

## Minutes - IAA Space Architecture Study Group 6.9 Meeting

Wednesday March 26, 2008  
IAA HQ  
6 rue Galilee  
75016 Paris  
Chair: Olga Bannova

Attendees: Olga Bannova (OB), Richard Clar (RC), Roger Malina (RM), Susmita (SM) Mohanty.

Meeting called to order at 11h15. Introductory remarks (OB) round table self-introduction of study group members in attendance. Richard Clar agrees to take minutes.

OB Go through recommendations. Suggestions or edits. Start with Commercialization/Tourism Module. Maijinn Chen wants to contribute but cannot be leader of module at this time.

### Commercialization/Tourism module

SM Can reach out to Space Tourism people she knows.

OB Space Tourism is not developed enough at this time to collect adequate data.

SM If only Space Tourism, Susmita can participate in gathering data. No time though to work on broad Commercialization. Create a set of recommendations. Will take responsibility for gathering data for Space Tourism Module.

OB Will need help with Commercialization/Tourism Module. Maijin is not able to contribute as much as she would have liked to so she can not be a module leader. Brent Sherwood will contribute to Commercialization Module. Seek to involve Nikolai Tolyarenko and Oleg Alifanov.

SM Will get input from space tourism and X-prize people.

OB Traveling to Moscow in May for conference. Good opportunity to meet with Russian SASG members.

SM Spin-offs from NASA and ESA applicable to Commercialization/Tourism module: seek input from David Raitt for ESA.

## Art Module

RM Artists as architects? Need to communicate artist's ties to Architecture.

RC Involve artists in initial design phase of space programs. Need to Develop certification process for artists.

RM Art and design. Recognize more from architecture standpoint. Need to articulate art in architecture.

SM Example of Arthur Woods piece onboard the MIR Space Station. Psychological factors.

RC Sees artists' role in space programs as non-specific. Identify specific type of artist who is qualified to work in space programs. Interdisciplinary. Artist sits in on initial planning phase of space programs. Artists may offer a different approach than architects or engineers.

SM Reword Art Module recommendations. More specific.

RC Prioritize. First step would be how to identify artists for space programs and establish a certification process.

RM Will white paper have bibliography? Also need a "best practices" or "good examples." A few paragraphs – bibliography resume. In the IAA, you will be dealing with people who have no idea what you are talking about. A few good cases on this project. So and so was involved. 2 to 3 examples of good practice.

OB Ask module leaders to present examples of best practices.

RM Each module start with identifying one example of best practices. Really concrete. Show where published info may be found.

RC Difficult to find many examples in Art.

OB Use story you just gave about NASA/Ames Human Factors meeting in one room, engineers in the next room discussing weight savings by not using paint on interior walls of ISS.

SM Cosmonauts input on psychological factors of Wood's artwork onboard MIR.

RM Bibliography very useful.

SM Can we have both best practices and good examples? Excellent technical papers.

RM May be too big a job to do in next 8 months.

SM Identify 5 or 10 good published papers for each module.

RM Another thing missing is a category called: "Recommendations to the Academy." Include such things as: Add Space Architecture and Space Art to the Multilingual Space Dictionary. Elect architects in each section of the Academy. List of "best" person to be recommended for election into each Academy section. Norman Foster—one example—emerging discipline—well known. Every section should nominate space architects. Provide list of recommendations. Have Academy establish an award for space architecture. SASG 6.9 report to include section: Recommendations to the Academy.

SM Need to find consistent way of writing SASG report

OB Brent and AI will continue to do the editing.

#### Simulation module

SM Will get real live examples of American simulations, European simulations, and Russian simulations—3 different examples—then will select 5 or ten examples of papers—not mine—but excellent papers that could go into the bibliography. Could even include Japanese examples of simulators.

OB Clearly there is no doubt you have many examples of Simulations. What about recommendations themselves?

SM After looking at the HF module, will re-write this in a way that we follow consistent patterns that will make it easier for Brent to edit and for us to find what to take for the final set of ten.

OB It can't be anything that you have done in your papers. It has to be separate material.

SM Agrees.

Simulation in Russia coming up—Mars 500—2 simulations of 105 days each and one up to 500 days.

RM Would O'Neil be considered a space architect? Is he a member of the IAA?

SM Burt Rutan and Peter Diamandis should be members of the Academy.

RM Compile list of possible names for debate on recommending election into the IAA. These architects have an integrated view. Came from different career paths.

OB What about awards for contributions to space architecture?

SM First award, recognition only. No money.

RM Recommend to the Academy to continue sessions on space architecture.

OB Why not arrange for international design contests?

RM Recommend that the Academy sponsor design competitions in space architecture at universities. Use very specific ideas that can be realized.

### Educational Module

OB Space architecture should be introduced in all engineering schools.

RM IAA should sponsor design competitions in architecture schools. Architects are used to design competitions.

When SASG 6.9 document is delivered to the Academy, it should be a good example of graphic design!

Must also provide the Academy with a list of reviewers for the final report.

Reviewers need to be from outside the SASG.

Francis Winisdoerffer would be one name for recommendation.

Roger Malina leaves meeting.

OB Richard will provide the minutes.

Brent says not enough members of the SASG are participating in the wikipedia site. Please encourage SASG members to use the Wiki site.

SM Wants to recommend new people outside the SASG for the HF Module.

Refine format for all modules.

Use this as an example format, but be more specific.

OB Recommendations should be shorter.

SM Use HF model format. Be very specific. Easier for Brent to Edit.

Next scheduled meeting: IAC 59 in Glasgow, Sep 29th - Oct. 3rd, 2008

Summary:

1. Request Modules leaders to provide 2-3 good examples In support of their recommendations.
2. Produce a few general recommendations to IAA from SASG as a group.
3. Use a uniform format for each module recommendations to simplify future

- editing.
4. Each Module should provide bibliography for proposed recommendations.
  5. Suggest names of possible reviewers of SASG report--outside the SASG—for recommendation to the Academy.
  6. Suggest names of leading architects to be considered for recommendation for Academy membership in the four IAA sections.

OB This brings our meeting to a close. Thanks to all for attending.

Meeting adjourned at: 11:56 am.