



16601.11
15 JAN 2021

COMMANDANT INSTRUCTION 16601.11

Subj: SPACE LAUNCH AND REENTRY ACTIVITIES AFFECTING THE MARINE TRANSPORTATION SYSTEM

- Ref: (a) Marine Planning to Operate and Maintain the Marine Transportation System (MTS) and Implement National Policy, COMDTINST 16003.2 (series)
 (b) Multiple Use Waterway Management Planning Guide, COMDTINST 5223.1 (series)
 (c) Aeronautics and Space, Title 14 CFR
 (d) Memoranda of Understanding/Agreement, COMDTINST 5216.18 (series)
 (e) Risk Management (RM), COMDTINST 3500.3 (series)
 (f) National Search and Rescue (SAR) Plan of the United States
 (g) United States National Search and Rescue Supplement to the International Aeronautical and Maritime Search and Rescue Manual
 (h) U.S. Coast Guard Addendum to the United States National Search and Rescue Supplement (NSS) to the International Aeronautical and Maritime Search and Rescue Manual (IAMSAR), COMDTINST M16130.2 (series)

1. PURPOSE. This Instruction prescribes policy and reporting requirements for all units assessing and mitigating the risks related to space launch and reentry activities occurring in or adjacent to the marine environment of the United States.
2. ACTION. All Coast Guard unit commanders, commanding officers, officers-in-charge, area and district operational commanders, deputy/assistant commandants, and chiefs of headquarters staff elements must comply with the provisions of this Instruction. Internet release is authorized.
3. DIRECTIVES AFFECTED. None.

DISTRIBUTION – SDL No. 170

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NON-STANDARD DISTRIBUTION:

4. BACKGROUND.

- a. The Coast Guard has statutory responsibility to safeguard the marine transportation system (MTS) and marine environment pursuant to 46 United States Code (USC) Chapter 700. Space launch and reentry activities introduce a unique risk profile into the MTS and marine environment. The recent increase in current and projected space launch and reentry activities represent a new challenge for operational commanders throughout the Coast Guard.
- b. Space launch and reentry activities may require the Coast Guard to exercise its statutory authority for a variety of reasons. When space launch and reentry activities occur in, or adjacent to, the marine environment, government and commercial space operators become maritime stakeholders. The same marine environment safeguards and procedures the Coast Guard applies to the activities of all other maritime stakeholders also apply to space launch and reentry activities.
- c. Operational commanders should continue to honor established agreements with inter-agency partners such as Department of Defense (DoD) or National Aeronautics and Space Administration (NASA) for government sponsored activities. As outlined in these established agreements, operational commanders will issue a Notice to Mariners when supporting space launch or reentry activity. Examples of these agreements can be found in the Commandant (CG-WWM-1) Policy Library including:
 - (1) Reimbursable Interagency Agreement between Sector Virginia and NASA Goddard Space Flight Center Wallops (2019)
 - (2) Memorandum of Understanding between USCG District Seventeen and Alaska Aerospace Corporation (2017)
 - (3) Memorandum of Agreement between USCG District Seven and DoD Manager's Space Transportation System Contingency Support Office for Space Shuttle Launch and Rescue Support (2001)
- d. Space launch and reentry activities conducted by commercial entities are regulated by the Federal Aviation Administration (FAA), which requires commercial launch operators to prepare a safety risk assessment in accordance with Reference (c). The Coast Guard has entered into agreements with NASA, the U.S. Air Force (USAF), and the Federal Aviation Administration (FAA) to coordinate federal response related to space activities in the marine environment. FAA regulations regarding commercial space launch and reentry activities require the commercial entity to coordinate with the local Coast Guard District in order to receive an FAA license for launch and reentry activities. These FAA regulations do not bind the Coast Guard to provide assets during commercial launch and reentry activities. The Coast Guard has the discretion to determine how to employ its resources and manage risks related to space launch and reentry activities.

