7 and these definitions apply.

4.1 Project Overview Planning Tool (POPT)

FAA's Office of Commercial Space Transportation (AST) provides the Project Overview Planning Tool (POPT) online.[1] It serves as a basis for early project planning and development of documentation for the safety and environmental review portions of an application. The information an applicant provides in the POPT corresponds to the concept of operations (CONOPs) deliverable of the Pre-Application Consultation Checklist, supports the development of the environmental review process, and forms a basis for stakeholder engagement.

4.2 Section 450.35 Means of Compliance (MOC)

Prior to application acceptance, MOC(s) must be accepted by the FAA Administrator per § 450.35. Due to the complex nature of part 450 and MOC requirements, the applicant should begin compliance discussions with FAA as early as possible. Through these early discussions, the applicant and FAA will discuss when the applicant should submit the § 450.35 MOCs to allow sufficient time for FAA to review them prior to the full application submission. For further information, see paragraph 7.4.2 of this AC.

[1] Project Overview Planning Tool (POPT), https://www.faa.gov/media/87871.

5 ACRONYMS

AC – Advisory Circular

ADO – Airport District Office

AIP – Airport Improvement Program

ALP – Airport Layout Plan

AST – Office of Commercial Space Transportation

CFR – Code of Federal Regulations

CONOPs – Concept of Operations

CSTSI – Commercial Space Transportation Safety Inspectors

EAR – Export Administration Regulations

ELOS – Equivalent Level of Safety

ESP – Explosive Site Plan

FAA – Federal Aviation Administration

FR – Federal Register

ITAR – International Traffic in Arms Regulations

MOC – Means of Compliance

MPL – Maximum Probable Loss

MTCR – Missile Technology Control Regime

NEPA – National Environmental Policy Act

NPIAS – National Plan of Integrated Airport Systems

POC – Point of Contact

POPT – Project Overview Planning Tool

U.S. – United States

U.S.C. – United States Code

6 PROJECT LIFECYCLE PROCESS OVERVIEW.

This AC guides prospective applicants on the items required throughout the project lifecycle, from the initial discussion with FAA through operations and application updates. Figure 1 and Table 1 of this AC provide an overview of the application process. More detailed information is in the following chapters of this AC.

Figure 1 Project Lifecycle Process Overview

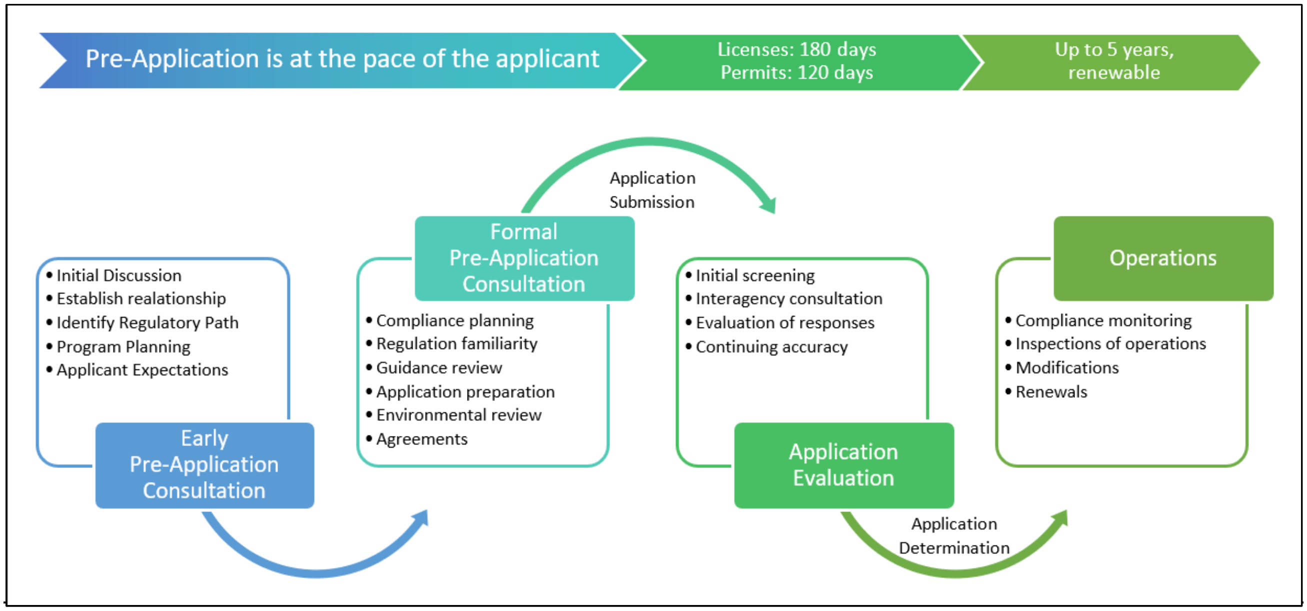

Table 1 – Project Lifecycle Process Overview

Stage	**Description**

Early Pre-Application Consultation	To begin Early Pre-Application Consultation:
	• Complete the Initial Contact Information form located on the FAA website[2] and send the completed form to ASTPreApp@faa.gov.
	• FAA's Pre-Application Program will respond and offer to schedule an Initial Discussion.
	In this stage, a prospective applicant can expect:
	• An Initial Discussion with FAA's Pre-Application Program
	    o FAA leads a regulatory path discussion
	• Applicant completes a program planning document
	    o The POPT[3] helps communicate the applicant's planned operation
	• Opportunity to ask questions/receive guidance
	    o FAA guidance material questions
	    o Regulatory interpretation
	    o Applicant schedule
	FAA Point of Contact (POC): Pre-Application Program Team
	Note: See paragraph 7.2 of this AC for the explanation of Early Pre-Application Consultation.

Formal Pre-Application Consultation	• FAA assigns a Team Lead to the applicant.
	    o The FAA Team Lead is the applicant's main POC for all applicant interactions with FAA.
	• Project-specific discussions
	    o Some regulatory requirements are evaluated during pre-application. See paragraphs 7.4 and 7.5 of this AC for more information on special considerations.
	    o Environmental requirements
	    o Applicant's proposed schedule
	• Applicant prepares application documentation using FAA -provided guidance materials.
	FAA POC: FAA Team Lead

[2]The Initial Contact Information form is available at https://www.faa.gov/space/licenses/pre-application-initial-contact-information.
[3] Project Overview Planning Tool (POPT) is available at https://www.faa.gov/media/87871.

<table>
<tr><th>Stage</th><th>Description</th></tr>
<tr><td>Application Submission</td><td>Applicant submits an application; the application should demonstrate that every subsection and component of the regulations have been addressed.
See chapter 8, Application, of this AC for more information on how to apply.
FAA confirms receipt of an application
FAA POC: FAA Team Lead</td></tr>
<tr><td>Initial Application Screening</td><td>FAA completes an initial screening of the application for application acceptance
See chapter 9, Initial Screening of this AC for more information.
FAA notifies the applicant of application acceptance or rejection.
FAA POC: FAA Team Lead</td></tr>
<tr><td>Application Evaluation</td><td>The application will be evaluated by FAA. This includes:
Policy review
Safety review
Environmental review
Payload review, if applicable
Maximum Probable Loss (MPL) and financial responsibility determination, if applicable
For more information on the review period including duration and types of reviews, see chapter 10, Application Evaluation of this AC.
FAA POC: FAA Team Lead</td></tr>
<tr><td>Application Determination</td><td>FAA informs an applicant, in writing, of a license issuance or denial.
See chapter 11, Application Determination, of this AC for more information.
FAA POC: Refer to the determination letter</td></tr>
<tr><td>Compliance Monitoring, Licensing Maintenance, and Modification</td><td>FAA inspectors conduct safety monitoring of licensed and permitted operations.
FAA inspectors conduct site visits.
The applicant can request license modifications, including renewal requests. The applicant should submit continuing accuracy updates and renewals requests.
FAA may issue a modification to a license or permit.
FAA POC: Refer to the determination letter.</td></tr>
</table>

7 PRE-APPLICATION CONSULTATION.

Pre-application consultation provides the applicant with an overview of the application process and the issues that are relevant to FAA's licensing and permitting decisions. Under § 413.5, a prospective applicant must consult with FAA before submitting an application to discuss the application process and possible issues relevant to FAA's licensing or permitting decision. Early consultation between FAA and the applicant helps to identify possible regulatory issues at the project planning stage when changes to an application or to proposed licensed activities are less likely to result in significant delays or costs to the applicant. Pre-application consultation includes the safety, environmental, policy, and payload review portions of an application, as applicable. Experts from the applicant's organization and FAA engage in direct communication to increase the success of a pre-application consultation. FAA determines the appropriate level of pre-application consultation support for each applicant.

