

# BSEE Permits, Approvals, and Process Alternatives

## U.S. Federal Aviation Administration

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### 1. Overview of U.S. Federal Aviation Administration Commercial Space Launch Site Licensing Program

The U.S. Federal Aviation Administration (FAA) is responsible for licensing the operation of launch sites used for the purposes of commercial space transportation under the Commercial Space Launch Act. If a prospective launch site operator proposes to offer its launch site to others, that person must obtain a license to operate a launch site. The FAA's commercial space launch site licensing program is not applicable to launch operators operating private sites for their own launches or a person wishing to operate a site to support amateur rocket activities.

The FAA's approach to licensing the operation of a launch site focuses on five areas of concern critical to ensuring that operation of a launch site will not jeopardize public health and safety, the safety of property, U.S. national security or foreign policy interests, or international obligations of the U.S. interests. These reviews encompass the environment, policy considerations, the siting of explosives and other explosive safety measures, the safety of a launch site location, and operational responsibilities.

Statutes and regulations relevant to commercial space launch site licensing include:

- *Commercial Space Launch Act [51 U.S.C. Ch. 509, §§ 50901-50923]*
- *License application procedures [14 CFR Part 413]*
- *License to operate a launch site regulations [14 CFR Part 420]*

#### 1.1. Alternatives to BSEE Permits, Approvals, and Processes

##### 1.1.1 Pre-application Consultation

BSEE could require pre-application consultations between BSEE staff and potential permit applicants.

Under 14 CFR § 413.5, an applicant must consult with the FAA before submitting an application. Pre-application consultation is mandatory in order to allow both an applicant and the FAA the opportunity to identify potential issues relevant to the FAA's licensing determination. Pre-application consultation allows a prospective applicant to familiarize the FAA with its proposal and the FAA to familiarize the prospective applicant with the licensing process. It is intended to provide an efficient and effective process leading to the development of a substantially complete license application.

Under the FAA commercial space program, pre-application consultation is not a formal structure, and need not be accomplished within a set timetable. Early pre-application consultation is recommended by FAA to enable the applicant to identify potential licensing issues at the planning stage when any proposed changes or modifications to an applicant's program or commercial space transportation application are less likely to result in significant delays or costs to the applicant. This avoids potential wasted efforts by a prospective applicant in preparation of an application. For new launch concepts, the

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pre-application process allows a prospective applicant and AST's Licensing and Safety Division to identify an efficient process for the applicant to demonstrate the safety of any proposed launch, reentry or operation of a launch or reentry site.

The FAA does not require pre-application consultation to involve personal face-to-face meetings with FAA staff. For many proposals consultation may be made by telephone, electronic mail or other means. A prospective applicant's concept, issues, and schedule nearly always drive the schedule and order of such discussions. FAA recognizes that space transportation concepts are often very complex, and the establishment of a good working relationship with FAA early in the life cycle of a commercial space transportation program is beneficial to all participants. Recognizing that an applicant's schedule is often subject to change and driven by availability of resources, early discussion of schedules with the FAA can assist in effective planning of resources to evaluate an application. The submittal by an applicant of parts or elements of the necessary material for review as they are developed is strongly recommended. In all cases, the FAA encourages the proposed applicant to submit, as part of the process, application material in draft, and the FAA will review and provide feedback on the content.

### **1.1.2 Time-Bound Permit Application Review Process**

BSEE could establish a program in which BSEE is required to determine the completeness of applicant submittals within a prescribed time frame and, once that portion of an application (or the full application) is complete, BSEE is required to issue a decision concerning the applicant submittal within a prescribed time frame.

FAA decides whether to accept a particular application through an initial screening of the application to see if it is "substantially complete." Commencing the review of an incomplete application is in the interest of the applicant in that it allows for early identification of required information that an application may not have otherwise addressed in the application. The FAA determines through this review process when an application is sufficiently complete for the 180-day application review period to commence, and then notifies the applicant. When the FAA receives an application that fails to provide sufficient information for the FAA to commence a meaningful review, the applicant will be notified, in writing, noting the areas of deficiency. Accordingly, the 180-day review period will start to run only upon FAA receipt of an accepted application.

Once deemed complete, the FAA has 180 days to review the license application and issue a decision to either approve or deny the application. 51 U.S.C. § 50905 requires notification to the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 30 days after any occurrence where the FAA has not taken action on a license application within the 180 day review period. However, unlike some international oil and gas permitting programs reviewed, a license application is not deemed to be accepted if FAA fails to meet this timeline requirement.

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Acceptance of the application does not establish that an application is fully complete. The fact that an application is only “substantially complete” means that more information may be required before the application is entirely complete. The FAA may also ask for additional information or clarifications in the course of the licensing process in situations where an applicant’s proposal contemplates unique activities, vehicle configurations, or technologies.

The FAA can toll, or stop the clock on the 180-day review period when an applicant fails to provide information required for the FAA to complete its review. If an applicant does not address requests for required information in sufficient detail, or if the application contains inconsistencies that are not resolved, the FAA will advise the applicant and provide a time by which the requested information must be provided. Once the deadline has passed, and while the FAA waits for any information from the applicant necessary to complete its review, the 180-day time limit on the FAA does not run.