- e. Operational commanders should assess the risks associated with commercial space launch and reentry activities consistent with assessing risk related to all other MTS activities. The appropriate commander shall conduct a five-step navigation safety risk assessment (NSRA) for space launch and reentry activities. If the NSRA is insufficient to determine associated risk, the commercial entity is responsible for providing the Coast Guard with additional data related to risk for the proposed space launch or reentry activity.
 - f. The operational commander has the discretion to determine if a Local Notice to Mariners is sufficient, a Marine Safety Informational Bulletin (MSIB) should be released to the public, or if Coast Guard assets should deploy in conjunction with the space activity. Requests for policy support or interpretation should be forwarded to the appropriate Directorate at Coast Guard Headquarters.
 - g. As space activities become more common and a routine part of port operations, the risk profile should become more routine. The NSRA's will likely culminate in the operational commander issuing a Notice to Mariners or MSIB notifying the public of the proposed location of space launch or reentry activities as the Coast Guard becomes more familiar with the risk profile associated with space launch and recovery activities.
 - h. References (a) and (b) address the Coast Guard's maritime governance scope and provide guidance to balance the economic needs of the Nation, the diverse desires of waterways users, and the need to mitigate risks shared by the stakeholders and participants in the Nation's marine environment. Operational commanders should evaluate space launch and reentry activities using the same risk assessment process applied to all other MTS activities.
 - i. The national guidance outlined in this Instruction is required for consistent risk evaluation associated with space launch and reentry activities. Commercial space activities may occur in multiple geographic locations. Area Commanders shall ensure alignment of local policies with national guidelines.
 - j. The Coast Guard will continue to evaluate standards and procedures for conducting risk assessments while balancing the economic, environmental, and safety concerns associated with all MTS stakeholders. Operational Commanders shall use the NSRA tool in order to determine baseline risk to the MTS. As operational units become more adept at evaluating risk and the use of the NSRA tool, units are encouraged to document best practices and share them with Commandant (CG-5PW) in order to shape future risk evaluation methodologies.
5. DISCLAIMER. This guidance is not a substitute for applicable legal requirements, nor is it itself a rule. It is intended to provide operational guidance for Coast Guard personnel and is not intended to nor does it impose legally-binding requirements on any party outside the Coast Guard.

6. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS.
 - a. The Office of Environmental Management, Commandant (CG-47) reviewed the development of this Instruction, and the general policies contained within it, and determined that this policy falls under the Department of Homeland Security (DHS) categorical exclusion A3. No further environmental analysis is necessary in accordance with the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1 (series).
 - b. This Instruction will not result in any substantial change to existing environmental conditions or violation of any applicable federal, state, or local laws relating to the protection of the environment. It is the responsibility of the action proponent to evaluate all future specific actions resulting from this policy for compliance with the National Environmental Policy Act (NEPA), other applicable environmental mandates, and the U.S. Coast Guard Environmental Planning Policy, COMDTINST 5090.1 (series).
7. DISTRIBUTION. No paper distribution will be made of this Instruction. An electronic version will be located on the following Commandant (CG-612) web sites. Internet: <http://www.dcms.uscg.mil/directives/>, and CGPortal: <https://cgportal2.uscg.mil/library/directives/SitePages/Home.aspx>.
8. PROCEDURE. The Coast Guard has adapted existing procedures related to the assessment and mitigation of risk and incident response in order to assess and address the effects of space transportation activities in or adjacent to the marine environment. Disruptions to the MTS, impacts to public safety, and the potential for disaster response operations fall within the scope of operations already familiar to Coast Guard units. This Instruction places space launch and reentry activities in this context and enables units to identify relevant factors necessary for risk-based decision-making and mission execution.
9. RECORDS MANAGEMENT CONSIDERATIONS. This Instruction has been thoroughly reviewed during the directives clearance process, and it has been determined there are no further records scheduling requirements, in accordance with Federal Records Act, 44 U.S.C. 3101 et seq., 36 CFR Chapter XII, Subchapter B, National Archives and Records Administration requirements, and Records & Information Management Program Roles and Responsibilities, COMDTINST M5212.12 (series). This policy does not have any significant or substantial change to existing records management requirements.
10. DEFINITIONS. The following terms appear throughout this Instruction and any associated tactics, techniques, and procedures.
 - a. Agreement—this means a Memorandum of Agreement (MOA) in accordance with Reference (d). Letters of Agreement (LOA) are considered equivalent to MOAs.
 - b. Commercial—refers to any non-government parties other than those who are responsible for amateur rocket launches.