7.1 Benefits of a Successful Pre-Application Consultation.

7.1.1 A successful pre-application consultation should achieve the following:

- Clarify the requirements for an acceptable application;
- Reduce regulatory risk through early identification of regulatory questions or issues relevant to the FAA's licensing decision and other FAA line of business regulatory requirements; and
- Develop an application that is robust and acceptable by FAA. For applications under part 450, AC 413.13-1A provides more detail on the information requirements and criteria for submitting an acceptable application.[4]

7.2 Early Pre-Application Consultation.

7.2.1 During the Early Pre-Application Consultation stage, FAA reviews the applicant's CONOPs, program schedule (including the definition of significant milestones), and funding levels (e.g., government contracts or investor funding through critical design review, but not dollar amounts) to determine if the applicant is ready to enter formal pre-application discussions. The duration of early pre-application consultation depends on the applicant's proposed operation, level of regulatory experience, and pace of the project development. Applicants should familiarize themselves with the resources available on FAA's Office of Commercial Space Transportation (AST) website, including advisory circulars, links to regulations, workshop materials, and additional guidance documents, starting in early pre-application consultation and continuing throughout the development of application documentation.

[4] AC 413.13-1A, *Submitting an Application for a Part 450 Vehicle Operator License*, latest revision.

7.2.2 Evaluating a license application often involves an iterative process where the applicant submits and FAA reviews the application materials as they become available. Building a strong relationship between the applicant and FAA is key to a successful pre-application consultation.

7.2.3 The Project Overview Planning Tool (POPT).

7.2.3.1 Early pre-application consultation focuses on project planning and early compliance planning. The POPT,[5] available on FAA's AST website, serves as a basis for early application planning and development for the safety and environmental review portions of an application.

7.2.3.2 An applicant may prepare the optional POPT and further develop it throughout pre-application consultation. If the applicant provides the POPT to FAA, this will inform FAA on project status and assist in development of early environmental information. Applicant responses in the POPT are expected to be preliminary in nature and therefore do not need to fully address the compliance responses required in the formal application submission.

7.2.4 What to Prepare for an Initial Discussion.

7.2.4.1 The initial discussion between a prospective applicant and FAA is fundamental to establishing a successful working relationship. The applicant should attend the initial discussion and is encouraged to maintain an active role throughout the licensing process, regardless of contracted support for application development.

7.2.4.2 Applicants are encouraged to provide a brief presentation with information similar to what is included in the POPT for the initial discussion. The briefing should not be a marketing presentation; instead, the applicant should focus on realistic plans and short-term goals of the proposed operation.

[5] Project Overview Planning Tool (POPT) https://www.faa.gov/media/87871.

Table 2 – Applicant Initial Discussion Information

Expected Applicant Item	Description
Concept of Operations	A Concept of Operations (CONOPs) should be a comprehensive, but concise, overview of the operations which the proposed applicant intends to perform using the vehicle, site, or payload to be authorized by FAA. For a vehicle, this would include: ❑ Launch/Reentry sites ❑ Launch/Reentry vehicle, including configurations. ❑ Nominal flight path ❑ Mission objectives and payloads, if known ❑ Method of disposal or controlled reentry For a site, this would include: ❑ Site location ❑ Proposed types of vehicles and operations to be hosted ❑ Trajectories of vehicle operations

Vehicle, or Site Description	Expected Vehicle Information:
	❑ Vehicle dimensions
	❑ Propulsion system
	❑ Fuel types and amounts
	❑ Expected flight trajectory
	❑ Flight monitoring system description, such as vehicle tracking or inspection consoles.
	❑ Flight safety system description
	❑ Expected Payloads, general information:
	    ❑ Designation or class
	    ❑ Intended operations
	    ❑ Ownership, including foreign ownership
	    ❑ Hazardous materials
	Expected Site Information:
	❑ Site location
	❑ Description of launch/reentry facilities
	❑ Site ownership and agreements
	❑ Contractually obligated incumbent launch operators

Expected Applicant Item	**Description**
Vehicle, or Site Description	(Optional) Expected safety element approval information, in accordance with § 450.39: ❑ Safety Element as defined by § 414.3 ❑ Regulation being met by Safety Element ❑ Safety Element approval number (previously issued to applicant or third party)
Project Schedule with Milestones	An overview of the project schedule. This should include the current status along with the planned operational date(s) and any key milestones.
Government Contracts and/or Partnerships	A brief statement of whether the applicant has any contracts or partnerships with a government entity (U.S. or International). For vehicle operator applicants: A vehicle operator can use services or property of a Federal Entity in accordance with § 450.45(b) to meet FAA's launch or reentry licensing requirements. Operators should reference AC 450.45-2 *Compliance when Contracting with a Federal Entity* when using services or property of a Federal launch or reentry site or other Federal Entity by contract.
Foreign Government Involvement/ Investment	A statement of any foreign government involvement or investment in the project or organization.
Point(s) of Contact	The name, email, and phone number of individuals who will be the points of contact between the applicant's organization and FAA during early pre-application.

7.3 **Formal Pre-Application Consultation**.

7.3.1 Formal pre-application consultation starts when FAA determines that a project is ready for the applicant to start detailed compliance planning. Detailed compliance planning covers a wide range of topics beyond the design and operation of a vehicle or site.

7.3.2 At the start of formal pre-application consultation, FAA assigns a Team Lead to the project as the main point of contact (POC) for the applicant, transitioning the project out of the FAA's AST Pre-Application Program Team. FAA may assign analysts, subject matter experts, and other team members or provide support as needed based on the project's readiness in each subject area.

7.3.3 A successful formal pre-application consultation results in an application ready for submission to and review by FAA. FAA determines which application materials, if any, the applicant should submit for review in formal pre-application.

7.3.4 The following paragraphs of this chapter provide additional information on the topics that should be discussed during formal pre-application consultation.

7.3.5 **Application Compliance Checklists.**

7.3.5.1 FAA encourages applicants to use a compliance checklist while developing an application. FAA provides application compliance checklists on FAA's AST "Getting Started with Licensing" website.[6] These checklists provide applicants with a matrix of all regulatory requirements and can be used to track application documentation when developing materials, ensuring they respond to each regulation requirement.

7.3.5.2 Using the compliance checklist benefits the application process in two ways. First, it provides the applicant with an official FAA tool to prepare and track application materials prior to submission, in alignment and corresponding to the regulations. Second, the checklist format provides FAA with a reference sheet for all application documentation that is consistent across all applicants and projects. This consistency allows FAA to quickly and efficiently evaluate whether the submitted materials meet the criteria for application acceptance.

