



IAA Commission III meeting
Paris, March 12th , 2012
Christophe Bonnal

Progress report on IAA Study Group 3.9 “Private Human Access to Space”

Proposer(s): H. Rauck – G. Brachet **Chair:** Ch. Bonnal
Primary IAA Commission Preference: Commission 3
Secondary IAA Commission Interests: Commission 5

Overall Goal:

Identify and quantify the key topics associated to Manned Private Access to Space for both Orbital and Sub-orbital missions.

Key words:

- Technical aspects
- Legal and regulatory aspects, safety aspects
- Financial aspects, market analyses, associated business plans
- Motivations of potential customers
- Physiological and Psychological requirements, ergonomic constraints

Expected outcome of the study:

IAA Position Paper giving the keys to the topic and potentially including recommendations. Subdivision of the study into key chapters, with one “book captain” per chapter ; 7 or 8 members per chapter covering a wide range of origins (countries, agencies, industrials, searchers, operators...)

Time line:

Initially: 3 years following the initial proposal (March 2007)

Revised timeline:

- 1st IAA symposium on Private Human Access to Space (Arcachon)
 - ⇒ 28-30 May 2008
 - Publication of the full CD with all the papers, most of the presentations, pictures, ... Distribution to all participants
 - ⇒ End of September 2008
- Report during IAC Glasgow ⇒ October 2008
- Publication in Acta Astronautica of the 15-20 best papers out of the 68 presented in Arcachon
 - Process undergoing: 15 papers pre-selected
 - 4 rejected
 - 2 withdrawn after review
 - 14 finalized ⇒ Published AA Vol 66, 11-12
- SG: Formal invitation of members of the SG
 - Additional members are welcome, but may lead to problems of coherence and homogeneity (lack of efficiency; depends on the definition of a Working Group !)
 - ⇒ Daejeon, October 2009
- Extended table of contents ⇒ IPC, Paris March 2010
- IAC 2010: presentation of the status of the action
 - Decision taken during the meeting to hold the 2nd IAA Symposium on Private Human Access to Space in 2011
- 2nd IAA symposium on Private Human Access to Space (Arcachon)
 - ⇒ 30, 31 May, 1st June 2011
 - Nice little conference (100 participants from 12 countries)
 - 56 presentations + 2 round tables
 - Good press support thanks to presence of Astronauts, candidates, Virgin Galactic, X-COR, Astrium...
 - Proceedings distributed to all participants, available upon request
- Preparation of a dedicated issue of Acta Astronautica with a selection of 15-20 most interesting papers out
 - Process undergoing: Formalism towards Acta, notification to authors
 - See following page
- Associated proposal to delay the preparation of the Position Paper. Already discussed with IAA SG
 - ⇒ Report of the conference expected in CapeTown, September 2011
 - ⇒ No progress since March on the content due to conference
 - ⇒ First complete draft expected for Paris meeting March 2012
 - ↳ Late, as only half of the contributions are available
 - ⇒ Final draft expected for IAC 2012 in Naples

Special Issue of Acta Astronautica on Private Human Access to Space

Co-editors: Tannja Masson-Zwaan, Christophe Bonnal

Selected Structure:

Editorial (4 pages), Tanja + Christophe

1st Keynote: Jean-Perre Haigneré (ACE) → Under consolidation

2nd Keynote: Bernhard Hufenbach (ESA) → Available, under approval

3rd keynote: Derek Webber (Spaceport Associates) → Under review

4th keynote: Jean-Luc Wibaux (Virgin Galactic accredited agent) → Available, under submission

1st part, Christophe editor

Editorial (2 pages), Christophe

- LeGoff (Astrium), market → under submission
- DeLuca (Poli Milano), hybrid propulsion → under review
- Maggi (PoliMilano), hybrid propulsion → under review
- Chavagnac - Clervoy (Astrium) → under submission
- Onuki (Japan), Commercial Human space flight in Japan → under consolidation
- Trujillo (ESA), Safety → under submission
- Eymar (N4E), business → under review
- Salt (Vega), business → under review
- Götz (DLR), medical aspects → under submission
- Webber (Spaceport Associates), Point to Point → under review
- Sippel (DLR), Point to Point → under submission
- Peeters (ISU), Point to Point → under submission
- ↳ strong potential still to loose 2 or 3

2nd part, Tanja editor

Editorial (2 pages), Tanja

- VanDer Dunk (Uni Nebraska) → under review
- Lazare (CNES) → under review
- Ametova (Leiden Uni) → under review
- Johnson (IISL) → under review
- Galhego-Rosa (Leiden Uni) → under review
- Masson-Zwaan (IIASL) → under review
- Beamer-Downie (General Counsel Airclaims) → under review
- Mahmoudi (Aerospace Research Institute, Iran) → under submission
- Carminati (Weil, Gotshal & Manges) → under review