

**International Dual Licensing  
COMSTAC Findings and Recommendations  
November 2020**

COMSTAC received the following task and background from FAA AST regarding international dual licensing. COMSTAC's findings and recommendations follow.

***Task** – Propose process improvements, policy decisions, and/or regulatory language for the FAA/AST to reduce potential duplication and burden on industry from dual-licensing with other countries during US launches and reentries outside the United States while maintaining safety. The deliverable will include ways to reduce AST costs (such as travel and staff time) of on-site inspection. The deliverable should be in the form of a narrative report.*

***Background** – Other countries that host US vehicles have (or will have) their own laws and regulations to comply with as they develop and phase-in domestic regulations and technical oversight capabilities. This creates the potential for duplication in dual-licensing with the FAA that may result in an additional burden on industry as well as potential conflicting requirements. At the same time, AST funding for travel outside the United States for inspections may be limited for launches and reentries and evaluated on a case-by-case basis.*

*The 2014 National Space Transportation Policy directs the Secretary of Transportation and other appropriate agencies to: “Advocate internationally for the adoption of United States Government safety regulations, standards, and licensing measures to enhance global interoperability and safety of international commercial space transportation activities.” The FAA currently does not regulate certain aspects of ground safety for launches outside the United States because a license “begins at ignition.”*

*There are inherent business risks in choosing to launch and/or reenter outside the United States because of dual-authorities. This task will enable FAA to evaluate issues in dual-licensing as US companies choose to launch and/or reenter outside the United States.*

**COMSTAC Methodology**

The task was assigned to the COMSTAC Regulatory Working Group for completion. Working group members conducted a literature review of the topic, including FAA AST white papers, existing FAA AST international memoranda of understanding, and trade and academic papers. Working group members interviewed FAA AST leadership, international, and licensing staff members, as well as launch industry representatives and former government officials. Initial finding and recommendations were shared with the full Regulatory Working Group for feedback and then presented at the September 2020 COMSTAC public meeting. No public comments were received.

## Findings and Recommendations

COMSTAC's evaluation of the dual licensing environment resulted in three categories of findings – Endorse, recommend, and further study. *Endorse* indicates a beneficial process or practice FAA AST is already conducting in whole or in part. *Recommend* indicates a beneficial process or practice FAA AST should adopt. *Further study* indicates a potentially beneficial process or practice FAA AST should consider, but one that will require additional assessment by FAA AST or an outside entity to determine feasibility and ultimate value.

### *Endorse*

COMSTAC endorses the following processes or practices as beneficial to the dual licensing process.

1. **Endorse FAA/AST's risk-based assessments of required on-site inspections at non-US launch sites** – AST has implemented a risk-based assessment process to determine the required onsite inspections for a particular launch. This process is used for all launches, not just dual licensed launches. This can result in less burdensome process requirement for an individual dual licensed launch. For example, for dual licensed New Zealand launches, this process has determined AST on-site inspectors are not required at all launches, with inspections and observations taking place virtually at Rocket Lab facilities in Los Angeles and potentially Wallops in the future. AST may still determine on-site inspections are required at some cadence of launches (every X launches) or as circumstances change. COMSTAC endorses this practice.
2. **Endorse including industry in government to government meeting where practicable.** FAA AST holds government to government meetings with its non-U.S. counterparts as it determines the specific framework it will employ in a dual licensing situation. In some cases, FAA AST has encouraged the impacted U.S. operator to participate in these discussions. This provides for a more direct discussion among the relevant actors and can more quickly answer questions or resolve issues in the dual licensing situation. COMSTAC endorses this practice.
3. **Endorse FAA/AST operating in a leader/follower model with other USG entities** – In some cases, for example, launches from particular areas of the ocean, a U.S. operator may need to satisfy U.S. government regulations in addition to the FAA AST launch regulations and a non-US entity's launch regulations. In those case, FAA AST has acted as the "leader" to support the US operator in meeting the various U.S. government requirements and acting as a liaison to those other U.S. government regulators. COMSTAC endorses this practice.

### *Recommend*

COMSTAC recommends FAA AST adopt the following processes or practices to benefit the dual licensing process.