- c. Exclusive use site—derived from Reference (c), section 417.9(c), this means a commercial site where the owner and operator of the site is the same as the owner and operator of any space vehicles launching or reentering there. *Federal launch ranges* are not *exclusive use sites*.
- d. Government—refers to U.S. federal, state, or local government agencies or tribal organizations recognized by the U.S.
- e. Launch—derived from Reference (c), section 401.5, this means any activity that prepares a space vehicle for operations above the surface of the earth, or the actual operation of the vehicle to achieve this. This includes launches from offshore sites, including the preparation of such sites for the launch activity. The waterborne delivery of a space vehicle to an offshore site is part of the launch activity, as is the return to port of any waterborne, mobile launch platform following the launch.
- f. Marine Environment—as defined in 46 USC § 70031, this encompasses the navigable waters of the United States, the waters over which the United States asserts exclusive fishery management authority, and the waters of the Outer Continental Shelf of the United States.
- g. Marine Safety Information—this encompasses the methods by which the Coast Guard informs the public of activities or incidents in the marine environment, including:
 - (1) *Notice to Mariners*, per 33 CFR § 72.01, encompassing *local notices to mariners* (LNM), *broadcast notices to mariners* (BNM), and *notices to mariners* (NTM or NOTMAR) issued by the National Geospatial-Intelligence Agency.
 - (2) *Marine assistance request broadcasts* (MARB) and *urgent marine information broadcasts* (UMIB), per Reference (h), Sections 2.6 and 4.1, to inform the public of maritime requests for assistance and potential or actual maritime distress situations.
 - (3) Additional methods of communication: *marine safety information bulletins* (MSIB) and other electronic, verbal, or physical means of informing the public, such as Automated Identification System (AIS) broadcasts, social media notices, news reports, flyers, and direct communication with mariners.
- h. Operator—
 - (1) *Launch or Reentry Operator* is the party responsible for the launch or reentry of a space vehicle.
 - (2) *Site Operator* is the party responsible for a Site.
- i. Reentry—derived from Reference (c), section 401.5, this means any activity that prepares a site to receive a space vehicle after its launch, or the actual return of the vehicle to the surface of the earth after launch. The return to earth of booster rocket stages and equipment associated with launch are not reentries; they are elements of a

launch. Returning the space vehicle from an offshore reentry site to an onshore servicing facility is part of the reentry activity.

- j. Risk assessment—
 - (1) *Operational risk assessments* address the impacts of risk factors to Coast Guard personnel and assets and comply with Reference (e).
 - (2) *Navigation safety risk assessments* (NSRA) address the impacts of risk factors on the marine transportation system.
 - (3) *Environmental risk assessments* address impacts of risk factors to the marine environment to inform the development of Area Contingency Plans sections for space transportation in accordance with the National Contingency Plan (40 CFR, part 300).
- k. Search and Rescue (SAR) Region—in accordance with the National SAR Plan, The Coast Guard is responsible for organizing available SAR facilities in SRRs as defined in the National SAR Supplement. These waters generally include all navigable waters subject to the jurisdiction of the U.S., but also include international waters stretching far in to the Atlantic and Pacific Oceans and the Gulf of Mexico.
- l. Site—derived from Reference (c), section 401.5, this encompasses the FAA Office of Commercial Space Transportation’s (AST) terms *federal launch range*, *launch site* and *reentry site*, and means a location or area on or adjacent to the navigable waters, where space transportation activities occur. Vessels used as a platform for space transportation activities are not sites. The locations at which the vessels conduct launches and reentries are sites.
- m. Space Launch and Reentry activities—this includes the testing, launching, and reentry of space vehicles. This also includes experimental activities on land in preparation for launching and reentry of space vehicles.

11. ROLES AND RESPONSIBILITIES.

- a. The Coast Guard is responsible for safeguarding maritime waterways in order to facilitate commerce and enjoyment of these waters for all users of the MTS. Space launch and reentry activities may overlap with aspects of the marine environment and may present risks to navigation and public safety that occur alongside the other risks present in the marine environment. The Coast Guard has responsibilities for mitigating and responding to navigation risks using the methods defined in policy. After conducting an NSRA, operational commanders shall decide if the activity requires the Coast Guard to issue or enforce one or more of the following:
 - (1) Broadcast Notice to Mariners,
 - (2) Marine Safety Information Bulletin,

