

### **Minutes of Meeting**

Time & Date:

• Zoom Meeting: https://aiaa.zoom.us/j/95963441809?pwd=TjdUODZQSndiQkI2amlRaEdSNEo5dz09

7:30pm, Thursday, Sept 24, 2020 (Next meeting is scheduled on Oct 22<sup>nd</sup>)

- or call: 877-853-5257 US Toll-free or 888-475-4499 US Toll-free
- Meeting ID: 959 6344 1809 / Passcode: 910506

AIAA-NE online information:

- LinkedIn: https://www.linkedin.com/company/aiaa-new-england
- Website: <u>https://engage.aiaa.org/newengland/home</u>

Attendances:Umanga Balasuriya, John Blandino, Qiana Curcuru, Hiro Endo, David Guo, Endri Lesha, Bruce<br/>Mackenzie, Jeff Mobed, Medhi Mortazavi, Albert Moussa, Allison Tsay, Krystina Waters,<br/>Charlie Wilson, Moe Z Win, Gary Wolfe<br/>Joe Vornehm, Scott Stadler

# 1 Opening Remarks & Administration (Charlie – 10 minutes)

- Welcome new volunteers: Krystina, Allison, Qiana Welcome back Jeff and Bruce!
  - Qiana is a member of MIT LL Already actively supporting us with Zoom and leading K-12 mentoring initiatives.
  - Krystina (Krys) is a WPI AIAA student rep and the WoAA liaison to the council. She is also assigned to lead the WPI Jet engine team.
  - Allison Tsay to our council activities. She is one of our members at Mercury Systems.
  - Ken Knopp has moved to the FAA here from Washington. He is very active in Public Policy, joining Phil Hattis and Kevin Duda in that interest.
  - We welcome SKAI as the newest AIAA corporate member. SKAI will describe the company and scientific aspirations in an upcoming zoom.
- Tonight's special priorities
  - Select future zoom presentations from our extensive list.
  - Gary, Allison & Umanga reporting on the effort to understand what AIAA has done in Green Engineering.
  - After 8 pm we will discuss major updates to our 20/21 budget.
- We are planning to start completing the 20/21 chairman's annual reports when the form arrives



## 2. Reports by Committee Chairs & Volunteers:

- Green Engineering (Gary/Umanga/Allison)
  - Spurred by the addition of SKAI as a corporate member, Gary has led an effort to understand what AIAA has done in Green Engineering, what SKAI is offering, and H2 fuel cells. The team includes Umanga and Allison.
    - Recent climate change activity at AIAA (Umanga)
    - SKAI Overview Hydrogen E-VTOL (Gary)
    - Current state-of-the-art and recent breakthroughs H2 Fuel Cells (Allison)
    - For more info see the team presentation on the section web site: "2020 09 24 GreenConversation\_AIAA\_SKAI\_HydroFuel.pdf"
  - Great research work A very interesting area to get involved and expand further
  - Short online courses available on Green Engineering topics.
  - Try to invite someone from the Sustainable Aviation work to talk on Zoom? Or ask someone to join us at the meeting?
  - Potential future opportunity for Zoom webinar or facility tour (in person or virtual)?
- Zoom Webinars
  - Ian Dargin's presentation on September 16th was extremely interesting. It shows what one person with dedication and technical strength can do. Ian had an attendance of 23. Thank you Qiana for hosting Ian and Hiro for training your group of hosts and making the arrangements. The Zoom schedule is set through November with Professor Bertschinger (MIT and APS) on October 14 and Dr. Laura Forczyk (NASA and her company, Astralytical) on November 17.
  - Zoom Webinar schedule for remaining 2020:
    - 10/14: Prof. Ed Bertschinger -<u>TRANSFORMING THE CULTURE IN PHYSICAL SCIENCES AND</u> ENGINEERING - A 10-YEAR PLAN FROM APS-IDEA (Endri)
    - 11/27: Dr. Laura Forczyk "YOUR FUTURE IN THE SPACE INDUSTRY" (Endri)
    - Three candidates for Dec webinar:
      - Constantine S: "3D metal & composite printing / Additive manufacturing technologies" (Gary/Umaga)
      - Bruce McKenzie: "Living on Mars" (Mehdi)
      - Elad Kivelvitch: "Artificial Intelligent Systems AIAA TC" (Gary)
    - For more info on the Zoom schedule & presenters (Click here)
- STEM for pre-college students (Endri)
  - Sent requests for K-12 STEM project funding to our 84 Educator Associates and is forming an evaluation team. In them, we describe our new STEM grant programs for typical and for underresourced K-12 schools.
    - Received 2 replies so far.
    - Planning to sponsor 20 proposals at \$250 each.
  - The member count per state is MA 38, ME 12, NH 27, RI 2, VT 5. Endri will send out offers to high school EAs for mentoring in coordination with Qiana.
  - We hope to increase our number of Educator Associates by 10%. Charts from the Structural Dynamic TC on their yearly STEM outreach are attached as something we could aspire to.
  - Former chair Jeffrey Mobed is assisting the team Currently working on defining the criteria for selecting the winners...
  - Actions:
    - Qiana would like to forward the application invite to her contacts Endri to send Qiana a copy of the email & the form.
    - Find out if we can pay forward. We believe it is OK to do so for the amount below \$600, otherwise, it can be subject to tax complications



