

54th ICASC meeting minutes  
Virtual Microsoft Teams Meeting  
March 23rd, 2021

**ICASC Members Present**

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**Executive Secretariat**

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**ICASC members absent**

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**Guest**

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## 1. Opening remarks Joe Doubleday

## 2. Member Updates

- a. Floyd Badsky - FAA Flight Inspection slowed at the initial onset of the pandemic to allow us to establish pandemic protocols (cleaning, masking, quarantine, etc.). All NAVAIDs throughout the US and US interests worldwide have been maintained throughout the pandemic. Protocols make our work more challenging but we still managed to flight inspect Antarctica and navigated the protocols required for the island nation of New Zealand, our staging location.  
We are in the process of acquiring an additional four Challenger 605 or 650 aircraft to replace our aging Lear 60 and Challenger 601 fleet. The added Challenger aircraft will be equipped with the next generation of flight inspection system that includes updated software, new television camera positioning system, and an integrated laser altimeter.
- b. Fabrizio Maracich - we have been active within the ICAO IFPP during the pandemic through virtual meetings. This allowed for continuation of the normal workflow, even though the output pace has been reduced. We have just presented a working paper (WP) on evolving the RNP-AR concept and it was well received. Further study on the matter has been granted by the plenary session and the WP is now coordinated as necessary with other ICAO panels and study groups for further discussion. (WP is attached for the benefit of ICASC members).  
ICAO has formed a new panel, called PLTP, Pilot Licensing and Training panel. This panel may, in the future, discuss about certification of FVPs (Flight Validation Pilots). There is already a placeholder for FVP training and certification requirements in the ICAO PANS-TRG, and while for the time being these requirements will remain within the ICAO DOC 9906 volume 6, in the future this may change. EASA in Europe is already in the rulemaking process to provide specific regulatory framework in this domain, to be published in 2022. It might be of interest for this Committee to consider appointing a member or an advisor to this panel. The ICASC members are invited to check if there is someone from their respective States that has been appointed as a member of this panel for coordination purposes. Liaising with this panel can be important.  
On the ENAV side, we are actively working on GBAS development and we are involved in drone experiments with the purpose of complementing flight inspection in the ground measurement domain. In 2020 and 2021 we have seen a clear increase in the flight time related to flight validation, due to the continuing effort to rationalize the airspace.
- c. Florence Jacolot - Flight Inspection annual program back to normal in France, 2021 schedule is almost 100% full booked, but more difficult in our overseas territories (New Caledonia, French Polynesia). 14 days strict quarantine for the flight inspector when he arrived to the island and before he could meet the Australian FI crew. All nav aids were inspected without any performance out of tolerance.  
Due to the loss of incomes resulting from the dramatic traffic reduction (-80% in 2020), DSNR restricts investment to the ongoing navigation systems modernization programs,

and to employees salaries (DGAC had to contract loans of more than 2 billions from the government).

Hopefully we could get some money to replace the 2 engines of our KingAir Beech200 from 2010, as it turned out at engine inspection that too many parts of the engines were to be replaced.

As of March 26 2021, 3.6% of the French population has been vaccinated (2 doses, 10% 1 dose), mostly all vulnerable people (elderly over 75 first, medical personal, 70, then in April over 50 years old with comorbidities and “essential” workers).

Rule is now telework 100% or 1 day at office max if the job is suitable for telework.