7.4 Special Considerations for Part 450 Vehicle Operator License Applicants.

FAA expects to discuss the topics in Table 3 of this AC with an applicant during pre-application consultation, to the extent they are relevant to the applicant's proposed operations. Some topics offer flexibility, which can lead to a more efficient licensing process for both the applicant and FAA; for more information, see AC 413.13-1A, *Guidance on Submitting an Application for a Part 450 Vehicle Operator License*, or latest revision.

[6] FAA compliance checklists are available at:Hyperlink to FAA license processing checklist.

Table 3 – Major Components of Formal Pre-Application Consultation for Vehicle Operator License Applicants

Topic	Owner
Team Assignments • Main Point of Contact (POC) • Identify team member roles that will interact with FAA • Identify contract support, if any	**FAA and Applicant**
Concept of Operations (CONOPs) The prospective applicant should provide the following information: • Overview of planned operations • Unique mission aspects • Mission description • Vehicle description • Launch or reentry site(s) • Organizational structure • Program status and desired timeframe See the Project Overview Planning Tool (POPT) for assistance in the development of a comprehensive CONOPs, including the items listed above.	**Applicant**
Planned Program Schedule The prospective applicant should provide a program schedule that includes a definition of significant milestones. These milestones should include expected dates for design reviews and testing, environmental analyses/reviews, application submission, authorization need, target date of first operation (first launch or reentry), etc.	**Applicant**
Program Maturity The prospective applicant should provide information to show that the launch or reentry vehicle program is sufficiently mature and stable to perform an initial design review, such as a system requirements review or other preliminary design review. Evidence of maturity may include, but is not limited to: • Award of a government contract with program milestones leading to flight • Funding through milestones • Known investors or assets • Manufacture or testing of hardware	**Applicant**

Topic	Owner
Scope of the License Determining the point at which launch, or reentry begins, and ends will be discussed during pre-application consultation.	**FAA and Applicant**
Compliance Planning During pre-application consultation, FAA will work with applicants on compliance planning. Means of compliance (MOC) may include following the methods provided in an advisory circular, government standards, industry consensus standards, or unique MOC(s) developed by an individual applicant. FAA will review the submitted MOC to determine whether they satisfy the regulatory safety standard. Below is a list of topics to discuss during compliance planning: • Application Compliance Checklist[7] • MOC Table • Unique MOC(s) • Equivalent Level of Safety (ELOS) • Waivers **Note:** This list is not exhaustive. Prospective applicants should defer to their POC regarding compliance planning.	**FAA and Applicant**
Section 450.35 MOCs Prior to application acceptance, MOC(s) must be accepted by the Administrator for certain regulations as per the subparagraphs of § 450.35. The applicant should consider beginning compliance discussions with FAA as early as possible, as the submission provided by the applicant may be complex. Through these early discussions, the applicant and FAA will discuss when these § 450.35 MOCs should be submitted to allow sufficient time for FAA to review prior to full application submission. The following MOCs must be accepted by FAA prior to application acceptance, per § 450.35(a): • Section 450.115(b)(1), Flight Safety Analyses. • Section 450.139(e)(1), Toxic Hazards for Flight. • Section 450.145(b), Highly Reliable Flight Safety System. • Section 450.163(a)(1), Lightning Hazard Mitigation. • Section 450.187(e)(1), Toxic Hazards Mitigation for Ground Operations.	**FAA and Applicant**

[7] https://www.faa.gov/space/streamlinedlicensingprocess/part-450-application-compliance-checklist.

Topic	Owner
Process Alternatives Agreed to by the Administrator (if applicable) In creating the regulations, FAA anticipated that certain requirements may need additional regulatory flexibility. As a result, FAA included the phrase “as agreed to by the Administrator” within those specific regulations. The goal was to remove the burden of the operator providing an ELOS or applying for a separate waiver for those specific requirements. As such, if the phrase “as agreed to by the Administrator” is included in the regulation the operator may submit an alternative to the proposed requirement for review. Applicants should discuss any process alternatives early during the pre-application consultation.	**FAA and Applicant**
Timeframes (if applicable) An applicant can propose, and FAA can accept, an alternative timeframe for any of the requirements listed in appendix A to part 404, in accordance with § 404.15(b). FAA expects alternative timeframes to be proposed and accepted during pre-application consultation or during the application process so that the agreed-to timeframes are then reflected in the license once issued.	**FAA and Applicant**
Safety Element Approvals per § 414.15 (if applicable) FAA may issue a safety element approval applied for concurrently with a part 450 license. If an applicant is planning to seek a safety element approval, the applicant must continue to consult with FAA before submitting its application.	**FAA and Applicant**

7.4.1 Scope of a Vehicle Operator License.

The Scope of License establishes the bounds for the part 450 requirements for a given vehicle operation and directly impacts an applicant's submissions and subsequent analyses. The Scope of License is a requirement for both launch and reentry operations. FAA strongly encourages applicants to start discussions on the Scope of License at the beginning of the formal pre-application consultation.

7.4.1.1 For a launch at a United States (U.S.) site, in accordance with § 450.3(d), the applicant should identify pre- and post-flight ground operations. These operations include any operations that are potentially hazardous before implementing mitigations such as restricting public access.

7.4.1.2 For a reentry, in accordance with § 450.3(c), licensed activities include those conducted in Earth orbit or outer space to determine reentry readiness and that are critical to ensuring public health and safety and the safety of property during reentry. Reentry also includes activities necessary to return the reentry vehicle, or vehicle component, to a safe condition on the ground after impact or landing.

7.4.1.3 For more information, refer to AC 450.3-1, *Definition of Launch and Scope of a Vehicle Operator License* and AC 413.13-1A, *Guidance on Submitting an Application for a Part 450 Vehicle Operator License*, latest revisions.

7.4.2 Means of Compliance (MOC).

An MOC is an approach that FAA accepts and that applicants use to satisfy a section or subsection of the regulations. An MOC is one method, but not the only method, to show compliance with a regulatory requirement.

7.4.2.1 **Section 450.35, Means of Compliance.**

Prior to application acceptance, MOC(s) must be accepted by FAA for the following sections of part 450. Due to the complex nature of these requirements, FAA strongly encourages applicants to begin discussions on these five MOCs at the start of the formal pre-application consultation stage.

The following MOCs must be accepted by FAA prior to application acceptance, per § 450.35(a):

- Section 450.115(b)(1), *Flight Safety Analyses*.
- Section 450.139(e)(1), *Toxic Hazards for Flight*.
- Section 450.145(b), *Highly Reliable Flight Safety System*.
- Section 450.163(a)(1), *Lightning Hazard Mitigation*.
- Section 450.187(e)(1), *Toxic Hazards Mitigation for Ground Operations*.

7.4.2.2 For more information refer to AC 413.13-1A, *Guidance on Submitting an Application for a Vehicle Operator License*, or latest revision.

7.4.3 **Launch or Reentry Site Considerations.**

Vehicle operator license applicants should identify the location of all expected launch or planned reentry locations early in the process. In accordance with 51 U.S.C. 50902(10), a launch site is the location on Earth from which a launch takes place and necessary facilities at that location. In accordance with 51 U.S.C. 50902(18), a reentry site is the location on Earth to which a reentry vehicle is intended to return. The launch site will be one of the following: a Commercial Site (operated under parts 420 or 433), an Exclusive Use Site, or a Federal Site.

7.4.3.1 <u>Commercial Site (operated under part 420 or part 433)</u>.

