

# Meeting Minutes SATC Telecon, 24 March 2017

Meeting: 20:00 UTC

Chair: David Wong Vice-chair: Brent Sherwood

Attendance:

Current total of SATC members: 38

Invited: all

Participating members (18%): 7, pre-coordinated absence (E) 6

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





## Agenda:

- Announcement
- Update on conference sessions planning
- Follow up on actions raised from previous telecon

#### **Announcement:**

- SATC Membership 3 new members joining and 4 members leaving SATC from 1 May 2017.
- SATC SC reform major restructure required. More details to follow, opinions and suggestions welcomed.
- Emanuel Pimenta: physical meeting important, suggested Lisbon as a potential place to meet one time a year. Had local connections that could be utilized if there are interests among committee.
- Matthew Simons: a SATC meeting is usually co-locate & held at the same time as AIAA Space conference in the past few years. Getting international members to join proved to be challenging, need more coordination & supports.

#### **ICES**

- 15 abstracts reviewed. 5 have since been withdrawn for various reasons by the authors.
- received 10 manuscripts and are in the process if sending them out for review via EasyChair.
- Tony Faddoul previously called for panelist & moderator for a panel about Lunar missions TF noted that these are all handled and sorted.
- Georgi Petrov/Sandra Haulplik Meusburger to follow up on how SATC could become an official co-organizer of ICES

## ACTION: All – volunteers to assist the manuscript review process

## **AIAA Space Forum**

- Matt Simon, Sam Wald & Ondrej Doule lead the abstract review process.
- Human space
- 46 abstracts, not far behind, help received,
- Space colonization committee talk, which goes to poster, next week,
- More rigorous process than previously
- Proposed earlier submission of manuscript not official procedure, but would try to implement
- An estimate of 30 papers would be presented
- Suggests to arrange a SATC Meeting during the conference.
- Details tbc 1 month early?
- The abstract evaluation to be based on 5 criteria: Technical Merit, Innovation, Applicability to Space Architecture and/or Space Colonization, Relevance to the next 50 years of human spaceflight, and track record of the author.
- MS to follow up with the Technical Program Chair on options for an early paper submittal and offline paper review process, which we will use to adjust sessions, placing less papers of less merit in poster sessions.
- Preliminary discussion of Ondrej Doule organizing a potential Space Architecture Workshop to follow up on the main conference.
- FIT 30 min Orlando, OD to follow up on details





#### IAC

TBC

## **Conference Strategy**

• ACTION – SAS leadership to initiate discussion and actions to follow up on previous SAS, and to start planning for next SAS (provisionally planned for Washington DC, 2019).

#### **Awards**

- Winner of 2016 SATC Best Professional Paper Award goes to "Mars Ice House: Using the physics of phase change in 3D printing a habitat with H2O" (ICES-2016-622) by Michael Morris, Christina Ciardullo, Kelsey Lents, Melodie Yashar, of SEArch, and Jeffrey Montes, Ostap Rudakevych, Masa Sono, and Yuki Sono, of Jet Portal & Clouds Architecture Office, presented at ICES 2016.
- Runner-Up paper was, "An Artificial-Gravity Space-Settlement Ground-Analogue Design Concept" by Gregory A. Dorais, of NASA AMES Research Center, presented at AIAA SPACE 2016.
- New Award SC Chair to succeed Mark Kerr
- Renee Matossian & David Wong to liaise with AIAA regarding podium event & Certificate of Merit for the Best paper awards

#### Outreach

- Patrick Harkness was invited to present on the subject of space architecture on behalf of SATC at "Manifest Destiny: An Interdisciplinary Forum on Mars Colonization", a space outreach event that took place at the University of Edinburgh, United Kingdom, 22-24 February 2017.
- David Wong updated Spacearchitect.org members directory & uploaded posts about recent events
- More volunteer needed to help the website upkeep.
- Spacearchitect.org Facebook page has reached 1200 Likes 40% increase compared to a year ago, 14% in the past 3 months.
- Steady increase of SA related enquiries that need to be addressed urgently.
- ACTION Outreach & Education SC chair (TR/PH) to follow up and work together and come up with a plan dealing with the SA related enquires

#### **Brochure update**

• <u>ACTION - Ondrej to reconcile blurring between SATC and SpaceArchitect.org within the</u> "How to become a space architect" brochure, based on items to be identified by DW.