4. **Recommend earlier in-depth gov to gov activity by FAA/AST and Department of State ("pre pre-application")** – FAA AST maintains regular relationships and holds several conferences and dialogues with non-US counterparts. AST has also entered into MOU's with non-US counterparts, including the United Kingdom. However, specific government to government negotiations for the rules that will govern a specific dual licensed launch are

typically not started until a U.S. operator submits a pre-application. In the New Zealand case, although overall considered a positive dual licensing example, the timeline for required government to government action took much longer than the statutory application process. This includes both trade agreements as well as the assessment of the non-U.S. regulatory framework by AST to determine the specific areas that will require dual licensing. (For example, an assessment of whether the existing non-U.S. government's labor framework will satisfy relevant AST's requirements.). COMSTAC recommends AST develop a threshold under which it determines a U.S. operator is "likely enough" to utilize a non-US launch site, thereby triggering this detailed assessment. If satisfied, AST will then notify State and other USG interagency actors to begin government to government work. AST can develop a series of steps with the U.S. operator so AST's efforts can be stopped if the operator's plans change. Based on discussions with industry representatives, the UK may be in this position now and could serve as a pilot.

5. **Recommend partial / mutual recognition agreements** – Starting as soon as the "likely enough" threshold recommended above is met, AST should work to establish partial or mutual recognition agreements with non-US launch countries outline the specific aspects of the non-US regulatory framework AST will consider adequate for meeting AST licensing requirements. This will provide potential U.S. operators with an assessment of the potential dual licensing burden and a baseline to work from in specific licensing. Telecom agreements are a potential model for this type of agreement.
6. **Recommend MOU process** – In dual licensing cases where the non-US government does not have comprehensive regulations in place, COMSTAC recommends FAA AST enter into an MOU that allows the FAA AST process to govern initial launch activities until the non-U.S. entity establishes its framework. While AST cannot control whether the non-U.S. entity accepts this scenario, the recommendation is for AST to make this effort. This includes FAA AST providing technical assistance to the non-U.S. entity to become comfortable with the FAA AST framework and encouraging State Department involvement to achieve this type of agreement.
7. **Recommend regulatory templates** – Recommend FAA AST develop detailed templates of its regulatory structures to enhance technical assistance to non-U.S. government regulators that do not have an existing regulatory framework. These templates would allow the non-U.S. government to develop a regulatory framework that will limit dual licensing scenarios, as the new regulations will be based on AST's framework and be acceptable to AST. These templates could be used in conjunction with the MOU process. For example, the non-US entity could begin operations under the MOU, then transition to its own, AST-like framework as its regulations are established.
8. **Recommend cross-waiver education support** – Recommend FAA AST help educate non-U.S. governments on FAA AST required cross waivers, which are often in conflict with non-U.S. entities' typical agreements. AST (and with State Department support) could help relieve a burden that falls on launch operators for negotiating these terms with the government entities.
9. **Recommend MOU/Agreements Allowed** – For non-U.S. government's without regulatory frameworks or in the process of developing their regulatory frameworks, recommend FAA AST advocate to the non-U.S. government that their ultimate framework will allow the use of the MOUs and mutual/partial agreements being recommended here.

## *Further Study*

Further study is needed to determine whether the following will benefit the dual licensing process.

10. **Further study FAA Aviation lessons learned** – FAA/AST should seek lessons learned from FAA / DOT from its existing international activities and coordination on the aviation side.
11. **Further study multi-site environmental assessments** – FAA AST should further study the ability to grant Environmental Assessments that encompass multiple sites at a time, including both commercial spaceports, international airports, and military bases.
12. **Further study a statutory change to the definition of “US Citizen”** – A change in the definition could remove dual licensing all together and limit U.S. jurisdiction over U.S. operator activity in non-U.S. jurisdictions. This requires further study as it could create greater uncertainty than the status quo, especially with underdeveloped non-U.S. regimes and potentially impact positive U.S. influence on space norms of behavior. This change could also impact the U.S.’s ability to meet its space treaty obligations without an additional regulatory framework.
13. **Further study statutory or Executive Order change on the applicability of U.S. environmental regulations in non-U.S. jurisdictions** – Applicability of U.S. environmental laws internationally is arguably based on Executive Order versus statute, and if so, could be changed via Executive Order. A statutory change would be to the broader U.S. government NEPA framework and a much larger issue than launch. This would require further study given the broader policy and U.S. equities beyond FAA AST.