

Meeting Minutes SATC Telecon, 7 Oct 2016

meeting: 20:00 UTC

Chair: David Wong
Vice-chair: Brent Sherwood

Attendance:

Current total of SATC members: 37

Invited: all

Participating members (22%): 8, individually (In) 0, excused (E) 7

Anton Andonov (I)	François Lévy (R)
Antoine Faddoul (R)	Sungwoo Lim (I)
✓ Payam Bahrami (I)	Elizabeth Lockard (R)
E Olga Bannova (R)	E Renée Matossian (R)
Christian Carpenter (R)	Kursad Ozdemir (I)
Marc Cohen (R)	✓ Georgi Petrov (R)
Silvano Colombano (R)	✓ Emanuel Pimenta (R)
Ondřej Doule (I)	Brian Pitchford (R)
E Maria João Durão (I)	Raúl Pólit Casillas (I)
Brian Griffin (R)	Luke Roberson (R)
✓ Patrick Harkness (I)	E Tomáš Rousek (I)
E Sandra Häuplik-Meusburger (I)	✓ Brent Sherwood (R)
A. Scott Howe (R)	E Jackelynn Silva-Martinez (R)
Ogbonnaya Iheukwumere (I)	E Matthew Simon (R)
✓ Barbara Imhof (I)	David Smitherman (R)
Rohan Jaguste (I)	Joseph Torkaman (R)
Abhishek Jain (R)	✓ Sam Wald (R)
E Mark Kerr (R)	✓ David Wong (I)
Shahzad Khaligh (R)	

SATC Announcement:

Strategy & Planning

DW outlined vision for SATC & SpaceArchitect.org for the next 2 years:

- SATC: organization and support to space architecture technical sessions at the 3 major space conference remain as the TC's primary activities.
- SpaceArchitect.org: significant changes coming
 - o Partly to comply with AIAA branding requirement (details explained below),
 - o Partly to take the opportunity to make SpaceArchitect.org more accessible and to act as a bridge between our professional community and the general public who are enthusiastic about space architecture, to encourage more talented individuals to join and contribute to the development of space architecture as a discipline.

SATC & SpaceArchitect.org

- BS reported recently he was contacted by Sandy Magnus, president of AIAA with regard to SpaceArchitect.org. Our website came to her attention in the context of AIAA's recent initiative to clarify and consolidate its own brand. There are concerns that our website has been "informal" about the distinction between the SATC and SpaceArchitect.org. Some of the language used on the website may be implying SpaceArchitect.org (set up as an independent non-profit organization) is a part of SATC, and therefore part of AIAA (a distinct non-profit organization).
- BS/DW went through the SpaceArchitect.org website in September and made changes to address the issues raised, and clarify the distinction between SATC and SpaceArchitect.org. AIAA is now reviewing our revised website – it is unknown yet if the revision is sufficient to address AIAA branding requirements, and we await feedback from AIAA to confirm compliance.
- The AIAA SATC website (<https://info.aiaa.org/tac/SMG/SATC/default.aspx>) needs to be updated – previously our efforts have been focused on maintaining SpaceArchitect.org, but to the AIAA SATC website needs to be better than it currently is.
- Three action items:
 1. BS to complete negotiation with AIAA HQ about what we can and cannot put on SpaceArchitect.org.
 2. BS/DW to draft, iterate and issue a set of working guidelines so members of both organizations can continuously maintain the distinctions between SpaceArchitect.org and SATC/AIAA.
 3. Volunteers are required to be responsible for updating and maintaining the AIAA SATC website.
- Specific website edit-permission would be required in order for to perform webmaster work on AIAA SATC website – it can be setup once the volunteers are identified.
- BI queried what exact problem does AIAA have with SpaceArchitect.org in its previous iteration. BS clarified that AIAA is concerned that the language used on SpaceArchitect.org implied that SpaceArchitect.org was an arm of the AIAA. The issue is that SpaceArchitect.org is not formally controlled by the SATC. Even though in practice the same people operate both organizations, nothing requires officers of SpaceArchitect.org to be members of SATC.
- BS noted it is understandable that AIAA, as a non-profit organization, does not want another entity that does not formally report to them, to be imply AIAA branding.

- BS has communicated to AIAA the benefits of having the entity SpaceArchitect.org, i.e., it provides a much more active presence around the world than would a typical TC otherwise.
- BS understood that the core of the AIAA branding requirement is that SATC should behave according to the same rules applied to all AIAA TCs.

Open Actions

Highlight Article on Aerospace America

- DW has seen a work in progress draft of the article. The SATC task group has been liaising with the AA editors directly, and it is understood that everything is under control.
- ACTION ASAP – Maria to send final draft to DW/BS before it is completed.