- (3) Limited Access Areas (Safety Zones or Security Zones as allowed by Coast Guard authorities),
 - (4) Deployment of patrol assets.
- b. When coordinating with space transportation operators, Coast Guard operational commanders should consider the following:
- (1) *United States Government operators* the Coast Guard should have established policies, procedures, agreements, and communications with United States Government operators. Operators include NASA, USAF, and the United States Space Force (USSF). This cooperation may occur in accordance with agreements specific to federal launch ranges and government sites. These agreements do not exempt the Coast Guard from fulfilling its duties and responsibilities associated with search and rescue, environmental protection, maritime safety and security, and other statutory missions. Upon receiving a request for support from a U.S. Government space operator, it is recommended that the Coast Guard may cooperate with that agency by:
 - (a) Advising on navigation safety risk and public safety risk,
 - (b) Providing patrol assets to improve that agency's operational capability,
 - (c) Supplementing first responder capabilities,
 - (d) Creation of a safety or security zone to keep the public out of an area with National Security implications.
 - (2) *Commercial operators* are applicants for, or holders of, commercial space transportation licenses and permits issued by the FAA. These operators have specific responsibilities assigned to them by Reference (c) and should coordinate all activities with the Coast Guard under the full view of AST. These regulations require the applicants to establish a written agreement with the local Coast Guard District in order to obtain an FAA license. Any assets deployed will not be reimbursable since commercial operators are not interagency partners in accordance with 14 USC § 701.
 - (3) *Amateur rocket launch operators* may be subject to FAA authority when operating from a site also used for U.S. government or commercial space activities and, when operating within the marine environment, may be subject to the same Coast Guard authority as a vessel operator or waterway user. The Coast Guard should evaluate each incident independently and on a case-by-case basis.
- c. Space launch and reentry activities may require the U.S. Coast Guard to exercise its statutory authority to conduct SAR as contained in Title 14, Sections 102, 521 and 701 of the U.S. Code. U.S. Coast Guard SAR duties are further delineated in References (f) and (g). Per Reference (g), "SAR will be conducted for personnel of a spacecraft". Per Reference (h), the DoD may assume SAR Mission Coordinator (SMC) regardless

of location for any incidents involving government sponsored space transportation activities. Specifically, the 45th Operations Group, Detachment 3 will be coordinating on behalf of the DoD. The Coast Guard will have representation embedded in the 45th Operations Group during launch and recovery operations. The DoD will have designated assets specifically staged for SAR support of these missions. If the need arises, the DoD may request additional Coast Guard SAR support in the form of assets or personnel to assume the role of SMC. For all other space transportation activities within the U.S. search and rescue regions, the U.S. Coast Guard shall carry out its role as SAR Coordinator and SMC as prescribed in References (f),(g), and (h).

- d. Assistant Commandant for Prevention Policy (CG-5P).
 - (1) The Director of Marine Transportation Systems (CG-5PW) is responsible for overseeing Vessel Traffic Services (VTS), managing the federal regulations related to vessel navigation, and enforcing the procedures related to Marine Safety Information and any aids to navigation (ATON) associated with space transportation activities. This includes, but is not limited to, procedures to conduct NSRAs. Commandant (CG-5PW) shall review this instruction and coordinate updates to risk assessments and relevant policy activities associated with this Instruction as necessary with input from other Assistant Commandants, Areas, Districts, and field units. Offices within this Directorate should:
 - (a) Collaborate with offices within the Assistant Commandant for Response Policy Directorate (CG-5R) in order to coordinate and develop risk assessment procedures and standards for agreements with NASA, USAF, USSF, and any other U.S. Government agency or entity involved in space launches and reentry activities.
 - (b) Identify elements of space launch and reentry activities that are relevant for marine planning activities such as NSRA and ATON administration, for inclusion in any related procedures.
 - (c) Develop procedures and analytics related to NSRA that enable District and Sector Commanders to gauge the risk to the marine environment posed by space transportation, and to communicate or enter into agreements with operators. This includes the identification of elements that are common among NSRA and agreements and methods to coordinate with commercial and government operators. These elements may be suitable for forming the basis of standardized forms, information systems, and a generalized assessment of the navigation safety risks posed by space transportation activities. All procedures should include data entry requirements for the Marine Safety Information for Safety and Law Enforcement (MISLE) or applicable database.
 - (d) Develop procedures for the use of VTS, Marine Safety Information, and ATON to control and notify vessel traffic as necessary, and within the scope of statutory authorities and obligations, during space transportation activities

in the marine environment. All procedures should include data entry requirements for the Integrated Aids to Navigation Information System (IATONIS) or applicable database.