In accordance with § 450.147(a), for operations at a Commercial Site, the vehicle operator must have a use agreement in place at the time of application with the site operator prior to any licensed operations at the site. The site operator is responsible for developing procedures to ensure that each operation carried out by a customer at the site does not interfere with other operations and public access is controlled. The site operator must provide each launch or reentry operator, and any contractor, subcontractor or customer of the launch site operator with the site scheduling requirements prior to the start of any operations at the site, per § 420.55. In accordance with § 450.181(b), *Coordination with a site operator*, the vehicle operator must also coordinate with the site operator to establish roles and responsibilities for reporting, responding to, and investigating any mishap during ground activities at the site. Applicants may obtain land use agreements with airports or other landowners for use of their property; however, an airport must still hold a part 420 or 433 license if land that is on or adjacent to its property is used for part 450 operations.

7.4.3.2 <u>Exclusive Use Site</u>.

If the vehicle operator license applicant owns and is the only operator at the launch or reentry site, they may request that FAA consider the site an Exclusive Use Site as part of the part 450 application. For an Exclusive Use Site, the applicant must satisfy the part 420 explosive siting requirements within their vehicle license, in accordance with § 450.183(b), *Explosive site plan*.

7.4.3.3 <u>Operations at a Federal Site</u>.

To operate from a Federal Site, a vehicle operator license applicant must have an executed agreement in place at the time of application, in accordance with § 450.147, *Agreements*. The applicant may enter into an agreement with a Federal launch or reentry site for the provision of ground safety services and oversight, in accordance with § 450.179, *Ground safety – general*.

7.4.3.3.1 Vehicle operators at a Commercial Site (operated under parts 420 or 433) located within a Federal Entity's property boundary may not qualify for the exception for ground safety in § 450.179(b). In instances where the Federal Site provides ground safety services and oversight, the vehicle operator may be able to demonstrate an ELOS to FAA's ground safety requirements, pursuant to 90 FR 19776, (May 9, 2025)[8].

7.4.3.3.2 FAA will accept any safety-related launch or reentry service or property provided by a Federal Site, as long as FAA determines that the launch or reentry services or property satisfy part 450 requirements, in accordance with § 450.45(b), *Services or property provided by a Federal launch or reentry site*.

7.4.3.3.3 FAA maintains all final decision-making authority over which regulations a Federal Site may satisfy and which the applicant will be responsible for satisfying in the application documentation.

7.4.3.3.4 Applicants who use services or property of a Federal launch or reentry site or other Federal Entity by contract should reference AC 450.45-2, *Compliance When Contracting With a Federal Entity*, latest revision.

7.4.3.4 <u>Water Reentries</u>.

For reentries into territorial waters, the applicant must obtain approval from the appropriate regulatory body having jurisdiction in the affected State. In accordance with § 450.147, the applicant must receive approval from the appropriate regulatory body for projected airspace and waterway hazard areas prior to the start of the reentry operation.

7.4.4 Modifications to Existing Part 450 Licenses.

7.4.4.1 <u>Modification without New Vehicle or Site</u>.

In accordance with § 450.211, a licensee must apply to FAA for a modification of the license when they change any representations in the application documentation. Modification requests that do not involve any additional vehicles or sites typically begin in the formal pre-application stage, rather than the early pre-application stage. This starts with a discussion with the operator's current FAA licensing POC. This type of modification may have fewer requirements in pre-application consultation, based on the amount of application material that is changing. FAA determines the level of pre-application consultation required on a case-by-case basis. For more information, see paragraph 12.5, *Application for Modification*, of this AC.

[8] https://www.federalregister.gov/documents/2025/05/09/2025-08097/federal-site-providing-ground-safety-services-and-oversight-for-launch-or-reentry-activities

7.4.4.2 Adding a New Vehicle or Site.

FAA considers modification requests that include adding a new vehicle or site as extensive modifications. The licensee should begin discussions with their current FAA licensing POC. Under part 450, current operators may apply to add additional launch or reentry sites to an existing authorization. Section 450.3 allows for an operator to add a vehicle; however, the new vehicle must be within the family of the authorized vehicle. If the vehicle modifications are drastic and require extensive changes to the application materials, FAA may make the determination that a new application is required.

7.5 Special Considerations for Part 420 and Part 433 Site Operator License Applicants.

FAA expects to discuss the topics referred to in Table 4 of this AC with an applicant during pre-application consultation, to the extent they are relevant to the applicant's proposed operations. Some of the topics allow for flexibility that can lead to a more efficient licensing process for both the applicant and FAA.

Table 4 – Major Components of Formal Pre-Application Consultation for Site Operator License Applicants

Topic	Owner
Introductions	**FAA and Applicant**
Concept of Operations (CONOPs) The prospective applicant should provide the following information: • Overview of planned operations • Site description • Site boundary • Explosive site plan • Flight corridors • Vehicle types and operations • Organizational structure • Program status and desired timeframe Access the POPT[9] on the FAA's AST webpage for assistance in the development of a comprehensive CONOPs, including the items listed above.	**Applicant**
Planned Program Schedule The applicant should provide a program schedule that includes a definition of significant milestones. These milestones should include expected dates for environmental analyses/reviews, application submission, authorization need, target date of first operation (first launch or reentry), etc.	**Applicant**
Program Maturity The applicant should provide information to show that site planning is sufficiently mature and stable to perform an initial site location review. Evidence of maturity may include, but is not limited to: • Award of a government contract with program milestones • Funding through milestones • Known investors or assets • Previous stakeholder outreach • Conference with FAA on the start of environmental review	**Applicant**

[9] Project Overview Planning Tool (POPT) https://www.faa.gov/media/87871.

Topic	Owner
Compliance Planning During pre-application consultation, FAA will work with applicants on compliance planning. Below is a list of topics to discuss during compliance planning: • Site location review • Agreements • Control of public access • Notifications • Mishap Plan • Scheduling of operations **Note**: This list is not exhaustive. Prospective applicants should defer to their POC regarding compliance planning.	**FAA and Applicant**

7.5.1 Launch or Reentry Site Co-Located at an Airport

Siting a spaceport at a National Plan of Integrated Airport Systems (NPIAS) airport requires site operator applicants to coordinate and comply with FAA Office of Airports regulatory requirements pursuant to part 139, in addition to part 420 or part 433 requirements. NPIAS airports are eligible to receive federal funding under the Airport Improvement Program (AIP). [10] When applying for a launch or reentry site operator license, the airport should ensure that any changes to the airport or operations do not jeopardize eligibility for NPIAS designation and AIP funds. The applicant must either be the airport or property authority or have an agreement in place in accordance with § 450.147(a)(1) for the use of the airport. To apply for a site operator license for a site co-located at an airport, the following process for pre-application applies:

1. Initial Discussions
   A. Applicant meets with the FAA Pre-Application Program within AST.
   B. Applicant meets with the local FAA Airport District Office (ADO).
2. Explosive Site Plan (ESP): Applicant prepares the ESP, in accordance with § 420.63, and site boundary, in accordance with § 420.21, and submits this information to AST.
   A. AST reviews and approves/denies the explosive site plan and the site boundary.
   B. AST does not review any other application materials at this time.
   C. Applicant should review other part 420 regulations, such as launch site location review, to ensure the project will meet licensing requirements

[10] For information on the AIP and NPIAS, please reference https://www.faa.gov/airports/aip and https://www.faa.gov/airports/planning_capacity/npias

including public risk criteria. FAA will review this after the ADO gives the conditional Airport Layout Plant (ALP) approval.

3. Airport Layout Plan (ALP): Applicant prepares updates to the ALP with the ESP information and site boundary, once approved by AST.

   A. Applicant submits the updated ALP to the ADO for review.

      i. The updated ALP should include the proposed launch or reentry operations and AST-approved ESP information.

   B. ADO reviews ALP and provides a conditional approval letter.

4. Part 420 Pre-Application: When the applicant obtains conditional approval of the ALP with its local ADO, AST reengages with the applicant on licensing reviews such as safety and environmental.

