

NASA Advisory Council Recommendation

Minimum Space Launch System (SLS) Flight Rate 2014-02-03 (HEOC-01)

Recommendation:

The Council recommends that NASA conduct a trade study to determine a minimum launch rate for SLS with respect to cost, safety, mission success and performance.

Major Reasons for Proposing the Recommendation:

Current Agency plans for SLS show a flight rate of one mission every other year, while preliminary mission planning for future exploration missions shows that a much higher launch rate may be necessary for mission success. The experience of many members of the Council would suggest that the currently planned launch rate is less than optimal for maintenance of the supplier base, and the ability of the engineering, production, launch and operations teams to make appropriate risk decisions in a timely fashion.

Consequences of No Action on the Proposed Recommendation:

Increased likelihood that SLS will be unable to meet its exploration objectives due to cost, safety or mission success issues.

NASA Response:

NASA concurs that there is a need to define the minimum flight rate with respect to cost, safety, mission success, and performance. NASA believes that it is important to not only look at this with respect to SLS, but also with respect to Orion and Exploration Ground Systems. The entire portfolio needs to be operated safely and cost effectively to meet our exploration requirements. To this end, Exploration Systems Development in the NASA Human Exploration and Operations Mission Directorate is initiating a study to determine the minimum flight rate. Due to the complexity of this study, we believe it will take some time to accomplish and we will report progress at subsequent Human Exploration and Operations Committee meetings of the NASA Advisory Council until complete.