- (e) Maintain a central, digital library of relevant Coast Guard policy, procedures (including job aids and guides), NSRA, and agreements with U.S. government and commercial space launch and recovery activities. This library should be accessible to operational and unit commanders and appropriate staff at Coast Guard headquarters, Areas, and Districts. While other offices may control these documents as program sponsors, including revision cycles and signature authority, all offices should make these documents readily available to this central library.
 - (f) Coordinate meetings as necessary between the Coast Guard and AST or other relevant stakeholders to facilitate efficient and timely response to industry developments that may affect the Coast Guard's risk assessments and any agreements with operators.
 - (g) Communicate with FAA Service Areas regarding the nature of amateur rocket launch authorization requests received.
- (2) The Director of Inspections and Compliance (CG-5PC) is responsible for procedures to conduct regulatory oversight of vessels and commercial waterfront facilities associated with space transportation activities. Offices within this Directorate should:
- (a) Share information with other Commandant (CG-5P) Directorates, AST and other relevant federal stakeholders in accordance with established processes regarding developments with Coast Guard directives and procedures related to vessel and commercial waterfront facilities associated with space transportation activities.
 - (b) Ensure field units apply current inspection regulations and policies to vessels and waterfront facilities associated with space transportation activities.
 - (c) Develop procedures for the inclusion of space transportation activities affecting the marine environment in Area Maritime Security Plans.
 - (d) Include data entry guidance for MISLE as necessary.
- (3) The Director of Commercial Regulations and Standards (CG-5PS) is responsible for regulations, standards, and policies to enhance maritime safety, security and stewardship associated with space transportation activities. Offices within this Directorate should:
- (a) Share information with the other Commandant (CG-5P) Directorates, AST and other relevant federal stakeholders in accordance with established

processes regarding developments pertaining to international and/or domestic regulations, policies and third party consensus standards related to vessel and commercial waterfront facilities associated with space transportation activities.

- (b) Leverage policies and guidance for novel vessels/systems to ensure an equivalent level of safety and security to current inspection regulations for vessels and waterfront facilities associated with space transportation activities.
- e. Assistant Commandant for Response Policy (CG-5R).
- (1) The Director of Incident Management and Preparedness Policy (CG-5RI) is responsible for procedures to respond to incidents related to amateur, commercial, and government space transportation activities in the marine environment. Offices within this Directorate should:
 - (a) Provide updates to relevant Assistant Commandants, Areas, Districts, field units, AST, and other federal stakeholders of developments in Coast Guard directives and procedures related to space launch and reentry incidents in the marine environment as practical.
 - (b) Collaborate with Offices within Commandant (CG-5PW) in order to coordinate risk assessment procedures and standards for agreements with NASA, USAF, USSF, and any U.S. Government agencies and commercial operators involved in space launch and reentry activities.
 - (c) Collaborate with NASA, USAF, and USSF to understand scope and variety of missions and delineate Federal On-Scene Coordinator authority for each.
 - (d) Assess federal regulations to address response planning and actions in the event of an incident that involves the release of pollutants into the marine environment as necessary.
 - (e) Lead and support national and international SAR forums in assessing and mitigating the risks to the global SAR system as they relate to space launch and reentry activities. These may include collaboration with members of the National SAR Committee, State SAR Coordinators, or other groups as needed.
 - (f) Develop procedures that enable District and Sector Commanders to include Area Contingency Plan sections that manage space launch and reentry incidents affecting the marine environment. This includes marine pollution, public safety, SAR, property destruction, and other elements that may be relevant to space transportation activities in the marine environment.
 - (g) Coordinate with U.S. Government and commercial launch and reentry teams designing plans for the rescue of spaceflight crews.

- (h) Incorporate language into the Strategic Planning Direction requiring a Coast Guard representative to work directly with federal and commercial space flight launch and recovery teams pre-coordinating the rescue of flight crews. At a minimum, this representative will be the subject matter expert to the civil SAR system, support real-time coordination with Coast Guard or international Rescue Coordination Centers, and support Coast Guard crews with any quick reference cards capturing HAZMAT, communication procedures, etc. as needed.
- (2) The Director of Law Enforcement, Maritime Security, and Defense Operations (CG-5RE) is responsible for procedures that mitigate the risks associated with amateur, commercial, and government space transportation activities in the marine environment. This may include collaboration with other Assistant Commandants, Areas, Districts, and field units. Offices within this Directorate should:
 - (a) Coordinate with NASA, USAF, USSF, and any government agencies involved in mitigating the risks to national security related to space launch and reentry activities in the marine environment.
 - (b) Identify and catalog waterfront locations related to space launch and reentry activities that may qualify as maritime critical infrastructure or key resources.
 - (c) Develop procedures to deploy Coast Guard operational platforms for the enforcement of limited access areas and other measures when the decision is made to employ this option to mitigate the risks associated with space transportation activities. This includes the development and maintenance of an operational risk assessment method that balances deployment of assets to mitigate the risks identified in the NSRA with the operations readiness costs associated with deployment of resources to operations other than SAR, maritime security response operations, and other maritime law enforcement operations. Such guidance must include data entry requirements for MISLE and the Asset logistics Management Information System (ALMIS) system.
- f. The Assistant Command for Capability (CG-7) is responsible for identifying and providing capabilities, competencies, capacity and developing standards for the staffing, training, equipping, sustaining, maintaining, and employing Coast Guard forces to meet mission requirements as these efforts relate to space launch and reentry activities in the marine environment. This may include collaboration with other Assistant Commandants, Areas, Districts, and field units.
- g. The Assistant Commandant for Resources (CG-8) is responsible for ensuring that proper Interagency Agreements are in place with trading partners IAW Financial Resource Management Manual – Procedures, COMDTINST M7100.4 (series) and the Department of Treasury Interagency Agreement Guide. These agreements will be managed by the Reimbursable Management Division under Commandant (CG-8).

