### MEETING MINUTES

AIAA DETC Aerospace Architecture Subcommittee 6 and 7 January 2004 Aerospace Sciences Conference, Reno, Nevada

Attendees:

Jun Okushi, Alice Eichold, Paola Favata, Marc Cohen, David Nixon, Kenji Nozaki, Silvano Colombano, Serkan Anilir, Thomas Gangale, Marilyn Dudley-Flores, Scott Howe, Donna Duerk, Constance Adams (by telephone)

Visitors: Jeff Howe, Ron Kohl

### **1 ACTIVITIES**

1.1 SPACE2004, San Diego

After discussion it was proposed and agreed by vote that ASASC (AeroSpace Architecture SubCommittee) will not arrange sessions at SPACE2004 in San Diego. This is due to (a) heavy commitments involved in preparing for ICES2004-Colorado Springs, ICES 2005-Torino and IAF2005-Fukuoka, (b) concerns over the high cost of conference attendance by non-military participants, (c) concerns over reported lack of organization of SPACE2004. This decision does not impede ASASC members from submitting papers to other sessions at SPACE2004. *Action: Scott to inform Eleanor Aldridge at AIAA*.

### 1.2 IAC2005, Fukuoka

Scott and Marc met with Angelo Iasiello, AIAA/IAF liaison officer, to discuss ASASC initiative to hold a 2<sup>nd</sup> Space Architecture Symposium at IAF2005 in Fukuoka, Japan. The initiative needs to be worked through the AIAA for maximum effect. The AIAA will write a letter to the IAF to formalize this request. Support (type TBD) will be available from the AIAA for this symposium, though an external sponsor will be advantageous to help cover costs. A meeting is required to discuss the initiative at IAF HQ in Paris. Additionally, a visit to IAF organizers at IAF2004 in Vancouver may be needed for IAF briefing purposes. *Action: Marc to prepare IAF-Paris Proposal; David and Serkan to meet with IAF in Paris in March.* 

### 1.3 ICES2004, Colorado Springs

Kurt is Chair of ASASC sessions at this conference with Susmita, Barbara and Susan as Vice-Chairs. Approximately 28 abstracts have been received. Other subcommittee members should be prepared to assist with paper reviews. *Action: Kurt to provide the subcommittee with a status report.* 

### 1.4 ICES2005, Torino

ASASC intends to be at ICES2005, Torino and at IAF2005, Fukuoka to ensure ASASC visibility at both events and to provide prospective authors and attendees with a choice of global venues to help to reduce personal expenses involved. Holding two ASASC events in 2005 will involve a substantial workload. To limit this, a single paper session only is proposed for ICES2005, Torino. Chairpersons for this conference need to be identified. It is hoped that Annalisa and Andreas will be able to accept this role.

Action: Andreas and Annalisa to respond to ASASC request to be Co-Chairs for single ASASC session at ICES2005, Torino.

1.5 New Member Presentations

Silvano, Thomas and Serkan all made new member presentations at the meeting.

1.6 SCTC Meeting Liaison

Silvano Colombano attended the SCTC Meeting as DETC liaison but no-one showed up at the meeting.

1.7 SDM2004, Palm Springs

David expects to attend the DETC meeting at SDM2004, Palm Springs.

## 2 EDUCATION

2.1 Education Matrix

This item is deferred to the next ASASC meeting at ICES2004, Colorado Springs.

2.2 Online Survey

This item is deferred to the next ASASC meeting at ICES2004, Colorado Springs.

## 2.3 Donna Duerk's NASA Education Study

Donna Duerk has completed her study contract with NASA-Ames Research Center. Marc is organizing the publication of this as a NASA Contractor Report. Copies will be made available to ASASC members after publication. *Action: Marc to distribute copies when available.* 

# 3 RESEARCH & DESIGN

### 3.1 ASASC Volumetric Section for DETC Design Guide

The missing Vectorworks files have been located. The next edition of the Design Guide is several years away so time is available to continue to optimize these drawings.

Action: Scott to prepare vector files for publication.

# 3.2 BEAMS

David provided a status report on the proposed BEAMS spaceflight mission and explained that the initiative has been adversely affected by the Shuttle Columbia loss and the subsequent hiatus of Shuttle missions. Scott is the Principal Investigator. At present, NASA-Ames Research Center and the University of Hong Kong have expressed interest in flying BEAMS experiments in the 2006/2007 timeframe. The earliest date that BEAMS can fly is now likely to be 2006. Capacity on each BEAMS flight is 16 experiments. The first BEAMS mission will be confined to passive materials technology experiments. The target is to obtain experimenter commitments by the end of 2004 for the first BEAMS mission at 100% occupancy.

Action: David and Scott to continue BEAMS marketing.

# 3.3 SATE

Kenji provided a hand-out and briefing on the SATE (effective transfer of Space Architecture technology to Terrestrial Architecture) research project. This project is being funded in Japan. Participants in this spin-off technology research project include Shimizu Corporation, the University of Tokyo and Plug-In Creations. The team is seeking participants or interested parties in the US. Examples of space technology that are suitable for study as spin-off candidates are requested.

## 3.4 Digitized Anthropometrics/Ergonomics Initiative

This initiative will be led by Jun. The first step will be to construct digitized computer models of human figures. Several digitized models for terrestrial applications exist (an SAE group specializes in this subject). A space motion capture approach will be applicable. Contacts with the movie industry may be appropriate.

Action: TBD.

## 4 PUBLIC RELATIONS

## 4.1 DETC Web Page

Further work is required on this item.

