

IAASS-Management-5.17

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### **Terms of Reference**

# TECHNICAL COMMITTEE FOR LAUNCH & REENTRY SAFETY

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Change Record	
September 2014	Initial version; Generic terms of references
October 2014	Adapted version; approved by the Technical Committee
November 2017	New version; discussed by the Technical Committee
May 2019	New version; coordinated with IAASS Directorate for PPD
May 2019	Version approved by TC (Los Angeles meeting)
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Approved:	
IAASS	President

IAASS is a non-profit organisation registered under 28101073 at the Chamber of Commerce in Leiden (NL)

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#### 1. Purpose

The Launch & Re-entry Safety Committee is one of the Technical Committees of the IAASS.

The primary purpose of this committee is to improve public safety via the exchange of information and plans related to best practices, research, and operations in the field of spacecraft and rocket launch and reentry. The committee is formed to facilitate cooperation in future research, to review the progress of ongoing cooperative activities and to identify and to broadly share best practices in launch and reentry safety.

It is the purpose of this committee to

- **identify** relevant risks and current methods of providing for public safety during launch and re-entry;
- research methods of advancing the state-of-the-discipline (this includes, but is not limited to, areas of policy, analysis approach, analysis methods, protocols, and tools;
- draw conclusions on areas of consensus;
- share knowledge by IAASS publications, training, and presentations;
- provide support through workshops and future work plans.

In the implementation of its tasks, the Launch & Reentry Safety Committee reports, in cooperation with the Technical Director, to the Executive Committee of the IAASS.

#### 2. Rationale

The members share a number of common interests in space safety which may be developed into a variety of cooperative research activities. Such ventures are likely to increase in frequency and scope in the future. It is in the interest of global public safety and of the space industry as a whole to identify best practices and to cooperate in their improvement. Therefore, the IAASS Technical Committee for Launch & Reentry Safety is established to identify, plan, review, and assist in the implementation of joint cooperative launch and reentry safety activities that are of mutual interest and benefit.

The Committee bases its operations upon robust processes for analysis and judgement to formulate policies and recommendations without bias. Only rational and evidence-based information, properly understood data and scientifically grounded assessments are used. Assumptions are explicitly acknowledged and constantly challenged.



#### 3. Scope

The scope of this committee includes:

- developing and promoting, in cooperation with representatives of international and national regulatory agencies and the space industrial sector, a multiyear strategy for research activities and publications in the area of safety with regard to launch and re-entry for endorsement by the Executive Committee of the Association;
- implementing the endorsed strategy for research activities and publications in the area of safety with regard to launch and re-entry;
- evaluating existing safety standards, practices, and requirements with regard to launch and re-entry, in order to determine which aspects of risk management, hazard mitigation and system safety engineering are applicable;
- developing, documenting and maintaining common and effective launch and reentry safety practices, that provide an efficient framework for the international space industry;
- promoting consistency in policies and technical rigor in the substance and application on common launch and re-entry safety standards;
- providing for reviews, and facilitating the exchange of data relevant to international launch and re-entry safety standards, practices and methods;
- organizing and conducting one or more sessions on topics related to safety with regard to launch and re-entry at IAASS conferences and providing for the review of the abstracts received in this area of competence;
- arranging, under the auspices of the Association and in cooperation with the *Academic Committee* and the *Training Program Committee*, the offering courses in the area of safety with regard to launch and re-entry;
- under the coordination of the Technical Director, interacting and interfacing with the other Technical Committees of the IAASS to assure consistency with the work of these Committees and with the strategy goals of the Association;
- under the coordination of the Technical Director, reporting at regular intervals on the activities, achievements and plans of the Launch and Re-entry Safety Committee to the Executive Committee of the IAASS and implementing the directives received.



### 4. Organization

The IAASS Technical Committee for Launch & Reentry Safety comprises:

- 1. A Chairperson elected to a 3-year term
  - a. The Chairperson is automatically an interim voting member of the executive board of the IAASS for the duration of the term.
  - b. The chairperson is to present status of the committee's work at each general international meeting of the IAASS.
  - c. The chairperson may delegate a temporary surrogate for any duty.
- 2. A Deputy Chairperson elected to a 3-year term
  - a. The Deputy Chairperson automatically becomes Chairperson after the term of the previous Chairperson has ended.
- 3. A Recording Secretary
- 4. Study Leads as appointed by a vote of the Committee
- 5. The voting membership
- 6. The non-voting membership

Meetings via web, telephone, or direct contact all qualify as official meetings of the Committee.

