



If You Do the Space Crime, You May Do the Space Time

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In recent years, a number of high-profile commercial space flights—some of which included celebrity passengers—garnered widespread media attention. Moving forward, one company aims to provide hundreds of passenger space flights per year. Another venture promises a "civilian lunar orbital mission" in 2023. One CEO has suggested the possibility of a "crewed mission to Mars in 2029." Regardless of the outcome of any of these specific plans, space tourism companies are pursuing travel that is more frequent, ambitious, and perhaps longer in duration. In short, more humans may be spending more time in space, increasing the potential for crime to occur during a mission or voyage. The issue is not entirely speculative—a range of violent behavior and sexual misconduct has reportedly occurred during simulated space missions. Should a criminal act occur during an actual trip to space, is there federal jurisdiction to prosecute it?

In light of Congress's continuing work on various matters pertaining to space, including commercial space flight, this sidebar explores the situations in which federal jurisdiction over crimes committed in space might exist. The sidebar focuses on crimes committed by private individuals in space and concludes with a brief discussion of congressional considerations. This sidebar does not examine the various additional laws that may be uniquely relevant to military or official personnel in space and does not cover other regulatory frameworks that may be relevant to space commerce. Information on some of these topics may be found in CRS In Focus IF11940, *Commercial Human Spaceflight*, by Daniel Morgan; and CRS Report R45416, *Commercial Space: Federal Regulation, Oversight, and Utilization*, by Daniel Morgan.

Special Maritime and Territorial Jurisdiction

One way the federal government may have jurisdiction over crimes committed in space is if the conduct occurs in the special maritime and territorial jurisdiction of the United States (SMTJ) and violates the substantive elements of a federal statute *applicable* in SMTJ. As one federal appellate court has explained, SMTJ generally includes "areas where American citizens and property need protection, yet no other government effectively safeguards those interests." One quintessential example is the "high seas," which are included in the definition of SMTJ in 18 U.S.C. § 7, along with certain international waterways, federal lands, islands containing bird guano, and domestic aircrafts in flight.

Congressional Research Service

https://crsreports.congress.gov LSB10869 Congress has amended § 7 to extend SMTJ to two situations that have particular relevance to crimes committed in space. First, in 1981, Congress added a new subsection—§ 7(6)—specifying that SMTJ includes vehicles "used or designed for flight or navigation in space." According to a 1981 report by the Senate Committee on Commerce, Science, and Transportation, before the enactment of § 7(6) there was a lack of "clear U.S. jurisdiction over criminal acts committed on a space vehicle, such as the Space Shuttle, while in flight." The report explained that, by "establish[ing] such jurisdiction over U.S. registered vehicles while in outer space as well as during the launch and reentry/landing phases," § 7(6) aligned domestic law with an international treaty (the Outer Space Treaty), specifying that a country "retains jurisdiction and control over objects on its registry that are launched into outer space." The provision applies only to vehicles listed on a registry maintained by the State Department pursuant to the Outer Space Treaty and a related convention. Registered vehicles have included "[r]eusable space transportation system[s]" and a variety of spacecraft. Further, § 7(6) applies only to vehicles "in flight." Under § 7(6), in flight means "from the moment when all external doors are closed on Earth following embarkation until the moment when one such door is opened on Earth for disembarkation or in the case of a forced landing, until the competent authorities take over the responsibility for the vehicle and for persons and property aboard." According to the report, this definition of "in flight" established "a [clearer] interface . . . between Federal and State criminal jurisdiction"—essentially by restricting SMTJ to the portions of a vehicle's journey where state jurisdiction might be lacking, unclear, or impractical. Thus, for federal statutes that apply in SMTJ, § 7(6) provides a tool for prosecuting violations that occur on a U.S. registered space vehicle while in flight.

Second, in 1984 Congress added another subsection—§ 7(7)—to the SMTJ statute. This subsection encompasses "[a]ny place outside the jurisdiction of any nation with respect to an offense by or against a national of the United States." Based on its text, § 7(7) appears aimed at crimes involving Americans that are committed in frontiers where there would otherwise be no jurisdiction. Case law interpreting § 7(7) is scarce, but some jurists have speculated about its applicability to one such place—Antarctica. Similarly, the application of § 7(7) in space seems logical, so long as the crime involves an American defendant or victim, and the particular location in space is not already under the jurisdiction of another country.

Sample Federal Statutes that Apply in SMTJ

An array of federal criminal statutes expressly apply to SMTJ. For instance, 18 U.S.C. §§ 1111 and 1112 punish murder (defined as the unlawful killing of a human being with malice aforethought) and manslaughter (defined as the unlawful killing of a human being without malice) within SMTJ. Other federal offenses applicable in SMTJ include, for example:

- Assault (at minimum, an attempt or threat to injure another);
- Theft (taking and carrying away, with intent to steal or purloin, the personal property of another);
- Arson (willfully and maliciously setting fire to or burning any building, structure, or vessel, among other things);
- Sexual Abuse (among other things, engaging in a sexual act with a person without that person's consent);
- Robbery (taking anything of value from another by force and violence or intimidation);
- Kidnapping (seizing or confining, among other things, another person against their will for an appreciable period).