- Mentoring (Qiana)
  - We plan to reach out again to our Educator Associates to access opportunities for mentoring to high school students. She has been in contact with Dan Cardon at Gilford High School.
  - David Guo has volunteered to give wind tunnel demos using his new tunnel lab at SNHU for this effort. See the attached close-up of the wind tunnel.
  - Qiana is planning a panel discussion with high school students Looking for volunteers to be the panelists!
  - Actions:
    - Hiro to put the advertisement/email to recruit panelist for Qiana.
- University Outreach (Mehdi)
  - Proposal sent to 9 student branches. BU, MIT, NU, SNHU, UML, UMaine, UVt, WIT, WPI 3 responded so far. Waiting for more
  - The invitation is now out. \$300-700 funding packages on offer for design, build & fly projects
- Diversity, Equity and Inclusion (Charlie)
  - Working on developing a relationship with the National Technical Association and the National Society of Black Engineers. These organizations may have members locally we could contact.
  - WoAA Rosemary reached out to Krys (WPI) She is now the liaison between AIAA-NE and WoAA.
  - Webinar by Prof. Ed Betsinger is coming up on 10/14<sup>th</sup> Presentations by Prof Bertschinger and Sheila Widnal in 2016 and 2017, respectively, are attached, for reference.
  - Jandria Alexander, Chair of the AIAA Diversity and Inclusion Working Group was part of a zoom last July: ASCEND Webinar: Diversity, Equity, and Inclusion in the Aerospace Community and Workforce, Part I which is recommended.
- Women of Aero-Astro (Rosemary & Elaine)
  - We are planning a zoom get-together next month with them and this council list. WoAA is interested in collaborating with AIAA-NE.
  - We are invited to view a September 6th zoom talk: WoAA D&I Panel Allyship in Aerospace at https://www.youtube.com/watch?time\_continue=4&v=MokmXs\_gyWg&feature=emb\_title
- Jet Engine Project: update (Kris, Hiro, John)
  - Welcome Krys (WPI) She is one of the three leaders for the project. We now have 10 students who started to work on the project.
  - Currently preparing a funding application. Once drafted John & the academic team will review and submit the proposal to Medhi.
  - Krys and her team are always welcome to contact Hiro at any time for advice.
- Section Website & Linkedin (Hiro)
  - Website (https://engage.aiaa.org/newengland/home)
    - Cleaned up the council site and started to post announcements, event notices, discussions.
      - Working on setting up a K-12 Educators page and the Committee pages for task force leaders talking to Luci Blodgett. Work is in progress.
  - o Linkedin (https://www.linkedin.com/company/aiaa-new-england)
    - Started to post-event notifications and Zoom session videos.
    - Good traffic increase in Aug/Sep after posting webinar videos and invitations (~450).
    - Looking into increasing the traffic and adding more followers.
- Public Policy (Phil and Ken)
  - No update.
- Professional activities:
  - o Red Sox, Collings Foundation, and Pratt and Whitney Hanger Museum Tours postponed until 2021
- Volunteers needed for activities below:
  - Understanding optimum techniques for DEI.



- Mentoring Panelists wanted (Qiana).
- Picking an AIAA Distinguished Lecture (<u>https://www.aiaa.org/get-involved/regions-</u> sections/distinguished-lecture-program)
- Honors & Awards Committee lead.

#### 3. Old Business

- "Remove Before Flight" tag purchase no report
- AIAA property 1x Table, 20x Water Bottles Currently they are stored in Scott's cellar.

#### 4. New Business

- Budget:
  - Develop a modified budget as things start happening. The budget submitted last May has expenditures of \$7,250 which is less than \$10,654 available if we include all of the funds leftover from last year. Proposed updates are described – see excel spreadsheet
  - Firm proposals to date:
    - WPI Jet engine work (\$2100).
    - Buying Dr. Forczyk's book (x10) for < \$200</li>

#### 5. Next Council meeting

• October 22 at 7:30. It will be quick because of the planned presidential debate at 9 pm and will emphasize reporting.