### Action: Scott and Pravi to work on DETC webpage.

### 4.2 Member Page

This requires periodic updating. *Action: Scott to update member page.* 

### 4.3 Automated E-mail List

Further work is required on this item. To avoid ASASC mailings labeled as spam, we should purge existing list and only include those names on Marc's contact list spreadsheet.

Action: Scott to update automated email list.

### 4.4 Online Forum

This item is deferred to the next ASASC meeting at ICES2004, Colorado Springs.

Action: Ted to establish online forum at later date.

### 4.5 Website Costs

Costs for maintaining the subcommitteee website are currently being met by Plug-in Creations Architecture, LLC. It is also proposed that a Japanese website is set up for the 2<sup>nd</sup> Space Architecture Symposium at IAF2005, Fukuoka if this goes ahead. It is proposed that the costs for these websites are covered by DETC funds. The agreement of the DETC will be required for this. *Action: Marc to discuss picking up webpage costs at DETC level.* 

### 4.6 Aerospace Architecture Subcommittee Acronym

It was agreed by motion and vote that the subcommittee acronym will henceforth be ASASC, which will be modified to ASATC after the subcommittee becomes a full TC later in the decade.

### 4.7 Website Introduction Statement

David circulated the latest draft of the website "Welcome" statement prepared by Alice, David and Scott and requested that subcommittee members give it a final review before it is added to the website. "ASASC" will now be used in this statement instead of "ASA".

Action: Any further comments on webpage "welcome" statement by subcommittee members requested by David by the end of January so we can post it on the webpage.

4.8 "Spacearchitect.org" Entry in Web Search

"Spacearchitect.org" appears as the number 1 entry on a typical web search under the name "space architecture". However, the description is confined to the phrase " resources for space architects". It is proposed that this is expanded to describe the website as the official website of the ASASC of the AIAA DETC, thus giving it a recognized organizational status and setting it above and apart from the many other "space architecture" website addresses. This description needs to be achieved in about 25 words.

Action: Alice to produce the required "wordbite" that can be used to describe "spacearchitect.org" on web search engine reports.

4.9 Articles and Publicity

Leonard David of the weekly newspaper *Space News* wants to do an article on space architecture. David has already provided him with some outline information and will prepare a synopsis of the present status of the ASASC group, to be reviewed by the Public Relations Working Group (Alice, Marilyn, Kurt) before transmission. Depending on the angle to be taken in the article and its length and content, subcommittee members may be asked to provide visual examples of their work for inclusion.

Action: David to prepare synopsis for Space News and circulate to PRWG for comments.

## 5 MEMBERSHIP

5.1 Status of ASACS membership

Following Kent's report on membership during the full TC meeting, the status of ASASC membership as of January 2004 is confirmed as follows:

Existing Members Scott Howe Marc Cohen Alice Eichold Ted Hall (International) Kurt Micheels Jun Okushi (International) David Nixon Marilyn Dudley-Flores Andreas Vogler (International) Paola Favata Constance Adams Silvano Colombano Matt Herman (Associate) New Members Serkan Anilir (International) Annalisa Dominoni (International) Donna Duerk Thomas Gangale Barbara Imhof (International) Susmita Mohanty Kenji Nozaki (International) Martina Pinni (Associate) Adam Wapniak (Associate) Melina Kaczor (Associate)

### 5.2 Attendance at DETC Meetings

The required attendance standards at DETC and ASASC meetings for ASASC members are as follows:

<u>Full Members</u> 2 meetings per year

International Members 1 meeting per year

<u>Associate Members</u> Optional attendance and contribution to sessions

Following discussion at TC level, it was agreed that issues of inattendance are best handled on a case-by-case basis with the individuals concerned.

5.3 Qualifications for Becoming an Full Member

The qualifications for becoming a Full Member of the ASASC are either publication of at least one paper, or a contribution to a paper session, or both.

5.4 Ongoing Search for New Members

Scott reported that he was visiting NASA-JSC, NASA-MSFC, NASA-KSC in the course of his present trip to the US and will be meeting with space architecture and human factors groups at these locations. These groups will be encouraged to join the AIAA if not already members, and subsequently select representatives to join the ASASC as subcommittee members. David will then follow up on assigning existing ASASC members to follow up the suitable "leads' and any other prospective members that emerge this year.

Action: Scott and David to follow up on additional new members.

## Action items:

1) Scott to inform Eleanor Aldridge at AIAA that ASASC will not chair Space2004 sessions.

2) Marc to prepare IAF-Paris Proposal; David and Serkan to meet with IAF in Paris in March.

3) Kurt to provide the subcommittee with a status report of ICES2004.

4) Andreas and Annalisa to respond to ASASC request to be Co-Chairs for single ASASC session at ICES2005, Torino.

5) Marc to distribute copies of Donna's curriculum report when available.

6) Scott to prepare vector files for publication.

7) David and Scott to continue BEAMS marketing.

8) Scott and Pravi to work on DETC webpage.

9) Scott to update member page.

10) Scott to update automated email list.

11) Ted to establish online forum at later date.

12) Marc to discuss picking up webpage costs at DETC level.

13) Any further comments on webpage "welcome" statement by subcommittee members requested by David by the end of January so we can post it on the webpage.

14) Alice to produce the required "wordbite" that can be used to describe "spacearchitect.org" on web search engine reports.

15) David to prepare synopsis for Space News and circulate to PRWG for comments.

16) Scott and David to follow up on additional new members.