This may include collaboration with other Assistant Commandants, Areas, Districts, and field units.

- h. Area Commanders are responsible for ensuring that Areas and Districts coordinate risk assessments, agreements, and operational deployments associated with space launch and reentry activities in the marine environment amongst themselves when appropriate. Area Commanders may delegate signature authority to requisite District Commanders to sign MOAs that span multiple Districts. Area staff should:
 - (1) Inform the Headquarters Directorates identified above of developments in U.S. Government, commercial, and amateur space launch and reentry activities within their areas of responsibility as necessary.
 - (2) Engage relevant stakeholders when the space launch and reentry activities and/or planning involve multiple Districts or span both Areas.
 - (3) Coordinate the deployment of Area and District operational platforms if necessary.
- i. District Commanders are responsible for conducting risk assessments and determining the appropriate mitigation tools and strategy. District staff should:
 - (1) Inform Area Commanders of developments in space launch and reentry activities within their Districts as necessary.
 - (2) Serve as primary points of contact to relevant space launch and reentry activity stakeholders for specific activities within their District.
 - (3) Conduct or oversee the conduct of any NSRA associated with space launch and reentry activities in the marine environment.
 - (4) Identify necessary communication with U.S. Government or commercial operators to mitigate any identified navigation safety risk, including timely development of marine safety information or the need for agreements with operators.
 - (5) Engage with space launch and reentry activities stakeholders, when the activities fall solely within their District. This includes establishing agreements with U.S. Government or commercial operators.
 - (6) Pass relevant information via the appropriate Area component. Issues related to navigation shall be forwarded to Commandant (CG-5PW). Response issues shall be forwarded to Commandant (CG-5R). Staffing and resource issues shall be sent to Commandant (CG-7); copying the appropriate program managers.
 - (7) Fulfill operational commitments specified in agreements with U.S. Government agencies or commercial operators. This includes: establishment of limited access areas and other access control measures as defined in policy; supporting

operations control centers; patrolling locations in order to reduce emergency response times or support the requesting agency's area access control measures; and conducting such exercises as necessary to ensure that operational commitments reflect operational needs.

- (8) Verify documentation in MISLE, ALMIS, and IATONIS of Coast Guard activities associated with space launch and reentry activities in the marine environment.
 - (9) Develop appropriate sections in the District Contingency Plans to reflect space flight activity.
 - (10) Develop appropriate sections in their District SAR plans with relevant information for their Search and Rescue Region for space flight operations.
 - (11) District Waterways staff are encouraged to consult the Navigation Center's Waterways Risk Assessment and Support division for assistance in reviewing any formal NSRA's, contact info: TIS-DG-NAVCEN-Waterways@uscg.mil.
- j. Captains of the Port (COTP) are responsible for mitigating the risks to waterways users posed by space launch and reentry activities in the marine environment. COTPs should:
- (1) Review all applicable NSRA Policy.
 - (2) Participate in outreach meetings with stakeholders, including space launch and reentry activities stakeholders and waterways users, to gauge changes in operational requirements or plans for relevant stakeholders.
 - (3) At the discretion of the District Commander, assist in conducting risk assessments and identifying what level of communication with operators is necessary per Paragraph 12.i(4).
 - (4) At the discretion of the District Commander, fulfill operational commitments specified in agreements with government or commercial operators, as noted in Paragraph 12.i(7).
 - (5) Coordinate the establishment and enforcement of limited access areas or other access control measures and special local regulations as necessary to promote port safety and security in relation to space launch and reentry activity in the marine environment.
 - (6) Document in MISLE, ALMIS, and IATONIS all unit activities associated with space launch and reentry activities.
- k. Commanding Officers and Officers-in-Charge of deployable resources should document unit activities associated with space transportation in MISLE and ALMIS.