SATC annual report & scoresheet

- ACTION ASAP – Inputs are required from the ICES and AIAA Space session chairs, and all Subcommittee chairs
- ACTION – DW to draft email to collect updated member information such as young professional status & AIAA member rank etc.

AIAA TC membership nominations

- Due 1st November 2016
- ACTION - It is noted that the SATC member roster currently shown on the AIAA SATC website is not current and need to be updated.

Phobos Base design competition

- DW reported the competition has been officially announced and AIAA HQ is handling its overall organisation and promotion in general.
- DW setup a competition information webpage on SpaceArchitect.org to fulfill a promise made earlier by MC on behalf of SATC during the competition RFI planning stage: (<http://SpaceArchitect.org/activities/phobosbasedesigncompetition2017>). The webpage provides links to the official AIAA competition pages, as well as links to various additional materials that are not formally AIAA-related, such as ICES.
- There were some concerns about where the award shall be given – if at ICES 2017 as currently planned, students would have to fund themselves to attend the conference – while there may be scope for AIAA to fund the student attendance at the 2017 SPACE Forum (Orlando). However, overall the group is still keen to keep the award event at ICES.
- We expect not much activity until the evaluation process ramps up next February.

HERA

- BS reported that MK is participating in the current HERA simulation. He is in Houston from 6 Sep to 27 Oct, including an isolated stretch from 19 Sep to 19 Oct (30 days inside HERA).
- ACTION - MK and JS should consider writing a space architecture specific report / paper that compares their experiences in HERA, as a feature in our 2017 conferences.

Awards

- During the 2016 Space Forum, Marc Cohen accepted the AIAA Certificate of Merit on behalf of the co-authors of the SATC 2015 professional best paper award:
 - o Cohen, Marc M.; Häuplik-Meusburger, Sandra (2015 July). What Do We Give Up and Leave Behind? (ICES-2015-056).
- Winner for the 2016 SATC student best paper award was announced in September:
 - o Arnhof, Marlies; July 2016, Design of a Human Settlement on Mars Using In-Situ Resources (ICES-2016-151),

- ACTION - Award SC to establish a more defined time schedule/process of the student paper award, in particularly taking into considerations of timing of AIAA financial year end & schedule of space conferences
- DW/BS clarified the funding for the cash prize of SATC best paper awards for the past few years have been from AIAA/SATC rather than SpaceArchitect.org. This is the reason why the best paper receipts get the AIAA Certificate of Merit as part of the AIAA award scheme.
- ACTION - Award SC to follow up on documenting the best paper selection process, as proof that the award process has been carried out in professional and unbiased manner.

Conference Update

AIAA Space Forum

DW summarized the report from MS:

- 6 sessions with 30 presentations, 1 poster session with 2 papers
- Attendance for presentation sessions averaged around 120 attendees. We had one of the largest session rooms at the conference (~165 seats). The room was completely full for 2 sessions, 75% full for one session, 50% full for two sessions, 25% full for one session.
- 11 SATC members attended
- MS to continue as POC and SA session chair for SPACE 2017 in Orlando.

ICES

GP reported:

- 4 presentation sessions with **17 presentations TBC**.
- 45-50 people average attendance
- GP and SH-M to be SA sessions co-chair again for ICES 2017.
- ACTION - GP to send out reminder for abstracts submission for ICES 2017. (deadline is 7 Nov 2016).

IAC

BS reported:

- BS & OB co-chaired session E5.1.
- 10 abstracts submitted, 6 presented, average attendance 15-30.
- Attendance number adversely impacted by Elon Musk presentation just prior, that started late and overran.
- DW noted report from JS that the Space Architecture – System Engineering cross disciplinary panel was a success, with an average attendance of around 280 and a diverse group of panelists representing different countries, genders, agencies, industries, and academia:
- <http://www.iafastro.org/events/iac/iac2016/global-networking-forum/space-architecture-and-systems-engineering-different-disciplines-or-the-same/>
- BS noted as one of the panelists it went okay in general, with room for improvements
- BI/BS noted the IAC GNF series “global networking forum” provided a platform for Space Architecture to draw bigger audience than typical technical sessions and should be considered again for the future. GNF events are awarded competitively.
- ACTION – Call for new idea/topics for GNF at IAC Adelaide.