7.6 **Environmental Review**.

7.6.1 FAA considers the issuance of a license or permit, including renewals and modifications, a major Federal Action under the National Environmental Policy Act (NEPA).[11] Applicants must analyze their proposed operations in an environmental review document and provide sufficient information to FAA to assess the environmental impacts of the proposed operations, including commercial space launch and reentry site operations and commercial space vehicle launches and reentries.[12] Applicants must complete the NEPA document prior to license or permit authorization; however, completion of this document does not guarantee that FAA will issue a license or permit authorization.

7.6.2 FAA will determine the type of environmental review, if any, required by the applicant, i.e., Environmental Assessment or Environmental Impact Statement. The applicant must comply with FAA Order 1050.1G[13] in preparation of the environmental document and associated consultations. Additional information can be found in the 1050.1 Desk Reference.[14]

7.6.3 FAA strongly encourages the use of the Project Overview Planning Tool (POPT) early in pre-application as a communication tool with the FAA environmental review team. Applicants need to ensure their application materials are sufficiently mature in development, with minimal changes expected, before proceeding with an environmental analysis of the impact of the proposed operations. If the proposed operation changes, applicants may need to revise the NEPA document, resulting in lost time and resources.

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[12] An application must include an approved FAA Environmental document, in accordance with §§ 420.15(e), 433.7(d), 437.21(b)(1)(iv), or 450.47(d).

[13] https://www.faa.gov/regulations_policies/orders_notices/index.cfm/go/document.information/documentID/1043997

[14] https://www.faa.gov/about/office_org/headquarters_offices/apl/environ_policy_guidance/policy/faa_nepa_order/desk_ref

FAA coordinates with the applicant to determine when the NEPA document should be started in parallel with the safety review portion of the application development.

7.6.4 Examples of information in the application materials that should be sufficiently mature include the following:

- Vehicle Operator License applicants:
  - Preliminary flight safety analysis
  - System safety analysis
  - Vehicle design (weight, propellants, thrust)
- Site Operator License applicants:
  - Location reviews
  - Explosive siting
  - Vehicle types
- All applicants:
  - Hazardous materials including propellants
  - Operational frequency
  - Land use agreements
  - Stakeholder engagement

7.7 **Stakeholder Engagement**.

7.7.1 FAA's Office of Commercial Space Transportation (AST) proactively engages stakeholders by initiating early and ongoing outreach efforts that span the life of the license application review process. This includes the pre-application consultation phase and the associated environmental document's public review period. As stated earlier, the environmental document can be in the form of an Environmental Assessment or Environmental Impact Statement. Stakeholders may include Federal Agencies, local or state governments, tribal nations, foreign governments, local public, or special interest groups.

7.7.2 During early pre-application, the FAA Pre-Application Program may suggest stakeholder engagement based on the applicant's proposed program. Early stakeholder engagement may be encouraged for the following examples: new and unique operations, operations at or near airports or Federal Sites, or overflight of foreign territories.

7.8 **Additional Licenses and Coordination**.

7.8.1 In addition to regulation requirements found in Chapter III of Title 14 of the Code of Federal Regulations (14 CFR), applicants may need to seek additional licenses or coordinate with other U.S. Government Agencies. Some examples of agencies are listed below with possible reasons why an applicant may need to reach out to them for additional licensing or coordination:

- Federal Communications Commission
  - Any ground- or space-based radio frequency requirements
- National Oceanic and Atmospheric Administration
  - Earth observation, on-board cameras
- FAA Air Traffic Organization
  - Operations impacting airways
- United States Coast Guard
  - Operations near or over navigable waterways
- For operations at or near a Federal Site
  - National Aeronautics and Space Administration
  - United States Space Force
  - United States Air Force

7.8.2 A company's operation may have international impacts, which necessitate FAA, with the U.S. Department of State, coordinating directly with a foreign government to ensure U.S. policy interests and the obligations the U.S. Government assumes in a treaty, convention, or agreement in force between the Government and the Government of a foreign country are maintained, in accordance with 51 U.S.C 50919(e). However, other international impacts are operational in nature and may require the operator to directly coordinate with a foreign government, such as for notices to airmen and mariners per § 450.147(a). The applicant should discuss the proposed CONOPs with FAA's licensing POC early in pre-application consultation to identify any international impacts.

7.8.3 The applicant is responsible for the coordination of any additional required licenses or approvals.

8 APPLICATION.

8.1 Application Content and Quality.

8.1.1 Applicants are legally responsible for all statements in their application, in accordance with § 413.7(c). For FAA to efficiently review the application, it is extremely important that the applicant maintain accuracy of documentation through a document revision control system. This ensures that FAA correctly evaluates the documentation that the applicant considers is part of their application. If FAA issues a license, all statements within the application are subject to compliance monitoring, per § 413.7(c).

8.1.2 Applicants should respond to regulatory compliance questions using concise and accurate answers. If FAA needs additional information or clarification beyond what is submitted with the application, FAA will request the information and provide reasoning for the request. Applicants should provide any requested additional information in a timely manner.

8.1.3 Applicants should ensure their application documentation clearly demonstrates that each requirement is addressed. When possible, FAA recommends citing the requirement followed by the response in the application documentation to reduce ambiguity. Alternatively, applicants can show requirement tracing through a compliance matrix, table of contents, or other similar method. Note that application requirements vary based on the regulatory part and its individual sections—not all documentation referenced in an application is automatically required to be submitted as part of the application for FAA evaluation. Some materials referenced in an application are only required to be reviewed by FAA post-licensing for verification and compliance monitoring purposes. As a result, FAA recommends a clear and concise method for tracing the documentation provided in an application to FAA for evaluation to ensure the applicant and FAA are aligned.

8.1.4 FAA may reject or deny an application if it is not clearly organized or contains errors, inconsistencies, or omissions.

8.2 Responses to each Regulatory Requirement.

Applicants may provide regulatory responses in the following forms:

1. Direct Response.

   A direct response is a clear and concise description of how the applicant demonstrates compliance with each part and subpart of the regulation. Applicants write these types of responses directly into the main application document body or reference them in an attachment to the application. FAA will review the substance of each response during the evaluation period.

2. Not Applicable Response.

   Certain requirements may not apply to all applicants. If a regulatory requirement does not apply, the applicant should mark it as “Not Applicable” and include rationale explaining why the requirement is not applicable. Applicants are encouraged to use a compliance matrix for tracking which requirements they propose are not applicable, with traceability to the accompanying rationale. FAA will review the substance of these items' responses and determine their validity.

3. Delayed Submission Response.

During pre-application consultation, a prospective applicant and FAA may agree on a delayed response for certain requirements. If they agree, an applicant may provide information or analyses, such as those that are typically finalized close to the planned licensed or permitted activity, after submitting the application. Prospective applicants should collaborate with their FAA licensing POC regarding compliance planning.

8.3 Confidentiality.

In accordance with § 413.9, an applicant may request in writing that their trade secrets or proprietary commercial or financial data be treated as confidential. The request must be made at the time the information or data is submitted and state the period of time for which confidential treatment is desired. Information or data for which the applicant requests confidentiality must be clearly marked with an identifying legend, such as "Proprietary Information," "Proprietary Commercial Information," "Trade Secret," or "Confidential Treatment Requested." Where this marking proves impracticable, a cover sheet containing the identifying legend must be securely attached to the compilation of information or data for which confidential treatment is requested. Information or data for which confidential treatment has been requested or information or data that qualifies for exemption under section 552(b)(4) of Title 5, United States Code (U.S.C), will not be disclosed to the public unless the Associate Administrator determines that the withholding of the information or data is contrary to the public or national interest.