### **1.2. Points for Further Research**

#### **1.2.1 Pre-application Consultation**

If required pre-application consultations are considered as a potential alternative approach to BSEE permitting, assessment of the likely issues that could be resolved through this requirement in the BSEE permit process would be conducted to assess the benefit of establishing a pre-application consultation requirement for BSEE.

#### **1.2.2 Time-Bound Permit Application Review Process**

If a time-limited applicant submittal review process is considered as a potential alternative approach, further investigation on the specifics of how time-limited processes are being applied in FAA’s commercial space launch site licensing program would be conducted to assess how time limitations may impact the efficiency and effectiveness of the licensing program. This additional research will involve looking into the specific activities that cause the FAA to toll the review clock and whether FAA has to notify the Committee on Science of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate if they intend to toll the clock. In addition, a comparison of the FAA process with time-limited processes that result in application approvals seen in international oil and gas permitting programs reviewed would be performed to better define the most suitable alternative approach for BSEE. This information would be used to assess the viability of applying various time-limited applicant submittal review approaches to the BSEE permitting program.

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### 1.3. Implications for BSEE

#### 1.3.1 Pre-application Consultation

##### *Efficiency and Effectiveness*

A pre-consultation requirement could potentially improve efficiency and effectiveness on the part of both BSEE and the applicant, could be neutral, or could be detrimental to efficiency and effectiveness. Requiring pre-application consultation between potential applicants and BSEE would require additional interaction between BSEE and the regulated community that do not necessarily currently occur, and therefore potentially requiring additional resources to be expended by both BSEE and the applicant. However, because a better understanding of the information needed in the application and of the proposed operations would be available, pre-application consultations could lead to efficiencies and increased effectiveness in application development by the potential licensee and application review by BSEE.

##### *Suitability for Purpose*

Pre-application consultations could potentially improve safety and environmental performance. BSEE would have the opportunity to highlight specific concerns during the pre-consultation process and give the potential permit applicant the opportunity to more accurately address those concerns prior to formal submittal of the application, by applying better information and understanding gained through the pre-application consultation process. Furthermore, BSEE could potentially conduct more informed technical reviews of applicant submittals and conduct more focused/informed inspections because of the information gathered during the pre-application consultation process.

##### *Implementation*

BSEE would need to add this additional step to the permit process, but could generally continue to approach the rest of the permit process as it is being implemented today.

#### 1.3.2 Time-Bound Permit Application Review Process

##### *Efficiency*

A time-bound BSEE review process approach could potentially improve efficiency for both the agency and the applicant. BSEE staff could potentially spend less time reviewing each submittal because the review process is time bound, i.e., applicant submittals would not be under review for many weeks, or months, where they would be subject to an inefficient review cycle of “up time” and “down time” as BSEE staff conduct the review. However, under a system similar to FAA’s commercial space launch site licensing system, if BSEE did not meet the established time frame for issuing a decision concerning the applicant submittal, BSEE would need to notify an entity overseeing the agency’s activities. This could reduce efficiency if BSEE routinely misses deadlines and needs to spend time interacting with the entity overseeing the agency’s activities. Application of a time-bound review process could provide the applicant with an increased level of certainty that their submittal will be reviewed and a decision made in a timely manner, which could improve the applicant’s ability to plan projects.

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### ***Effectiveness***

Application of a time-bound review process by BSEE could potentially improve effectiveness on the part of the agency, depending upon the design and the efficiency of the time-bound review process put in place by BSEE. Time-bound review could potentially result in improvement in the quality of reviews conducted by BSEE if the review process is designed and staffed such that the reviews can be routinely conducted by BSEE in a focused manner within the allotted time frame. However, if BSEE is required to make decisions within a specified time-frame it is possible that the required level of review may be compromised on occasion, reducing effectiveness, where the agency is coming close to the allotted timeframe.

Application of a time-bound review process could improve effectiveness on the part of the applicant. Applicants could have more incentive to ensure that their submittals are administratively complete and technically accurate when first submitted in order to take advantage of the set review time process for agency completeness review and agency decision to issue or deny a permit. Either an administratively incomplete submittal or a technically deficient submittal would derail the set review time and diminish the advantage to the applicant of the time-bound agency review process resulting in a timely agency decision on the submittal. A time-bound review process could potentially result in the applicant having to spend less staff time supporting the review process; applicant staff could potentially be able to work more effectively to improve the level of completeness and technical accuracy of the submittals.

### ***Suitability for Purpose***

Application of time-bound processes could potentially result in improved safety and environmental performance, could be neutral, or could be detrimental to performance. Achieving performance improvement would depend in part on BSEE achieving efficiency and effectiveness in the review process.

### ***Implementation***

Implementing time-bound BSEE review processes would require a fundamental change in how BSEE manages staff time and work flow within the agency. BSEE would need to establish standardized work processes that will allow BSEE to anticipate and accommodate time-bound reviews of submittals within the established time frames. Development of standardized work processes could involve drafting of guidance documents, including checklists or standardized forms, for BSEE staff to follow during the review process. The successful implementation of time-bound BSEE review processes will depend upon the efficiency of the established review process.