Space Architecture Symposium

GP reported:

- The SAS was held after the last day of ICES, and was successful. Attended by around 30-40 with many new people that had not been part of our community.
- <http://SpaceArchitect.org/activities/symposium-2016/>
- 4 presentations by invited speakers in the morning, followed by 3 sessions of big table discussion/workshops with moderators in the afternoon.
- Notes collected from the sessions would be edited and published as a position paper.
- ACTION – SAS leaders to follow up on the applications and outputs from SAS.
- DW noted discussion needs to take place on when the next SAS should be held, and what format should it be. We don't want to wait another 10 years, but we don't want to rush into another one either.
- BI noted that we should focus on how to maximize the outputs from the recent SAS, of which could inform us how best to follow up the event.
- GP noted that perhaps every 2-3 years is good to go alongside ICES whenever it takes place in Europe, where we seem always able to attract big turnout.
- BS noted that the recent SAS was able to attract students who were unable to attend ICES due to costs. Their presences and inputs added value and provided interesting perspectives beyond the scope offered in ICES.
- BS considered the SAS format was good that it enables interactions not allowed by typical technical sessions, and we should be doing it more often.
- BS noted that SAS could be an annual event if it focuses on being the free student/outreach event that goes alongside one of the major space conferences.
- BS considered it is feasible for a SAS type day event following the SPACE Forum in Orlando in 2017, then another one following IAC in Bremen in 2018, and then one to follow up the SPACE/IAC mega-conference in Washington DC in 2019.
- BI emphasized the importance of utilizing the outputs of SAS strategically to create opportunities for people to work on. As currently there are few opportunities in Europe for space architects to work on human space exploration.
- Potential for SAS to get involved in creating policy and strategy for future space exploration, to go beyond the level of student projects, and to pursue follow-up in the space industry.

Conference Strategy & Planning

- BS acknowledged that some members previously raised concerns that SATC is currently supporting too many conferences each year, which dilutes our footprint, and that we should focus papers into one conference. BS does not agree: supporting 3 conferences per year is not too many because they are very different conferences performing very different roles.
- ICES is a good venue for space architect to present technical work due to its rigorous peer-review process; however, the publication is in a conference proceedings.
- The AIAA SPACE Forum is essentially a “dark-suit,” aerospace industry middle management conference. It is a good venue for reaching out to this demographic to communicate the importance of space architecture. As an AIAA TC we are obligated to support it. The papers are not peer reviewed; this year several were of poor quality. Also, despite the session statistics, many of the session papers were not about “space architecture.” AIAA papers are logged into the AIAA paper system, and published in the conference proceedings.
- BS suggested that AIAA conferences should peer review submitted papers because without this, its reputation is being eroded.
- BS suggested investigating other AIAA conference such as the Sci-Tech conference in January to see if one might be better suited to the SATC's annual purpose. [Post telecom, BI researched the paper statistics from Sci Tech and we concluded that this conference, albeit at a better time of year to spread out our presence, is only partly about space and is NOT a good venue for SATC.]

- IAC has mixed paper quality due to no peer review, but it is the dominant global space conference. It is also the only conference which agency-head level executives attend. Therefore it holds value for our community. The best papers from each session are considered by *Acta Astronautica*, a peer-reviewed journal sponsored by the International Academy of Astronautics that is the most formal publication venue among our three conferences.
- BS stated that AIAA SPACE is SATC's most urgent priority for improvement, and commented that it does our community no good to associate "space architecture sessions" with poor quality papers.
- BS noted MS has been acting as the interface between AIAA SPACE and SATC, but needs help and senior-level backup in organizing genuine space architecture sessions, so that the space architecture identity does not get subsumed into the Space Exploration TC, which is a dominant committee at AIAA SPACE. SETC-SATC collaborations need to be improved.
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- GP queried if SATC could implement a peer-review process just for our sessions at SPACE; BS responded that this would only be possible for a dedicated space architecture session, within the track of related sessions.
- BS suggested MS to propose to SETC collaboratively that SATC handle all the abstracts related to habitation for them, as we are AIAA's experts in space architecture. Let us review and organize them into coherent sessions of themes and structures. Essentially it would be SATC doing these sessions for SETC – BS considered this a more practical less confrontational approach for working with other AIAA TCs.
- BI observed the value of presenting space architecture papers strategically in non-space architecture sessions, to expose the topic to as many other AIAA people as possible.
- BI/BS noted the AIAA SPACE's Forum 360 program could be a good format, similar to the IAC GNF series. They are held at time slots that do not compete with technical sessions, which yields a bigger audience.

Other Items

Web & mailing list hosting

- DW noted that as our SpaceArchitect.org mailing list continues to grow steadily, we are approaching the maximum email processing capacity allocated by our web server.
- ACTION – DW to call out to wider community to seek advises and ideas to tackle the capacity problem.

