

International Cooperation on Space Safety Standards



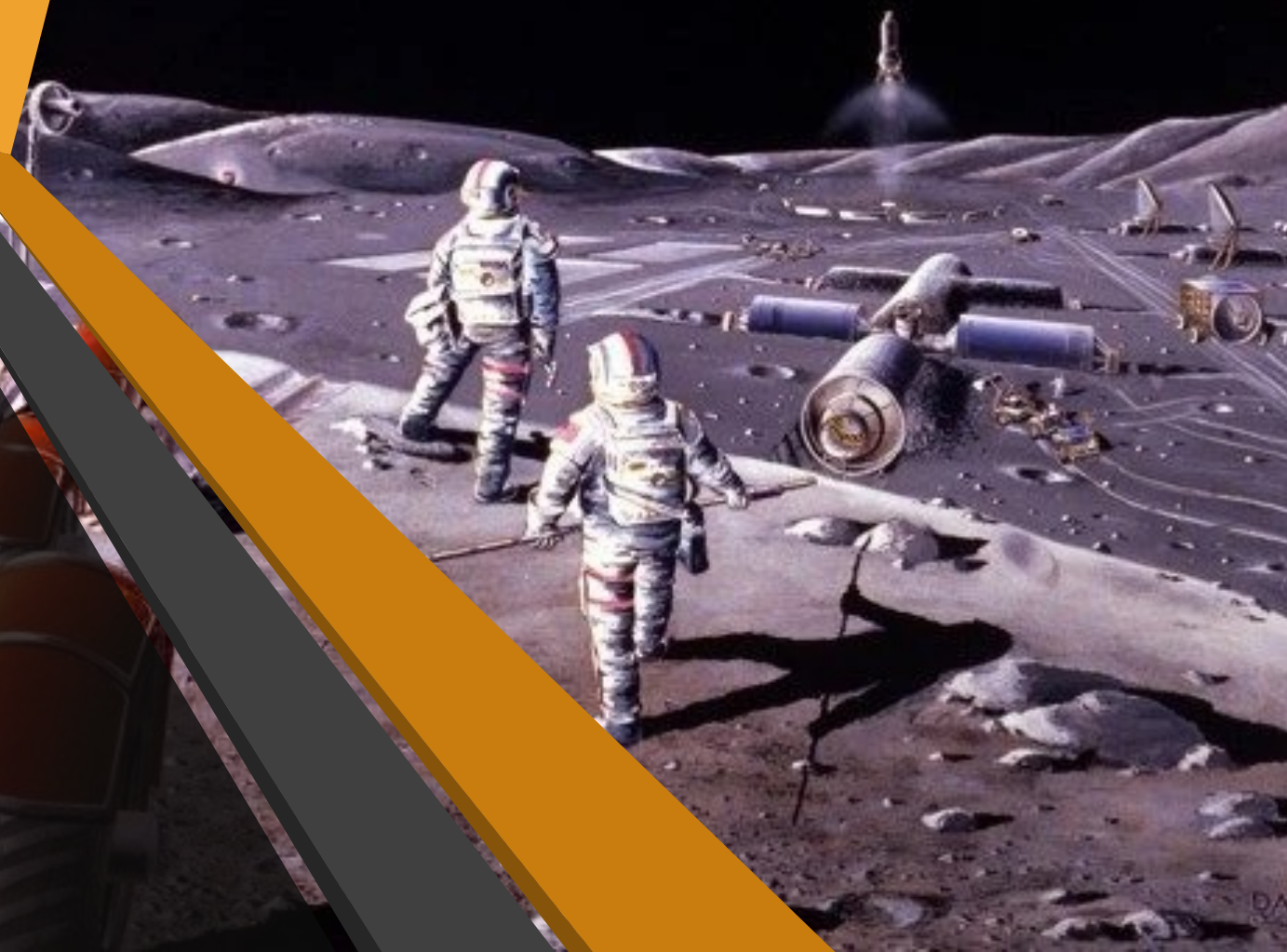
by

Mark Glissman Ph.D *
Department of the United States Air Force
Chief of Space Safety

Tommaso Sgobba
IAASS Executive Director

62nd LSC COPUOS - 27 Mar 2023

* The presenter is expressing personal views only; content does not necessarily reflect the official policy or position of his institutional affiliation





Historical Precedent

- International Civil Aviation Organization (ICAO)
 - 1944 International Civil Aviation Convention held in Chicago developing a charter to foster future development of international civil aviation...promote cooperation between nations...
 - 1947 ICAO became a specialized agency of the United Nations
- International Maritime Organization (IMO)
 - 1948 international conference held in Geneva adopting a convention formally establishing the Inter-governmental Maritime consultative Organization...provides machinery for cooperation among Governments ...encourage maritime safety...
 - 1958 convention entered into force
 - 1982 name changed to International Maritime Organization



Examples of Issues Facing the International Space-Faring Community

- On-orbit Congestion
 - Currently tracking more than 47,500 objects in orbit (source)
 - More than 27,000 of those have cross sections of 10 cm or greater
 - 10s of thousands currently in process of licensing with 100s of thousands proposed
- Uncontrolled Space Debris Reentries and Affect on Terran/Air/Maritime Domains
 - Uncontrolled reentries are largely unnecessary and pose great risk
 - Uncontrolled reentries have an economic affect e.g., closures of commercial airspace
 - International standards and further state regulations are largely lacking
- Terran Orbit/Cislunar Operations/Lunar Orbit and Surface Search and Rescue
 - Requires international cooperation to be effective
 - Requires satellite-based telecommunications and navigation
 - Requires international interoperability standards



Path Forward

- Now is the time to consider an International Space-Faring Organization (ISFO)
 - International need to cooperate due to nascent space-faring growth
 - Need to address genuine harmonized international wellbeing in space operations
 - International Space Safety governance is necessary to ensure cooperation while promoting individual state goals
 - Leverage the outstanding path laid out for us in the 1967 Outer Space Treaty governing the activities of States in the exploration and use of outer space including the Moon and other Celestial bodies



Forerunner

The IAASS proposes the establishment by MoU of an open cooperation among interested countries for the development of space safety standards, based on the following key principles:

- Cooperation aimed to achieve the highest practicable degree of uniformity in national regulations, standards, procedures, and organization;
- Joint development of top-level space safety standards as reference for national regulations;
- MoU signature not generating any prerogative, right or obligation for individual nationals of the subscribing countries. Only national laws and regulations apply;
- Ultimate decision maker on implementation and enforcement is the national space authority;
- Secretariat of the standardization cooperation at UN OOSA.