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Policy, Legal, Institutional and Economic Aspects of Space Debris Detection, Mitigation and Removal
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THE US AIR FORCE COMPLIANCE WITH THE US GOVERNMENT ORBITAL DEBRIS
MITIGATION STANDARD PRACTICES

Abstract

The US Government Orbital Debris Mitigation Standard Practices (ODMSP) are a set of technical guidelines established to provide guidance on the mitigation of debris generation during normal operations and accidental explosions, on the avoidance of on-orbit collision, and on post-mission disposal. They serve as the principal debris-related requirements of space activities subjected to the supervision and control of the US government as explicitly required in the National Space Policy of 28 June 2010. The latter however authorizes the approval of “exceptions” to the ODMSP by the head of the agency sponsoring the space activities. This paper investigates the attribution of waivers to the US Air Force by the Deputy Secretary of Defense during the last decade; in other words: since the enactment of the National Space Policy of 2010, what was the degree of compliance of the US Air Force with the ODMSP?

To answer this question, this paper draws from two sources of data. First, a successful Freedom of Information Act (FOIA) request on the number of “national security space launches” realized by the Air Force from 2011 to 2018 and their compliance with the ODMSP, published for the first time in this paper. Second, anonymous interviews with numerous experts familiar with the matter, mostly officials at the Department of Defense and the Department of State, to understand the hidden dynamics behind the evolution of the Air Force’s compliance.

After providing historical background on the ODMSP and the National Space Policy of 2010, this paper reviews the implementation of these requirements into the Department of Defense’s and the Air Force’s own directives and instructions. Then, it presents the recent drive of the Air Force towards compliance with the ODMSP. It analyzes various reasons having led to the improvement of the Air Force’s behavior in outer space with a specific focus on the actual evolution of its launch capabilities and the personal push of influential decision-makers for increased compliance. Elements of comparison are provided with a quick factual presentation of NASA activities’ compliance with the ODMSP. Finally, the last section comments on the interagency discussions for the revision of the ODMSP, which conclusions were announced in December 2019, and that were subject to intense speculation regarding the respective inputs of the main participants.