8.4 Submittal of an Application.

Section 413.7 provides detailed requirements for submitting an application. These requirements are applicable for requests for new authorizations, renewals, and modifications. Specifically, the application:

- Must be in writing and in English.
- Must either be submitted on paper (two copies), via physical electronic storage medium, or by email.
- If submitted with physical electronic storage, it must include a cover letter that is signed by the applicant, or someone authorized by the applicant. A sample application letter template is available on FAA's AST website page on Vehicle Operator Licenses.[15]

[15] https://www.faa.gov/space/licenses/operator_licenses_permits.

8.5 **Where to Submit an Application**.

8.5.1 Applications via Email.

For an application submitted by email, an applicant must send the application as an email attachment to ASTApplications@faa.gov. All electronic files should be date-stamped and have version control documentation, in accordance with § 413.7.

- If file size limitations prevent submitting the entire application to the above address, the applicant may submit a signed cover letter that specifies how to access the entire application, such as via a file-transfer site.
- It is the responsibility of the applicant to make the entire application easily accessible by FAA.

8.5.2 Applications on Paper.

Applicants submitting applications on paper must send two copies of the application to Federal Aviation Administration, Associate Administrator for Commercial Space Transportation, 1200 New Jersey Avenue, S.E., Washington, DC 20590. Attention: Application Review.

9 INITIAL SCREENING.

9.1 Submitting an Application.

9.1.1 FAA performs an initial screening of submitted applications. An applicant should ensure their documentation clearly shows a response has been provided for each application requirement. The applicant must identify and maintain configuration control over all of their submitted documents per § 413.7(c). Applicants applying under part 450 should refer to AC 413.13-1A, *Guidance on Submitting an Application for a Part 450 Vehicle Operator License*, latest revision.

9.1.2 To exit pre-application consultation and begin the license or permit evaluation review, applicants must ensure their application is true, complete and accurate, in accordance with § 413.7, *Application submission*. FAA will screen the application, and if FAA accepts the application, the applicant exits pre-application consultation, pursuant to § 413.11, *Acceptance of an application*.

9.1.3 When FAA accepts an application, it does not mean that FAA has determined that the application is complete. FAA will evaluate the accepted application and may request additional information necessary to make a determination, as stated in § 413.13, *Complete application*.

9.2 Application Acceptance.

If FAA determines that an application has met the acceptance criteria, FAA begins its qualitative evaluation. For a license application, the statutory review period is 180 days. For permits, the statutory review period is 120 days.

9.3 Notice of Application Acceptance or Rejection.

Consistent with § 413.11, *Acceptance of an application*, FAA provides written notification of application acceptance or rejection to the applicant.

9.3.1 <u>Notice of Application Acceptance</u>.

FAA includes the following in the written notification when it determines an application is complete enough:

- Start and projected end-dates of application evaluation statutory review period;
- A list of any identified items that remain outstanding that were not required for application acceptance;
- Consistent with § 413.13, any additional information required for a license or experimental permit determination that is known at the time of application acceptance; and
- The designated FAA POC during the evaluation period.

9.3.2 Notice of Application Rejection.

FAA includes the following in written notification when it rejects an application:

- A list of items not provided that are required for application acceptance;
- A list and explanation of items not in sufficient quantity for application acceptance;
- A list of any items that remain outstanding that were not required for application acceptance;
- Consistent with § 413.13, any additional information, known at the time of the application rejection, required for license or experimental permit determination; and
- The designated FAA POC for inquiries.

10 APPLICATION EVALUATION.

10.1 Statutory Timelines.

10.1.1 Once FAA accepts an application, the statutory timeline for the review begins. For all license applications, the statutory review period is 180 days. For permits, the statutory review period is 120 days. FAA does not specify a statutory review period for independent payload reviews or modifications to authorizations.

Table 5 – Statutory Review Periods by Regulatory Part

Regulation	Covered Operations	Statutory Review Period
Part 420	Launch Sites	180 Days
Part 433	Reentry Sites	180 Days
Part 437	Experimental Permits	120 Days
Part 450	Launch and Reentry Vehicles	180 Days

10.1.2 FAA encourages operators to engage in pre-application consultation early, prioritize application development, and continue to be responsive throughout the entire application process.

10.2 Additional Information Requirements.

In accordance with § 413.13, FAA's acceptance of an application does not mean it has determined that the application is complete. If, in addition to the information required by this chapter, FAA requires other information necessary for a determination that public health and safety, safety of property, and national security and foreign policy interests of the United States are protected during the conduct of a licensed or permitted activity, an applicant must submit the additional information.

10.3 Applicant Expectations.

In addition to the expectations in chapter 13 of this AC, applicants should maintain consistent communication throughout the application evaluation period with their FAA licensing POC. They should remain responsive to questions from FAA and adhere to agreed-upon timelines from formal pre-application consultation through post-determination activities.

10.4 Continuing Accuracy of Application Materials.

Under § 413.17, *Continuing accuracy of application*, an applicant must ensure the continuing accuracy and completeness of information they furnish to FAA as part of a pending license or permit application. When submitting an updated document, FAA suggests that applicants provide both a red-line version showing changes made to the document and a clean copy of the updated document. Inclusion of the red-line version may reduce FAA’s review time. FAA will consider only the clean version of the document as formal application material unless the applicant requests otherwise.

10.5 **Types of Reviews.**

FAA evaluates an accepted application across five areas: Safety Review, Policy Review, Environmental Review (parts 420, 433, 437 and 450), Payload Review (part 450), and Maximum Probable Loss (MPL) Determination (parts 437 and 450). These reviews occur relative to the applicable regulations, and all must result in a positive determination before FAA can authorize an operation.

10.5.1 Safety Review.

During a safety review, FAA examines whether the launch, reentry, or site operation would jeopardize public health and safety or safety of property. The safety review typically represents the most extensive part of FAA's evaluation.

10.5.2 Policy Review.

During a policy review, FAA, in consultation with other government agencies, determines whether the launch or reentry would jeopardize U.S. national security, foreign policy interests, or international obligations of the United States. During a policy review, FAA requests partner government agencies to review a policy document for their respective areas of interest. Partner agencies include the Department of Defense, Department of State, Department of the Interior, Office of the Director of National Intelligence, National Aeronautics and Space Administration, Federal Communications Commission, National Oceanic and Atmospheric Administration, and U.S. Coast Guard. For more information, refer to AC 450.31-1, *Definition of Launch and Scope of a Vehicle Operator License*.

10.5.3 Environmental Review.

In accordance with the NEPA, FAA will conduct an environmental review for each license or permit determination. The environmental review begins in pre-application and develops in parallel with the safety review portion of the application development. Applicants need to ensure their application materials are sufficiently mature in development, with minimal changes expected, before proceeding with an environmental analysis of the impact(s) of the proposed operations.

10.5.4 Payload Review.

During a payload review, FAA, in consultation with other government agencies, determines whether the launch or reentry of a payload would jeopardize public health and safety, safety of property, U.S. national security or the foreign policy interests, or international obligations of the United States. A payload owner or operator may request payload reviews independently of a vehicle license application. An independent payload approval is not an authorization; FAA integrates the approval into the launch service provider's vehicle operator license. For more information, refer to AC 450.31-1, *Definition of Launch and Scope of a Vehicle Operator License*, latest revision.

10.5.5 Maximum Probable Loss Determination.

FAA determines the financial responsibility of the licensee for third party liability and losses to U.S. Government property based on the maximum probable loss (MPL) in accordance with part 440. Only vehicle operators are subject to an MPL determination.