12. MEASUREMENTS. To assess the overall risk of space launch and reentry activities to the marine environment, Commandants (CG-5P), (CG-5R), and (CG-7) should analyze data entered in Coast Guard data systems. Headquarters should evaluate these activities in terms of what was assessed (nature and location of the space transportation activity), degree to which these activities affected the MTS and marine environment, and the operational decisions related to implementation of limited access areas and other risk mitigation efforts. The following data sources provide the inputs for data analysis.
- a. MISLE—
 - (1) Number of risk assessments conducted and the quantity of time, indicated by MISLE activity status dates, dedicated to conducting them.
 - (2) Number of agreements between the Coast Guard and operators.
 - (3) The number of broadcast notice to mariner announcements, limited access areas, regulated navigation areas, and other methods of controlling navigation, including VTS measures.
 - (4) The number of violations of any Coast Guard rule or regulation established for or enforced during space operations.
 - (5) The number and extent of services provided for launch or recovery activities requiring Coast Guard SAR services (whether Coast Guard assumed SMC for a commercial launch or supported DoD as the designated SMC for United States Government launches and reentries).
 - b. ALMIS—Total cutter and boat hours dedicated to enforcement of limited access areas and other deployable resource operations related to mitigating the risks associated with space transportation.
 - c. Measurements derived from stakeholder outreach—
 - (1) From AST, NASA, USAF, and USSF, number of sites nationwide, using these categories:
 - (a) Launch site, reentry site (and indication if the site functions as both).
 - (b) Federal range, commercial site, and exclusive use site.
 - (2) From AST, number and type of commercial space operators nationwide; and
 - (3) Trend analysis of the above measures to determine sector growth.
13. FORMS/REPORTS.
- a. Annual Districts Report. Districts engaging in risk assessments and mitigations of space launch and reentry activities should submit a "Space Launch and Reentry

activities Risk Report" memorandum to Commandant (CG-5PW) each fiscal year. This report shall be submitted through Area Commanders, no later than 1 November each year. Given the rapidly changing nature of space launch and reentry activities, the format and contents of this report may change frequently. Commandant (CG-5PW) should provide Districts the format of this report each year no later than 1 September.

- b. Sites Quarterly Report. At the start of each fiscal quarter, Commandant (CG-5PW) should distribute a report to relevant Coast Guard offices in order to share information regarding space launch and reentry activities nationwide. Since this report may contain sensitive, but unclassified information or commercial proprietary data, this report may be made available on the Coast Guard intranet at the For Official Use Only classification level, but is not suitable for distribution outside of the Coast Guard or Department of Homeland Security.
 - c. MISLE, ALMIS, and IATONIS Reports. The headquarters staff identified above should ensure that reports specific to space transportation activities are available in the Coast Guard Business Intelligence (CGBI) system.
14. REQUEST FOR CHANGES. Units and individuals may recommend changes via the chain of command to: cgwwm@uscg.mil.

/R. V. TIMME/
Rear Admiral, U.S. Coast Guard
Assistant Commandant for Prevention Policy

Encl: Applicable Excerpts From Title 14 CFR

APPLICABLE EXCERPTS FROM TITLE 14 CFR

The following excerpts are from Sections of Title 14, U.S. Code of Federal Regulations to this Instruction, and therefore the numbering and/or lettering sequences varies below.

Amateur Rockets

1.1. (*excerpted*) “Amateur rocket” means an unmanned rocket that:

- (1) Is propelled by a motor or motors having a combined total impulse of 889,600 Newton-seconds (200,000 pound-seconds) or less; and
- (2) Cannot reach an altitude greater than 150 kilometers (93.2 statute miles) above the earth's surface.

101.21(b). A person operating an unmanned rocket other than an amateur rocket as defined in § 1.1 of this chapter must comply with 14 CFR Chapter III.

420.3. Applicability. This part [“License to operate a launch site”] applies to any person seeking a license to operate a launch site or to a person licensed under this part. A person operating a site that only supports amateur rocket activities as defined in 14 CFR 1.1, does not need a license under this part to operate the site.

