

**Commonwealth of Virginia**  
**Aerospace Advisory Council (AAC)**  
Virtual Meeting—via Zoom  
Richmond, VA 23219  
8 October 2020: 9- 11am

**I. Call to Order & AAC Welcome - Director Mark K. Flynn, Director, VA DOAV-- 9:02 a.m.**

Director Flynn explained the purpose of the Aerospace Advisory Council. The purpose of the Council shall be to advise the Governor, the Joint Commission on Technology and Science, and the Secretaries of Commerce and Trade, and Education on policy and funding priorities with respect to aerospace economic development, workforce training, educational programs, and educational curriculum. The Council shall suggest strategies to attract and promote the development of existing aerospace companies, new aerospace companies, federal aerospace agencies, aerospace research, venture and human capital, and applied research and technology that contribute to the growth and development of the aerospace sector in the Commonwealth.

He noted that it is part of the executive branch of Virginia government and is not regulatory.

**II. Introductions - Director Flynn**

Moved to later in the agenda.

**III. Nominations for AAC Chair:**

Senator Linwood Lewis nominated Delegate Mark Sickles for AAC chairman.

Delegate Shelly Simonds seconded the nomination.

There being no further nominations, a vote was taken and Delegate Sickles was elected.

Nominations for AAC Vice Chair:

Delegate Shelly Simonds nominated Senator Linwood Lewis for AAC vice chairman.

Delegate Mark Sickles seconded the nomination.

There being no further nominations, a vote was taken and Senator Lewis was elected.

**IV. Approval of Minutes: 21 August 2019 Meeting - Director Flynn**

Review of minutes – Director Flynn

There were no corrections made to the minutes.

Delegate Simonds make a motion to accept the minutes and they were approved.

**V. Summer Aerospace & Aviation Program During COVID-19: Mary Sandy, Virginia Space Grant Consortium**

The Virginia Space Grant Consortium took most of their programs virtual this past summer. They strove to make the experience as real as possible. Feedback received from students was very positive.

The Pathways Flight Academies included an online ground school taught by Averett University with assistance by the ODU distance learning team. The 30 students in the program then flew 10 hours at flight schools (6 of them) near their homes. Most of the students have completed the program with approximately 1/6 of them soloing (versus 1/3 last year). The fact that students weren't able to fly with each other (back seat learning) and that some flew more sophisticated aircraft this year may have had an impact. Still, the program was deemed very successful.

The Virginia Space Scholars program with ODU and Wallops was held virtually.

The Virginia Aerospace Science and Technology Scholars designed a human mission to Mars.

The Virginia Earth System Science Scholars received 5 college credits.

The virtual closing ceremonies allowed an amazing amount of participation this year from officials.

The BLAST program was not able to take place as this program was more dependent on being based on college campuses.

The STEM Takes Flight program provided research experiences for 24 individuals at Langley and 2 at Wallops.

CSIIP, which places interns, continues to expand.

Budget Issues:

VESSS was passed but removed from the Governor's scaled down budget.

BLAST funding would require the loss of 40 student slots under the current funding plan.

GEOTED-UAS received a new NSF Award for training and student service learning projects.

A UAS Workforce Needs Survey Report was conducted (with funding from Go Virginia). Mary Sandy would like to discuss it at the next meeting.

Mary asked Delegate Sickles if he had any budget news from the special session. He replied that, because of changes to the session agenda, the budget was not taken up. Budget changes are in committee now. The Governor is preparing an interim budget. Another budget estimate is due in November. The new revised budget for the rest of FY21 and FY22 is due Dec. 16.

Introductions of New Legislative Members:

Delegate Amanda Batten represents 96 district.

Delegate Shelly Simonds represents 94 district. Note: Her family is associated with NASA Langley.

Senator Lynwood Lewis represents 6 Senate District. He is glad to rejoin the Council.

Introductions of new members.

Introductions of returning members.

## **VI. VA Space Update Dale Nash, CEO and Executive Director, Virginia Commercial Space Flight Authority**

This is the 75th year of the Wallops Flight Facility and 25<sup>th</sup> year of VA Space. Dale Nash showed a photo of the recent Minotaur 4 launch.

Pad 0A - NG-13 launched on February 15<sup>th</sup>. Throughout COVID the facility has kept missions going.

NG-14 launched on Oct. 2<sup>nd</sup>. It had a science payload, carried 8,000 lbs. of cargo on Cygnus, including a new zero G toilet, a sharksat mounted on the outside of Cygnus, and the Saffire-V experiment about how fires propagate in zero G.

VA Space now owns three large pads, a drone runway and buildings. They can now turn around a rocket in 24 hours to launch after a scrub (24 hour late load).

MARS Pad 0B - Minotaur Launch vehicles – Launched a Minotaur 4 in July.

MARS Pad 0C/LC2 - Launch site for Rocket Lab's Electron LV, payloads up to 660 lbs. The Capstone lunar mission is planned for early 2021. The rocket uses liquid propellant. Twelve missions a year (possibly more) may take place.

The MARS Payload Processing Facility (PPF) allows mission processing for multiple payloads (\$31.5 million dollar facility).

Integration and Control Facility Construction in Wallops Research Park is leased to Rocket Lab. It has integration space for multiple Electron Launch Vehicles – occupancy is planned for Oct. 2020.

MARS UxS Test Range and UAS Airfield

Used by US Navy Fire Scouts; Land, sea, and air operations, including non-combatant evacuation operations.

Air Test & Evaluation Squadron Two Four (UX-24) operations

Contracts exist for up to a year out.

In 2020 Wallops had 3 Interns from Eastern Shore Community College; 2 have since started working for them part-time.

