

IAA Study Group Status Report

Responsible Commission:

Study Number and Title: SG3.18; Study of Possible Inter-agency Protocol to handle Crisis/Emergency of Astronauts in Low Earth Orbit

Short Study Description (repeat from Study Group Proposal):

It is expected that human activities in LEO would be on the rise in future not only due to missions around the earth but also because of other interplanetary manned missions including that to Mars. As a consequence the probability of major malfunctions of Human Missions in Low Earth Orbit will increase accordingly. The Study will assess the feasibility to establish a protocol, restricted to rescue of crew from LEO, who got marooned or have lost de-orbit burn capability or are left with intolerably damaged thermal protection system and is not considering Moon, trans-lunar, Mars or other interplanetary missions. Rescue in the context of this protocol is considered to be those cases where external assistance is mandatory to rescue the lives of the crew.

Overall Status and Progress in past six months:

- Studies conducted on certain technical aspects of rescue including possibility of a dedicated rescue system with design features to achieve docking to a non-responsive target and need for defining an orbital corridor for manned flight
- Paper presented at conference held on 7-9 July 2015 at Torino, Italy on “Handling of crisis/emergency of astronauts in space – Studies on certain technical aspects”

Way forward:

Preliminary cosmic study report to be further enlarged to include -

- Detailing of certain sections like standardization, legal aspects, technical limitations etc
- Identify key clauses and proposed contents of such an International Protocol

Website Study Information up to date? (Study Group Membership, Study Plan and Schedule): To be updated

Issues requiring resolution? (recommend approach): The Study Group requires more representation in terms of Members / Participants from other major and emerging Space-faring nations.

Product Deliveries on Schedule? (If modified explain rationale):

Draft Report for Commission 3 Review by March 2016

Study Team Member Changes? (List any Study Team Members that you wish to discontinue, and provide names plus contact coordinates of any Members you wish to add on the second page of this Study Update form.) Note: Complete contact information including email, tel. and fax must be provided for all additions. Only Members with complete contact information will be listed and receive formal appointment letters from the IAA Secretariat.)

Name of person providing Study Group Status (Study Group Chair or Co-Chair):
Sundaram Ramakrishnan

Status Report Date: 29 September 2015

Study Team Membership Changes

Effectivity Date:

Discontinue:

Name
Current email address

Name
Current email address

Name
Current email address