

**DRAFT**  
**Minutes**  
**From**  
**IAA Commission V Meeting**  
**Paris (IAA), 23 March 2004, 08.30-10.45**

## **0. Participation and Welcome**

Participation: Logsdon, Brachet, Schrogl; Flury, Peter; for specific items : Becker, Bekey  
John Logsdon welcomed the participants and informed about contacts he had with several Commission members; the agenda, which had been distributed before the meeting was adopted.

## **1. IAC 2004 Vancouver**

Walter Flury reported about the status of the IAA.5.12. Space Debris and Space Traffic Management Symposium. 36 papers have been received; there will be 5 instead of 4 sessions with an additional session on risk analysis and a combined session on space traffic and NEO.

John Logsdon reported about the status of the IAA 5.13. Symposium on Space Policy, Law, and Economics. 44 abstracts have been received; the session on Emerging Issues in Space Policy and Law will be split into two in order to avoid rejecting half of the 30 abstracts received; out of the 14 abstracts for the session on Economic Benefits only 8 will be accepted. It was confirmed by the Chairman that there is no conflict with IISL regarding legal issues being dealt with at this symposium.

The Commission took note of these reports and stated that it was also pleased that its proposal on Climate Change in the Arctic was accepted as a Plenary.

## **2. IAC 2005 Fukuoka**

Walter Flury explained that the Space Debris Symposium should consist of three sessions (measurement and space surveillance, modelling etc., mitigation and standards).

John Logsdon explained that the Symposium on Space Policy, Law, and Economics should have again two sessions but that the policy and law session should already be planned for two half-days.

Both proposals were accepted by the Commission.

Kai-Uwe Schrogl explained that the newly re-established IISL/IAA Scientific-Legal Liaison Committee (chaired by himself and Wendell Mendell) would organize a Scientific-Legal Roundtable on space traffic. He was pleased to accept the offer from the Chairman that such events (the Roundtables are planned to take place on an annual basis) would be submitted via Commission V and that the Liaison Committee would work in close coordination with Commission V.

### **3. Study Group Report Status**

Walter Flury reported about the status of the Position Paper on Space Debris Mitigation Guidelines for Launch Vehicles and Spacecraft (IAA Study 5.1) as layed out in annex 1. The group's work was appreciated and its schedule accepted by the Commission.

Kai-Uwe Schrogl reported about the status of the study Traffic Management Rules for Space Operations (IAA Study 5.3) as layed out in annex 2. The group's work was appreciated and its schedule accepted by the Commission.

Francois Becker reported about the status of the study Space to Promote Peace (IAA Study 5.4). It is planned to launch the peer review in summer and finish it by the time of the Vancouver IAC. The study will be presented to UNESCO in November 2004 and to the Afghan authorities in January 2005. It might be possible that UNESCO requests such studies for other countries in the future. Credibility of the IAA, however, will depend on the implementation of the proposals. The ownership of the study (IAA or UNESCO?) is not yet settled.

### **4. Future Study Groups?**

Ivan Bekey reported about the work on IAA Study Group 3.5 Asteroids. It is feasible that Commission V either contributes to this work or creates a separate Study Group dealing with the policy/legal aspects of Planetary Defense/Protection. This issue will be further discussed at Vancouver (together with the question of other proposals).

### **5. Other Business**

#### **- Membership**

Walter Flury will be proposed to become Section 2 Representative

S. Murthy will be proposed to become Member

The other representatives/members (Atsuhiro, Kordyum, Cline, Favier, Stavrinidis) have not shown much interest in the Committee activities.

#### **- Announcements**

Walter Flury announced that ESOC will host the 4<sup>th</sup> European Space Debris Conference in 2005. His request for IAA co-sponsorship was supported by the Commission.

## **Status of the Study Group “Traffic Management Rules for Space Operations”**

### 1.1 Current status

- 2001: AIAA Workshop; establishment of an IAA Study Group
- 2002: IISL/ECSL Symposium on Space Traffic Management with Study Group's involvement at UNCOPUOS
- 2003: Space Traffic Management session at IAC Bremen with presentation of preliminary findings of the Study Group
- today: first draft of study

### 1.2. Upcoming activities

- 2004 (March-September): broader discussion of first draft including contributors and discussion group
- 2004 (April): presentation of intermediary results upon invitation at the Monterey Institute (Washington D.C.)
- 2004 (October): Space Traffic Management session at IAC Vancouver with presentation of the first draft
- 2004 (autumn)/2005 (IAA spring meeting): IAA review of the study
- 2005 (October): Scientific-Legal Roundtable at IAC Fukuoka with presentation of the adopted study

## 2. Major changes between the first ideas and the first draft

- there have been numerous indications that the study group should not be too ambitious and should not seek to promote new regulation
- the first draft consequently applies a long-term perspective and outlines only in an abstract manner the regulatory requirements
- the first draft is therefore more analytical and descriptive than normative (the possibility is kept open that draft regulation for the future could be sketched)

March 22, 2004

**International Academy of Astronautics  
Commission V**

**Status Study 5.1 Space Debris (23.3.2004)**

**"Position Paper on Space Debris Mitigation Guidelines for  
Launch Vehicles and Spacecraft"**

Study Group Space Debris (W. Flury)  
Subgroup: Launch vehicles (Ch. Bonnal)  
Subgroup: Spacecraft (J. Hussey)

**Structure of Position Paper**

1. Background
2. Scope and Objectives
3. Current Design and Operation Practices that lead to debris creation
  - 3.1. Launch vehicles
  - 3.2. Spacecraft
4. Options for minimizing debris creation
  - 4.1. Launch vehicles
  - 4.2. Spacecraft
5. Mitigation Guidelines
  - 5.1. Launch vehicles
  - 5.2. Spacecraft
6. Space Debris Mitigation: Cost, Benefit and Affordability
7. Conclusion and Recommendation

### Schedule

Draft #7 S/C Subgroup	Sept. 2003
Draft #1 LV Subgroup	March 2004
Draft #1 S/C & LV	May 2004
Draft #2	IAC Vancouver, Oct. 2
“Round-table” IAA.5.12.3 Mitigation	IAC Vancouver
Final draft	IPC 2005
Approval process, printing	
Presentation to UNCOPUOS S&T S/C	Feb. 2006