## **VII. C21AS Program Update - Jon Green, Virginia Tech**

The Commonwealth Center for Innovation in Autonomous Systems is a partnership between VA Tech and Old Dominion University. It is a 3 year program to support technology transition. The program moved to CIT on Oct. 1 2020.

Its functions are to provide pre-seed grants and wrap around support to ventures (mentoring, entrepreneurial expertise, technical expertise).

Involving 3 types of projects:

1. New venture
2. Small Virginia business
3. University team that seeks to license university intellectual property with a company headquartered in VA.

They are in the process of selecting year 2 projects and are looking for additional participants for the program.

## **VIII. Virginia Institute for Spaceflight & Autonomy (VISA) - Dr. David E. Bowles**

Virginia Institute for Spaceflight and Autonomy (VISA).

Located on the Eastern Shore, VISA is chartered to grow the entrepreneurial ecosystems for space flight and autonomy. Virginia is unique – launch pads, 2 NASA facilities, a fantastic university system and tremendous companies and other assets.

They have produced a website: [visaatodu.org](http://visaatodu.org)

An Informal Advisory Board has been selected.  
They are associated with the Go VA Eastern Shore Hydro drone Project (approved).  
A VISA Announcement of Opportunity has awarded 3 contracts.

Two data programs include the Virginia Small Sat Data Consortium (VSDC) and the VA Open Data Cube.  
[vadatahub.org](http://vadatahub.org)  
[Data4va.org](http://Data4va.org)

They thanked Dale Nash for providing two slots on NG-15 – 2 slots.

Dr. Bowles discussed an offshore wind facilities proposal for a project that has just gone in.

They are also interested in education and workforce development projects.

VISA wants to:

- Expand small sat collaborations
- Expand autonomous systems
- Grow Tech Transfer
- Continue Educational/workforce
- Strengthen aerospace business relationships

#### **IX. MITRE & VA University Innovation Exchange (UIX) Space Initiative - Dr. David E. Bowles**

The MITRE - Virginia University Innovation Exchange (UIX).  
ODU, UVA, VT, George Mason, VSGC, and MITRE are partners.

This group seeks to leverage multiple information resources for greater impact and serve as a platform for satellite data, etc. to put them in a useable format.

MITRE UIX Testbed Vision and Problems to be addressed include university projects including flooding rivers, health, transportation, etc.

Development of a system of systems architectures that are based on existing systems, supplemented with additional sources.

Identification collection fusion and sharing of relevant data from various sources to enable effective decisions.

They're looking for a suitable pilot project to demonstrate feasibility.

#### **X. VA is for Space Lovers Update - Staci Martin, Partnership Marketing Development Specialist, VA Tourism Corp.**

- Approved Virginia is for Space Lovers - [VATC.org](http://VATC.org)
- Prepared a landing page – [Space Tourism](http://Space Tourism)
- Driving Tours (400 miles or less – the new normal)
- Combining with other activities
- 5 year plan (now includes a recovery plan)

Recovery grants were awarded in August; second round in October.  
VTC has applied for and hopes to receive more funding for recovery grants.

**XI. VA Aerospace Business Association - Jack Schlank, President, VASBA (omitted)**

**XII. NASA Langley Update - Donna Lawson/Clayton Turner, Director**

Director Turner explained the agency's COVID-19 Response.

It is now operating at Level 3 with mandatory teleworking.

Milestones:

- Tempo ready to fly in 2020
- Space X demo 3 launch
- MARS Perseverance and Ingenuity Launch

Construction of the 170,000 sq. ft. Measurement Systems Lab is nearly complete.

Current Work: Advanced Air Mobility (will be the next wind tunnel), Earth Science, Artemis Program, and Human Space Flight.

He showed a chart of the impact of Langley and one of the economic impact.

**XIII. NASA Wallops Update - Dave Pierce, NASA Wallops Flight Facility**

It's a very exciting time at Wallops Flight Facility. Despite COVID challenges, the team continues to lead expansion of the NASA portfolio.

Completion of ½ dozen missions and 400 aircraft hours since last fall.

New orbital and suborbital capabilities.

He thanked all the front line employees at Wallops. Most are teleworking (about 25% are returning to the site).

Projects include:

- DEMO-2, tracking and telemetry
- Parachute testing for the spacecraft
- Perseverance Support
- Us Air Force Guardian Shield – Sept. 20-25

**XIV. DOAV Brief (ICON, legislation, VA- FIX) - Director Flynn**

VA- FIX (Dr. Amber L. Wilson) 2018 UAS Work Group –

Virginia has a #1 ranking from Business Facilities Magazine.

VAFIX is a sharing platform for state and local governments.

ICON A-5 (John Campbell) is a light sport amphibian (non-flying) aircraft that will be travelling to schools around the Commonwealth to support aviation education and workforce development. Delegate Shelly Simonds would like to connect offline to discuss the program in more detail.

Doug Stanley – NASA, NIA Aerospace Days – Asked about the status of the annual VABA reception. Has it been decided whether this will take place?

Mark Flynn replied that VABA is moving forward tentatively for the reception during the short session.

It was noted that the structure of the session itself is under discussion (30 days versus 6 weeks for the short session).

Mary Sandy shared that an Informal Aerospace Working Group Meeting would be coming up soon.

**XV. New Business - Director Flynn**

**XVI. Meetings Dates for 2020 & 2021: Newly elected Chairman/Chairwoman**

- A. 5 January 2021, 9- 11am— Virtual; tentative
- B. 6 April 2021, 9- 11am— Virtual; tentative
- C. 6 July 2021, 9- 11am— Virtual; tentative
- D. 5 October 2021, 9- 11am— Virtual; tentative

**XVII. Adjournment Newly elected Chairman— Delegate Sickles**

*The meeting was adjourned at 11:00 a.m.*