Study leads may convene subsets of the Committee as needed to conduct collaborative work within their purview.

The chairperson will not vote in any matter except to break a tie, and will represent the agreed resolution to the IAASS board and to the public according the majority opinion.

The vote on any resolution will be by the voting membership present at the meeting, so long as a minimum of five voting members are present.

If five or more members are not present for the decision on any resolution, then the issue will be settled by electronic correspondence.

If a vote is not unanimous, the recording secretary will include the basis of the dissenting opinion within the minutes. If the wording cannot be resolved in real time at the meeting to correctly capture the dissent, voting opponents of the measure may collectively generate a single statement of up to 500 words of dissent for inclusion within the minutes. (The recording secretary will wait for such input or for confirmation that no dissenting input is intended, prior to publication of the minutes.)



### 5. Membership

The Committee shall create and maintain a strong link between professionals from agencies, industry and academic institutions. Voting and non-voting membership is allowed.

### a) Voting Membership:

- a. Only safety professionals whose experience, research, and/or publication in the field of space safety qualifies them as expert in the field are eligible to be voting members of the Committee.
- b. Senior members and higher-level members (Associate Fellow, Fellow) of the IAASS satisfy this criterion.
- c. Non-IAASS-members can become voting members of the Committee.
- d. Permanent voting membership of any applicant is confirmed by a simple majority vote of those present at any Committee meeting, with concurrence of the chairperson.
- e. There can be only one voting member and one designated alternate voting member from any agency or organization represented on the Committee, but any such organization may only cast one vote on any resolution.
- f. Contractor organizations, agencies, academic institutions, and in rare cases, independent consultants are all independently eligible organizations.
- g. Voting members are obligated to endorse the current ToR of the Committee. Such signature by itself does not amend the ToR.

### b) Non-Voting Membership

- a. Any voting member of the committee may invite the attendance and participation of relevant individuals or organizations to support any Committee meeting, with the concurrence of the chairperson.
- b. Non-voting members may be polled for opinions but are ineligible to vote upon Committee resolutions.
- c. Following the first attended Committee meeting, such individuals are eligible to submit an application for ongoing voting membership to the chair, or may continue to attend future meetings in non-voting status by invitation.



### 6. Meetings

The Committee will conduct a minimum of one day of dedicated face-to-face business in association with every major workshop or conference of the IAASS, generally every 18 months on alternating continents. Generally, such Committee meetings have preceded the general workshops, but the detailed timing is at the convenience of the Committee voting members.

In-person attendance of the at least one voting member (or designated alternate) of every member organization is expected at these conference-associated Committee meetings.

The Committee may meet at its discretion in whole or in subcommittee to conduct additional business, dedicated workshops, and/or technical work & study sessions at times and places not associated with broader IAASS business.

The Committee shall conduct at least two teleconferences per year among the voting membership to assess progress in ongoing collaborative work, to share in important developments, and to plan the next face-to-face meeting logistics and agenda. These teleconferences are in addition to the face-to-face meeting, if that falls within the same calendar year.

### Required inputs:

Reports and analyses as agreed by the study teams within the Committee

### Expected outputs:

- Minutes of each Committee meeting
- An archive accessible to the voting membership of all presentation materials from each Committee meeting
- Personally Identifiable Information (Names, phone #, passport data, etc.) will be protected by encryption but available to Committee support staff with need-to-know

Participation in the Committee is voluntary. Neither the IAASS nor the Technical Committee will fund travel, housing, or subsidize activities of the Technical Committee, other than to collaborate on and underwrite publicity for and support of the basic site logistics of Committee meetings (examples: website maintenance, meeting room reservations, light refreshments for breaks, etc.).

There is no fee nor pay for Technical Committee membership.

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Any specific cooperative activities endorsed by the Technical Committee will be implemented through arrangements negotiated between members. Members should exchange data resulting from national and institutional programs as appropriate to their countries' export laws. These terms of reference establish the rationale and justification for export in some countries where such documentation is required. Data and information exchanged through the IAASS Technical Committee will normally be exchanged without restrictions as to use or disclosure, and with the respect future publication rights by the providing parties. If technical data is exchanged which is considered to be proprietary, and for which protection is desired, the data shall be marked with a notice indicating the use and disclosure restrictions, and the recipient agrees to abide by the terms of such notices.

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