Commercial Space Launch and Reentry Activities

413.3. Who must obtain a license or permit.

- (a) A person must obtain a license in accordance with this section, unless eligible for an experimental permit under paragraph (f) of this section.
- (b) A person must obtain a license to—
 - (1) Launch a launch vehicle from the United States;
 - (2) Operate a launch site within the United States;
 - (3) Reenter a reentry vehicle in the United States; or
 - (4) Operate a reentry site within the United States.
- (c) A person who is a U.S. citizen or an entity organized under the laws of the United States or any State must obtain a license to—
 - (1) Launch a launch vehicle outside the United States;
 - (2) Operate a launch site outside the United States;
 - (3) Reenter a reentry vehicle outside the United States; or
 - (4) Operate a reentry site outside the United States.
- (d) A foreign entity in which a United States citizen has a controlling interest must obtain a license to launch a launch vehicle from or to operate a launch site in—
 - (1) Any place that is outside the territory or territorial waters of any nation, unless there is an agreement in force between the United States and a foreign nation providing that such foreign nation has jurisdiction over the launch or the operation of the launch site; or
 - (2) The territory of any foreign nation, including its territorial waters, if there is an agreement in force between the United States and that foreign nation providing that the United States has jurisdiction over the launch or the operation of the launch site.

(e) A foreign entity in which a U.S. citizen has a controlling interest must obtain a license to reenter a reentry vehicle or to operate a reentry site in—

- (1) Any place that is outside the territory or territorial waters of any nation, unless there is an agreement in force between the United States and a foreign nation providing that such foreign nation has jurisdiction over the reentry or the operation of the reentry site; or
- (2) The territory of any foreign nation if there is an agreement in force between the United States and that foreign nation providing that the United States has jurisdiction over the reentry or the operation of the reentry site.

(f) A person, individual, or foreign entity otherwise requiring a license under this section may instead obtain an experimental permit to launch or reenter a reusable suborbital rocket under part 437 of this chapter.

417.111(i)(5). A launch operator must describe its procedures for and accomplish the following for each launch—

- (i) Inform local authorities of each designated hazard areas near the launch site associated with a launch vehicle's planned trajectory and any planned impacts of launch vehicle components and debris as defined by the flight safety analysis required by subpart C of this part;
- (ii) Provide any hazard area information prepared as required by § 417.225 or § 417.235 to the local United States Coast Guard or equivalent local authority for issuance of the notices to mariners;
- (iii) Provide hazard area information prepared as required by § 417.223 or § 417.233 for each aircraft hazard area within a flight corridor to the FAA Air Traffic Control (ATC) office or equivalent local authority having jurisdiction over the airspace through which the launch will take place for the issuance of notices to airmen;
- (iv) Communicate with the local Coast Guard and the FAA ATC office or equivalent local authorities, either directly or through any launch site operator, to ensure that notices to airmen and mariners are issued and in effect at the time of flight; and
- (v) Coordinate with any other local agency that supports the launch, such as local law enforcement agencies, emergency response agencies, fire departments, National Park Service, and Mineral Management Service.

420.31. Agreements.

- (a) Except as provided by paragraph (c) of this section, an applicant [for a license to operate a launch site] shall complete an agreement with the local U.S. Coast Guard district to establish procedures for the issuance of a Notice to Mariners prior to a launch and other such measures as the Coast Guard deems necessary to protect public health and safety.
- (b) An applicant that plans to operate a launch site located on a federal launch range does not have to comply with section 420.31 if the applicant is using existing federal launch range agreements with the U.S. Coast Guard and the FAA ATC office having jurisdiction over the airspace through which launches will take place.

420.57. Notifications.

(b) A licensee [of a launch site] shall maintain its agreement, made in accordance with § 420.31(a), with the local U.S. Coast Guard district.

431.75(b). Agreements for notices to mariners and airmen. Unless otherwise addressed in agreements between a licensed launch site operator and the U.S. Coast Guard and the FAA, respectively, a licensee authorized to conduct an RLV [reusable launch vehicle] mission using a launch site or reentry site other than a Federal launch range shall complete the following:

(1) An agreement between the licensee and the local U.S. Coast Guard district to establish procedures for the issuance of a Notice to Mariners prior to a launch or reentry and other measures as the Coast Guard deems necessary to protect public health and safety.

437.63(b). Unless otherwise addressed in agreements with a licensed launch site operator or a Federal launch range, a permittee [for experimental space flight operations] must have an agreement in writing with the following:

(1) For overflight of navigable water, a written agreement between the applicant and the local United States Coast Guard district to establish procedures for issuing a Notice to Mariners before a permitted flight.