International Space Station Intergovernmental Agreement

Commercial space flights from the United States have included at least one purely private visit to the International Space Station (ISS), a permanently inhabited research-oriented facility in low Earth orbit cooperatively operated by the United States, Member States of the European Space Agency, Russia, Canada, and Japan. Criminal conduct on the ISS implicates an ISS-specific agreement. Modifying and displacing an earlier agreement, the 1998 ISS Intergovernmental Agreement (IGA) signed by the governments of the cooperating countries provides that, in general, each country retains "jurisdiction and control" over (1) the "flight elements" or areas it provides and registers in accordance with the agreement (for instance, the habitation module provided by the United States); and (2) "personnel in or on the Space Station who are its nationals." In other words, unless a more specific provision of the IGA applies, each signatory retains jurisdiction over the areas and personnel it has provided to the project.

Article 22 of the IGA sets out more specifically the bases for criminal jurisdiction aboard the ISS, stating that each country "may exercise criminal jurisdiction over personnel in or on any flight element who are their respective nationals." However, in cases involving certain conduct—in particular, conduct that either (1) "affects the life or safety" of another country's national, or (2) occurs in or on, or causes damage to, another country's flight element—the country whose national is the alleged perpetrator must "consult" with the affected country at its request "concerning their respective prosecutorial interests." The affected country can exercise criminal jurisdiction in such cases if the country of the alleged perpetrator concurs or if that country "fails to provide assurances that it will submit the case to its competent authorities for the purpose of prosecution." It thus appears that disputes could arise as to which, if any, country should exercise criminal jurisdiction where one country's national causes harm or danger to a national of another country or engages in criminal conduct on portions of the ISS provided and controlled by another country. For instance, if a U.S. national aboard the ISS attempted to kill a national of another cooperating country or stole items from an area of the ISS controlled by such other country, the United States would, if requested, be required to consult the affected country. If the United States indicated that it did not intend to prosecute the alleged perpetrator, the terms of the IGA would permit the affected country to pursue prosecution of the U.S. national in its own courts even if the United States did not concur.

Crimes with a Domestic Impact

The sections above discuss crimes occurring in space where the harm also occurs in space. However, what if a crime committed in space causes harm domestically in the United States? Criminal conduct occurring in space that causes domestic harm-for instance, hacking that causes damage to a computer in the United States-will likely be subject to federal jurisdiction. In one widely publicized incident, NASA's Office of Inspector General investigated allegations that one of its astronauts improperly accessed a bank account from space. The resulting investigation disproved the allegations, but the incident highlights the technological possibility of cybercrime committed in space affecting computers in the United States. Federal prosecutors currently use tools like the Computer Fraud and Abuse Act (CFAA) and the wire fraud statute to prosecute cybercrimes originating abroad, and it seems plausible that federal prosecutors could use such statutes to charge violations committed from space where they affect computers in the United States. However, practical problems with cross-border prosecutions could complicate prosecutions of non-U.S. nationals who violate U.S. federal law in space. For instance, if a non-U.S. national commits a cybercrime during a space mission and that mission returns to a country where the United States lacks an extradition treaty, federal prosecutors would likely face obstacles in obtaining custody of the suspect to stand trial in the United States. For additional information on the CFAA and the wire fraud statute, see CRS Report R46536, Cybercrime and the Law: Computer Fraud

and Abuse Act (CFAA) and the 116th Congress, by Peter G. Berris; CRS Report R41930, Mail and Wire Fraud: A Brief Overview of Federal Criminal Law, by Charles Doyle.

Congressional Considerations

As discussed above, there are a number of ways in which federal criminal jurisdiction may reach conduct committed in space. As commercial space travel develops, it may present scenarios where jurisdiction is lacking or where an expansion of conduct subject to criminal sanction may be warranted. For example, Congress could extend federal statutes governing conduct such as hoaxes or violent threats to apply in SMTJ. Additionally, Congress could potentially use SMTJ as a jurisdictional hook to create laws criminalizing other conduct it believes worthy of criminalization in space, including offenses traditionally criminalized by state and local governments—such as vandalism, cruelty to persons, trespass, indecent exposure, disorderly conduct, and operating a vehicle while intoxicated.

Federal jurisdiction and the existence of an applicable statute does not mean that either a prosecution or a conviction would necessarily result. Crimes committed in space would likely raise a number of other legal and practical issues. It is possible to envision scenarios that pose questions about the application of the laws and rules governing search and seizure, the extent of constitutional rights such as a right to counsel during custodial interrogation, and the limits of international cooperation in incidents involving crews or vessels from other countries. For now, these issues are speculative, but the existence of federal criminal jurisdiction is a key threshold that will allow judicial precedent on such topics to develop. As human space travel pushes to new horizons, the universe of relevant federal criminal case law will likely expand.

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