- d. Asbjorn Madsen - Since Christmas, it has been home office only and no travel. Which feels like the longest Christmas vacations ever. It is now the third wave of the pandemic, just waiting for the vaccine. For a limited time it seems to work well to keep in contact with colleagues and customers via video link and telephone. Since less busy, time available to look into some ICASC issues. As membership coordinator, it has been possible to communicate with members due for retirement, to check out if they have any recommendations for candidates suitable for membership. Are also keeping the meeting overview and member attendees’ registration updated as usual.
- e. Liu Tong - In 2020, Flight Inspection Center of CAAC (BFIC) conducted all the periodic and commissioning inspection missions on time, the total flight hours of our center are more than 11,000, increased by more than 5 percent.  
3 old King-Airs are going through retire process, and will be handed over to the Civil Aviation University. By the end of this month, BFIC will have 5 Citation XLS with RVA systems, 3 Citation Sovereign with CFIS-1 system, 3 Citation XLS with CFIS-2 system. Another 8 new aircrafts will join our fleet this year, the first one is currently going through acceptance procedure. In addition, two business aircrafts are still there.
- f. Mike DiBenedetto - Under the sponsorship of FAA Navigation Programs, my team is supporting system safety, requirements verification, and acquisition activities for the FAA’s DME, VOR and TACAN Sustainment Program (aka the DVT Sustainment Program). As previously discussed, efforts include the development of DVT Program Safety Plan and Operation Safety Assessment documents. The development of these documents has been completed, peer-review activities were accomplished, and approved documents now exist. The development of a DVT Preliminary Hazard Analysis (PHA) document has been initiated. This document will be developed incrementally by producing a series of Functional Fault Hazard Analyses (FFHAs), which will be consolidated to create the PHA. The development of an approved TACAN Antenna System FFHA has been accomplished.  
My team is also supporting the FAA effort to re-validate and modernize DME, VOR and TACAN ground equipment specifications. Verification of the TACAN antenna modulation equation, equation parameter values, and tolerances has been accomplished and a report is being developed to document the verification effort and outcomes. DME antenna performance requirements are currently being examined. My team completed a detailed signal fading analysis that characterizes the effect of ground reflections on

coverage performance for a wide range of ground plane materials and surface roughness conditions.

Under the sponsorship of FAA Navigation Programs, my team is also supporting the development of a DME siting manual that will provide guidance and criteria for selecting suitable antenna locations for DME-only ground facilities. Our contribution is the development of manual chapters and appendices dealing with DME signal characteristics; signal processing and system performance considerations; relevant RF, multipath concepts, and related analytical techniques; site evaluation criteria; and, antenna performance considerations.

All field and flight test activities have been put on hold due to COVID-19.

### **3. Minutes from last meeting**

Minutes from the 53<sup>rd</sup> ICASC meeting were approved with changes.

### **4. Financial report**

No activity, hence no change from last ICASC meeting. The current ICASC fund balance was not provided, the account has not changed to Brad Elliott. Last balance \$674.78.

### **5. Review of Action Items from 52<sup>nd</sup> ICASC Meeting**

Displayed action items. Informed members to review action items and provide updates to Brad Elliott.

### **6. Discuss Plans for 21<sup>st</sup> IFIS in Durban South Africa.**

The 21<sup>st</sup> IFIS originally scheduled for 2020 has now been rescheduled for June 20<sup>th</sup> thru June 24<sup>th</sup> of 2022. Face-to-face meeting is preferred. Virtual meetings make it difficult to control how many individuals watch, one or many watching the proceedings. Conversations with vendors and networking is done in person not virtually.

### **7. Discuss Plans for 22<sup>nd</sup> IFIS in Japan.**

Keboushi Kazuyoshi presented a PowerPoint for the 22<sup>nd</sup> IFIS in Nagoya, Japan. The slides are located on the ICASC website at this [link](#).

Suggested March, 2024 because of less rain and cherry blossoms. Need to avoid Easter (March 31, 2024), ATM Madrid, and ICAO panel meetings. Will continue to discuss in the committee.

### **8. Discuss Plans for 23<sup>rd</sup> IFIS in Norway**

All systems go for 23<sup>rd</sup> IFIS in Norway.

## **9. Membership Discussion**

New members discussed, but will get information and ready for nominations at 55th ICASC meeting. New perspective member's information will be sent to membership two weeks prior to meeting for presenting new member.

Would like another member from academia to replace David Powell, and ENAV due to their major contributions to ICASC success.

Send new membership suggestions to Asbjorn, Membership committee chairmen.

Sileno Goedicke said good bye, but he should be around for the next meeting.

## **10. Flight Validation Pilot License**

Fabrizio Maracich would like to engage ICASC in the Flight Validation License ICAO is wanting to regulate.

Tom Wede showed interest but concerned about time and cost budgets.

## **11. Next Meeting**

The 55<sup>th</sup> ICASC meeting will be Tuesday, June 22<sup>nd</sup> 2021. 55<sup>th</sup> ICASC meeting will be virtual. This meeting will also be held from 12:00 to 15:00 GMT. This is the only time all ICASC members are awake and provide minimal disruption.

## **12. Closing**

Joe thanked everyone for their participation and patience with this virtual meeting format.

Brad Elliott  
ICASC Executive Secretariat