10.6 Tolling of Applications under Review.

10.6.1 In accordance with § 413.15(b), if FAA cannot continue the review of an accepted application because of lack of information or for any other reason, FAA will toll the review period until FAA receives the information it needs or the applicant resolves the issue. Tolling the review period means the 120- or 180-day statutory review period is paused until the toll is lifted or a determination is made. The purpose of tolling is to avoid denial of an application by allowing an applicant the opportunity to supplement its application based on feedback from FAA. Supplementing the application may include submitting additional information or resolving any issues identified by FAA that would affect the determination.

11 APPLICATION DETERMINATION.

11.1 Issuance of an Authorization.

11.1.1 Upon completing its evaluation of an application, FAA will determine whether to issue an authorization. If FAA makes a positive determination, it will notify the applicant in writing. The applicant will receive a copy of the authorization which details the scope of the authorization, along with its issuance, effectiveness, and expiration dates. FAA also posts this document publicly on its website, along with all other active authorizations. Once FAA issues an authorization, it considers the applicant an operator within FAA's nomenclature (see the definition of operator in § 401.7). The operator is required to adhere to all requirements set forth in the authorization for its duration and comply with the required record-keeping timeframe following the expiration of the authorization.

11.1.2 In addition to the authorization, FAA will also provide the applicant with a non-public transmittal letter. This letter may contain legally binding restrictions and requirements for the authorized operations, generally referred to as "Terms and Conditions." The applicant is required to adhere to these requirements to remain in compliance under their authorization. Generally, the applicant is aware of these requirements and the issues they pertain to prior to receiving the authorization. Additionally, FAA may remove these "Terms and Conditions" as operations occur and concerns are addressed. Generally, FAA issues "Terms and Conditions" in relation to a safety issue that it believes the applicant has not adequately addressed at the time of authorization issuance, but can address prior to operations. They may also address time-sensitive concerns, such as international agreements, that an applicant would not normally be able to address in the evaluation timeframe.

11.2 Denial of an Application.

11.2.1 In accordance with § 413.17(a), *Continuing accuracy of application*, FAA may deny the license or permit application that it accepted for consideration. FAA may deny an application if the application does not demonstrate compliance with all regulatory requirements. In accordance with § 413.21(a), FAA will inform an applicant, in writing, if it denies an application and will state the reasons for the denial.

11.2.2 FAA may deny an application if misrepresentations, conflicting information, or inconsistent information are material to public safety.

11.2.3 Section 413.17(a) also applies to applications for a license or permit modification.

11.3 Records.

In accordance with §§ 420.61, 437.87, and 450.219, once a license or permit is granted, a licensee or permittee must maintain all records, data, and other material necessary to verify that an operation is conducted with the representations contained in the application, the requirements of Code of Federal Regulations (CFR) parts pertaining to the license or permit, and the "Terms and Conditions" contained in their license or permit.

12 POST-DETERMINATION.

12.1 Compliance Monitoring and Inspections.

In accordance with §§ 420.49, 437.93 and 450.209, licensed and permitted operators are required to adhere to the regulatory requirements under which they obtained their license or permit, the representations in their application documentation, and any other requirements stated within the transmittal letter or terms and conditions of the license or permit. FAA may monitor and inspect any operations and activities related to the license or permit. Operators must allow Commercial Space Transportation Safety Inspectors (CSTSI) access to inspect vehicle components, testing, sites, and associated operations. Operators are required to have space available for FAA to monitor and inspect all licensed or permitted operations, including provision of a console for monitoring the progress of the countdown and communication on all channels of the countdown communications network per § 450.209. Operators should coordinate this inspection with the Safety Assurance Division within AST and cooperate with the CSTSIs in the course of their official monitoring and inspection duties.

12.2 Post-Flight Reporting Requirements.

Under §§ 437.53 and 450.215, an operator is required to submit to FAA certain post-flight reporting requirements no later than 90 days after a launch or reentry, unless a different timeframe has been agreed to. Post-Flight Reports may include various types of information. Since reporting requirements may change over time, operators should review requirements prior to license issuance and submit post-flight reports to AST's Safety Assurance Division using the following email addresses:

FAA Office of Commercial Space (AST) – Safety Assurance Division

Email: ASTOperations@faa.gov or AWA-ASA-300-Staff@faa.gov.

12.3 Non-Compliance Enforcement.

In accordance with § 405.3, FAA may modify an authorization upon application by the operator or upon FAA's own initiative, if FAA finds that the modification is consistent with regulatory requirements. In the event that FAA finds that an operator substantially failed to comply with FAA regulations, FAA may take enforcement action against the operator. Penalties for non-compliance may include, but are not limited to, mandatory corrective actions, fines, and suspension or revocation of an authorization.

12.4 Continuing Accuracy.

License or permit holders are required to maintain the accuracy of all documentation pertaining to their application throughout the duration of the license or permit, as required by §§ 420.47(b), 437.55, 437.85, 440.7, and 450.211. If an update includes changes that are material to public health and safety, it is considered a modification.

12.5 **Application for Modification.**

If a license holder makes changes to the operations or vehicle covered by a license authorization, they must submit a request for a license modification in accordance with §§ 420.47, 437.85, and 450.211. FAA may accept or reject modification requests or offer alternate paths to compliance with the proposed changes. If FAA rejects a modification request, the licensee may continue operations under the scope of the existing license.

12.5.1 Modifications to existing licenses do not have a statutory review period. However, FAA attempts to make determinations within 180 days. Modifications are not subject to tolling.

12.5.2 FAA encourages operators submitting requests for modifications to allow ample time for FAA review and approval prior to operations requiring a license modification.

12.6 **Duration of an Authorization.**

Upon issuing a license authorization, FAA provides an expiration date. If an operator chooses not to renew the license by the expiration of the authorization, the license shall expire. The owner of the license is required to maintain records for a set period of time following the expiration of the authorization.

Table 6 – Duration of Authorization by Regulation

Regulation	**Covered Operations**	**Duration**
Part 420	Launch Sites	5 years
Part 433	Reentry Sites	5 years
Part 437	Experimental Permits	1 year
Part 450	Launch and Reentry Vehicles	5 years

12.7 **Renewal of Authorizations.**

Each license or permit has an expiration date. In accordance with § 413.23, to continue operating beyond the expiration date, the license or permit holder must apply for renewal and obtain acceptance and approval of the renewal documentation from FAA. As stated in § 413.23(a), license holders must submit renewal requests at least 90 days prior to expiration; and permit holders must submit requests at least 60 days prior to the expiration.

12.8 Revocation of an Authorization.

In circumstances where the Administrator deems an operator's actions to be a serious risk to the public and in clear non-compliance with their license, FAA will revoke the license authorization, in accordance with § 405.3. The Administrator takes this action at their discretion, which may or may not occur as a result of an investigation into license non-compliance. An operator may also request their license be revoked in the manner of a license surrender. In both cases, an operator must reapply for a license and be authorized in order to continue those operations covered by the revoked license, pursuant to § 413.1.

13 APPLICANT EXPECTATIONS.

13.1 Self-Directed Application Development.

13.1.1 Applicants need a clear understanding of the appropriate regulations to develop a successful application. FAA encourages applicants to have a thorough knowledge of the regulations prior to starting application development. FAA's Office of Commercial Space Transportation (AST) provides a website[16] with tools and guidance to support application development, including ACs, compliance matrices, workshops, and handouts.

13.1.2 During the pre-application consultation stage, FAA will support inquiries regarding regulatory interpretation and technical issues; however, the applicant is responsible for applying knowledge of the disciplines associated with the regulations in its application.

13.2 The Applicant Team.

13.2.1 An applicant should provide FAA with a POC for all programmatic correspondence. The applicant POC should have overall insight into the application process and status and must be authorized to act on behalf of the application signatory. A program POC may be a project manager, team lead, or government affairs specialist.