Attendance Requirement

- It was noted that more SATC members should actively participate in SATC meetings and telecons.
- It was suggested that an attendance record to be published alongside SATC events, and to link attendance to some percentage of SATC events as one of the mandatory requirements for SATC members.
- EP noted the difficulties for independent, international members to participate in-person meetings, EP emphasized that it should be the collaborations and contributions in work that should be counted instead of just attendance.
- DW noted that it was appreciated that independent, international members may have difficulties to attend in-person meetings, and that it is one reason why SATC organizes regular meetings in telecon format, to enable participation by international members.
- [Post telecon note – the official AIAA TC rulebook states regarding membership:

- *AIAA official Membership on a TC signifies that one is a volunteer agent for one’s professional sector and organization. In accordance with the written endorsement from the nominee’s management or parent organization, it is understood that each appointed member should travel nominally twice per year to participate in meetings and devote time to committee business with parent organization funding. International members may be unable to travel twice yearly due to the cost of travel and should be excused from this expectation if appropriate.]*
- BS noted that out of the large membership on paper (37), currently only a small fraction actively engages in SATC events and activities.
- DW noted that measures have already been taken to tackle inactive members in past couple of years: individuals not participating in any events over the last couple of years have been individually warned of their inactivity and put on notice.
- GP noted that the attendance requirement should be stated more prominently rather than just buried within the minutes.
- BS noted that the participation issue is deep-seated and that SATC needs to seriously examine what value we add to the community of space architects; that will be the key to getting more people active.
- ACTION – BS/DW to draft new guidelines for members regarding participating SATC events.
- ACTION – conference chairs to provide information on SATC member attendance and participation in their respective events, along with presentation statistics.

Online Journal

- EP suggested an online space architecture publication or journal might be a good collaboration project for the community. DW noted of his previous involvement in creating The Orbit – the free space architecture community newsletter – and his ongoing work with OD on the Orbit magazine, a paid online space architecture magazine. DW highlighted some of the logistics issues that have been causing complications and delays in trying to carry out such initiatives in practice. EP suggested more student participation may help.

Selected action Items (Completed items to be deleted in next minutes)

Item	Description	Lead	Status	Deadline
AIAA compliance	Complete negotiation with Sandy Magnus/AIAA HQ about what we can and cannot put on SpaceArchitect.org	Brent	ongoing	ASAP
AIAA compliance	Draft, iterate and issue a set of working guidelines to clarify SpaceArchitect.org relative to SATC/AIAA	David/Brent		ASAP
AIAA SATC website	Call for volunteers to update and maintaining the AIAA SATC website	David/Brent		ASAP
SATC Article on Aerospace America	Send article final draft to DW/BS for final review before it is submitted	Maria		ASAP
Information for SATC Annual Report	Conference & SC reports from conference & SC chairs, including SATC member attendance	All conference chairs and SC chairs		ASAP
Information for SATC Annual Report	Draft email to collect updated member information such as young professional status & AIAA member rank etc	David		ASAP
SATC	Liaise with AIAA HQ to update SATC	David/Brent		31Jan17

membership nominations	membership roster			
HERA	Consider writing a space architecture specific report / paper comparing their experiences in HERA, to feature in 2017 conferences	Mark Kerr Jackelyne Silva		TBD
Awards	Establish a more defined time schedule/process of the student paper award, taking into consideration timing of AIAA financial year end and schedule of space conferences	Awards SC		ASAP
Awards	Document the best paper selection process, as proof that the award process has been carried out in professional and unbiased manner	Awards SC		ASAP
ICES	Send out reminder for abstracts submission for ICES 2017 – 7Nov2016	Georgi Petrov		ASAP
IAC	Call for new ideas/topics for GNF in IAC 2017 Adelaide	IAC leads		ASAP
SAS	Follow up on the outputs from SAS	SAS leads		TBD
Mail hosting	Call out to wider community to seek advice and ideas to tackle the capacity problem	David		ASAP
SATC activities attendance	Draft new guidelines	David/Brent		31Jan17
SA school list – draft for website	Generate publishable list of colleges and schools providing space architecture-relevant education	Olga (Marc's list)	Ongoing	TBD
Online SATC outreach brochure update	SATC SA online brochure requires update (May latest) – SATC members who wish to participate should submit inputs ASAP	Ondrej, David Contribution from SATC	Ongoing	TBD
Space Construction Book	Report on Comprehensive space construction book for space system architects	Patrick	Ongoing at 5%	TBD

Next Meeting

- **Next virtual meeting/ telecon – TBD**
- Action items updated on **16 Oct 2016**
- Minutes prepared by David Wong **15Oct16**, edited by Brent Sherwood **16Oct16**
- Minutes reviewed / approved by all participants by **21 OCT, 2016**
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- Minutes distributed to members@SpaceArchitect.org **by 22 OCT, 2016**