# SpaceArchitect.org

Needs a Treasurer, who will be an officer of the corporation.

### **Other Discussions**

- TF noted he is giving a space architecture presentation at the Stamford Observatory, CT near NYC.
- Student from Hawaii HISEAS year long confinement study, interested in doing PhD in Space Architecture, suggested get connected with SATC
- NASA human workshop





#### **Post Telecon Notes**

- Jackelynne Silva has been working with her local AIAA Houston Section, and is preparing for a space architecture track, detailed as below:
  - The AIAA Houston Section in coordination with the Human Systems Integration Employee Resource Group at JSC is organizing a Technical Symposium, in which Space Architecture will have its own track. We included Human Factors as another topic to also attract those papers but eventually they will form part of Space Architecture. We hope to get abstract submissions from the closest school representing SA, SICSA and others. Following on the interest on learning about the similarities and differences between SA and Systems Engineering (panel at IAC), a blend of them process wise would be Human Systems Integration. Here is the link to the call for abstracts:
  - o <a href="http://www.aiaahouston.org/2017-annual-technical-symposium/">http://www.aiaahouston.org/2017-annual-technical-symposium/</a>
- Marc Cohen reported progress on the Phobos Base AIAA Student Design Competition: The RFP was posted and went out on schedule but was not complete in that the SIAA staff apparently omitted mention of the prizes by mistake. Never the less, five teams signed up: two undergraduate and three graduate. We have received two questions from the participants, which with the answers, we should post on spacearchitect.org.





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

Item	Description	Lead	Status	Deadline
AIAA SATC	Call for volunteers to update and	David/Brent	Ongoing	
website	maintaining the AIAA SATC website			
SATC	Liaise with AIAA HQ to update SATC	David/Brent	done	31Jan17
membership	membership roster			
nominations				
HERA	Consider writing a space architecture	Mark Kerr		TBD
	specific report / paper comparing their	Jackelynne Silva		
	experiences in HERA, to feature in 2017			
	conferences			
Awards	liaise with AIAA regarding podium event	Renee Matossian	ongoing	May
	& Certificate of Merit for the Best paper	David Wong		2017
	awards			
Template for	come up with a modular and	Tomas Rousek	ongoing	ASAP
dealing with SA	standardized template/protocol to deal	Patrick Harkness		
enquiries	with SA related enquires			
ICES	Volunteers required to assist in ICES	ALL	ongoing	ASAP
	manuscript reviews			
ICES	Identify path to get SATC to become	GP/SHM	ongoing	TBD
	official co-organizer of ICES, as other			
	AIAA TCs.			
IAC	Call for new ideas/topics for GNF in IAC	IAC leads	ongoing	TBD
	2017 Adelaide			
SAS	Follow up on the outputs from SAS	SAS leads	ongoing	TBD
SAS	initiate preliminary planning for SAS	SAS leads	ongoing	TBD
Mail hosting	Call out to wider community to seek	David	ongoing	
	advice and ideas to tackle the capacity			
	problem			
SA school list –	Generate publishable list of colleges	Olga (Marc's list)	Ongoing	TBD
draft for website	and schools providing space			
	architecture-relevant education			
Online SATC	SATC SA online brochure requires	Ondrej, David	Ongoing	TBD
outreach	update (May latest) – SATC members	Contribution from		
brochure update	who wish to participate should submit	SATC		
	inputs ASAP			
Space	Restart/refocus space construction	Sungwoo	Ongoing	TBD
Construction	book for space system architects	Construction SC	at 5%	
Book				

# **Next Meeting**

- Next virtual meeting/ telecon TBD
- Action items updated on 27 April 2017
- Minutes prepared by David Wong
- Minutes reviewed / approved by all participants by **05 May, 2017**
- Minutes distributed to <a href="mailto:members@SpaceArchitect.org">members@SpaceArchitect.org</a> by **06 May, 2017**