13.2.2 Specialized personnel are critical to developing a successful application and should be part of the applicant's application development team. Specialized personnel have extensive knowledge of the appropriate regulations and in-depth experience in the delivery of application materials. Some specialized personnel are subject matter experts, which may include analysts in flight and system safety, as well as environmental specialists with NEPA knowledge. Specialized personnel may directly interact with FAA, as needed, with the applicant's main POC included for awareness.

13.2.3 Using contracted support on the applicant's team is acceptable to meet these expectations. However, the applicant should be included in meetings and communication between FAA and the contracted support. Ultimately, the applicant is responsible for all application content, regardless of the use of internal or external/contracted support during application development.

13.2.4 FAA will provide applicants with a main POC from AST. During early pre-application, applicants should direct all inquiries through the FAA Pre-Application Program via email at ASTPreApp@faa.gov. In formal pre-application, FAA identifies an FAA Team Lead as the main POC.

[16] https://www.faa.gov/space/licenses/licensing_process

13.3 Application Content, Quality, and Structure.

13.3.1 Applicants must ensure all statements in the application are true, complete, and accurate, as required by § 413.7(c). FAA encourages applicants to maintain accurate documentation through a document revision control system to ensure the correct documentation is evaluated as part of an application. If FAA issues a license or permit, all statements and documentation within the application are subject to compliance monitoring.

13.3.2 Applicants should ensure their application responses are concise and accurate, providing only the required regulation information. If FAA needs additional information or clarification beyond what is submitted with the application, it will request the information and explain the reasoning. Applicants should provide additional information in a timely manner.

13.3.3 Applicants should ensure their application documentation clearly demonstrates that each requirement is addressed. When possible, FAA encourages applicants to provide the requirement citation followed by the response directly in the documentation. Using this application structure ensures that FAA is evaluating the intended information for each regulatory requirement. Alternatively, or concurrently, applicants can show requirement tracing through a compliance matrix, table of contents, or other similar method. Applicants must submit any application reference documents that provide compliance evidence for the respective application requirements in accordance with § 413.7(c). However, during submission, an applicant may note that a full reference document is being provided for completeness and request that only the required portion be considered application material, with the remainder being reference only.

13.3.4 When updating documents, either in pre-application draft form or during an evaluation of a final submission, FAA recommends that applicants provide the updated document in both clean and red-lined versions for a more streamlined review. Again, document revision control is imperative with updated versions for evaluation.

13.3.5 FAA may reject or deny an application if it is not clearly organized or contains errors, inconsistencies, or omissions.

13.4 Clear Communication.

13.4.1 Clear communication between FAA and the applicant is key throughout the licensing process including the pre-application discussions. This communication may be written or verbal. All statements provided to FAA by an applicant must be true in order for the application to be in compliance with § 413.7(c). If any questions arise regarding an interpretation of the regulations, tools, or guidance provided by FAA, the applicant should reach out to their POC for clarification.

13.4.2 Applicants should be responsive to all FAA requests and provide requested information in a timely manner. Such responses should be clear and concise and be answered to the best knowledge and ability of the applicant. Failure to respond to FAA in a timely manner, or failure to provide factual information, may result in significant delays within the pre-application and evaluation process.

13.4.3 Additionally, the applicant should be forthcoming with expected changes to the CONOPs or designs during both the pre-application process and the evaluation process. Changes that have not been previously disclosed may have a significant impact on FAA's ability to complete either the review of pre-application deliverables or the application evaluation in a timely manner.

13.4.3.1 **For Vehicle Operator License applicants**:

Disclosure of a previously uncommunicated change to the vehicle or CONOPs during pre-application may affect previously approved MOC(s), Scope of License, or environmental analysis for the application, all of which are critical to application acceptance and a positive license determination.

13.4.3.2 **For Site Operator License applicants**:

Disclosure of agreements with tenant launch or reentry operators and the vehicles operated by such entities that the site plans to host are critical for many aspects of the safety review. A site license applicant also needs to demonstrate the ability to control public access to hazardous areas, in accordance with § 420.53. If the applicant does not own all the land that will be affected by the proposed operations, and cannot legally control access to the site, then the applicant must disclose agreements with adjacent landowners. Circumstances where the applicant does not have legal jurisdiction to fully conduct the proposed operations required by part 420 or 433 may lead to an evaluation toll until the applicant resubmits all documents, or an application denial in the most serious circumstances.

14 ADDITIONAL CONSIDERATIONS.

14.1 U.S. Applicants Launching and/or Reentering in a Foreign Territory.

14.1.1 U.S. entities, as well as foreign entities in which a U.S. citizen has a controlling interest, that intend to conduct spaceflight operations under part 400 regulations in foreign territory are required to obtain the necessary regulatory approvals from both the U.S. and the host nation in accordance with §§ 420.41(c), 437.17, and 450.13. FAA may choose not to require a foreign authorization to be completed prior to FAA issuance of a license or permit. However, prior to operations in a foreign territory, additional foreign authorizations may be required for the use of an FAA license or permit in accordance with §§ 420.41(c), 437.17, and 450.13.

14.1.2 Failure to adhere to all applicable requirements of law or regulation that may apply to its activities would result in a non-compliance, jeopardizing the authorization, and possibly exposing the operator to legal penalties within the host nation.

14.1.3 In scenarios where FAA authorizations conflict with the regulatory requirements of a host country, FAA may defer to the host country's regulatory requirements for operations conducted within that host country but is not obligated to do so. However, the operator must comply with the applicable U.S. Federal regulations and if there is a conflict or overlap with requirements, the applicant should notify FAA immediately to prevent delays in the licensing process or possible denial.

14.1.4 In addition to FAA regulatory requirements for the conduct of operations, applicants must ensure that the transfer of information and material used for licensed operations and all other spaceflight activity have been approved by the U.S. Department of State and the appropriate government institutions within the host nation and any nation through which such information or objects may transit pursuant to Section 38 of the Arms Export Control Act (22 USC 2778). The Missile Technology Control Regime (MTCR) and the International Traffic in Arms Regulations (ITAR) require strict compliance, with serious legal penalties for non-compliance in accordance with 22 CFR 120. Extreme care should be taken to ensure all movement of MTCR and ITAR covered objects and information comply with U.S. and foreign regulations.[17]

[17] https://www.state.gov/bureau-of-international-security-and-nonproliferation/releases/2025/01/missile-technology-control-regime-mtcr-frequently-asked-questions

14.1.5 International waters not within the Exclusive Economic Zone or the territorial waters of a sovereign body recognized by the U.S. are not considered foreign territory, but there may still be considerations for ITAR and MTCR compliance in such areas depending on the operation.

14.2 Foreign Applicant Launching and/or Reentering in the United States

Foreign entities seeking to conduct spaceflight operations in the U.S. must conduct their operations under 14 CFR Chapter III regulations per § 413.3. In addition, any foreign or U.S-based applicants seeking payload reviews must also obtain all required licenses, authorizations, and permits per § 450.43(a)(1). Furthermore, § 450.13 states the rights not conferred by a vehicle operator license, thus, as with U.S.-based operators, foreign applicants may also need to ensure that the transfer of information and material used for licensed operations and all other spaceflight activity have been approved by the U.S. Department of State, the Bureau of Industry and Security, and the appropriate government institutions within the applicant's home country, as well as any nation through which such information or objects may transit. The MTCR, Export Administration Regulations (EAR), and ITAR require strict compliance, with serious legal penalties for non-compliance. Extreme care must be taken to ensure all movement of MTCR, EAR, and ITAR covered objects, and that the information complies with U.S. and foreign regulations.

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Subject: (insert AC title/number here)　　　　Date:

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☐ Recommend paragraph on page be changed as follows:

☐ In a future change to this AC, please cover the following subject:
(Briefly describe what you want added.)

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