Institut für Physik der Atmosphäre



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Atmospheric research project EUREC4A Summary of meeting with ATC (2019/12/12)

This memo summarizes the meeting with Civil Aviation Authority and Air Traffic Service of Barbados regarding the scientific EUREC4A campaign on 12th December 2019. From the side of the EUREC4A team, the following persons attended the meeting: Dr. Björn Brügmann, Dr. Ludwig Worbes, Dr. Ilya Serikov and Dr. Florian Ewald (on behalf of Andrea Hausold, DLR flight operations). From Civil Aviation Authority and Air Traffic Service, Mr. Glyne Blanchette (Chief Air Traffic Control Officer), Mr. Neil Sarjeant (Unit chief, ATS) and three additional representatives attended the meeting. The next meeting is scheduled for 14th/15th January 2020.

1) Joint operation area:

For the period of the EUREC4A campaign (2020/01/17-2020/02/17), BGI ATC can issue a NOTAM east of BGI comprising the G550 (D-ADLR) circle pattern (radius 50 NM) from SFC to FL245. Inside this "joint operation area", research aircrafts and tethered balloons can be operated on our own discretion. Dropsondes can be deployed from PIARCO airspace from FL295 into this area within BGI TMA. The west border of this area can be as close as 40 NM to BGI VOR. The area should contain a buffer zone of 5 NM to allow for the drift of dropsondes. This would put the center of the G550 circle at e.g. 1325N05755W at a distance of 95 NM from BGI VOR (see Figure 1). The exact position and size of the area should be announced until 2nd January 2020 to donna.archer@barbados.gob.bb.

2) Flight schedules:

Take-off in short sequence and vertically-stacked, collocated flight ("super-curtain") 3x a week at 04, 08, 12 LT are no problem for ATC. Night-flights (IFR) are no problem as ATC and BGI are operating 24/7. More than 3 flight days a week are also no problem, while the busiest time is Fr/Sa/So. Please note that we did not speak to an airport representative, which is probably the bottleneck here!

3) Tethered balloons (CloudKites):

Operation of tethered balloons within joint operation area no direct concern to BGI ATC. Emergency protocol for detached CloudKites should be established with BGI ATC. The G550 can serve here as a relay to raise awareness to ATC. Every CloudKite operation outside the joint operation area and inside BGI TMA will need its own, stationary NOTAM.



4) Radiosondes:

Launch of radiosondes from ships within joint operation area and inside BGI TMA is possible. Protocol or NOTAM for radiosondes should be discussed with PIARCO. No launch of radiosondes close to east shoreline without clearance by ATC. Radiosonde launches close to shore more easy during the night. No radiosonde launch west of Barbados.

5) BOREAL drone:

BOREAL can use BGI TMA between Morgan Lewis Beach and the joint operation area if ferry is at 400 amsl (1200ft) within a defined, east borne corridor. A NOTAM should be issued. Clearance for all other drones within BGI TMA are still TBD.

6) Lidar operation on R/V Meteor

In the beginning of the campaign (3-4 days), a lidar on board the R/V Meteor will be operated close to the east shoreline, near the scientific ground station BCO (130945N0592544). For that period, a NOTAM should be issued. Launches of radiosondes during that period have to be cleared by ATC. The radiosonde team at BCO should coordinate this clearance with ATC.

7) Overpass over BCO

Overpass over BCO by G550 shortly before landing no problem at 4km (FL130). Pilots should ask to be vectored over BGI VOR. Lower overpasses are only possible in coordination with departing traffic. For that, pilots should ask ATC for clearance before exiting the joint operation area for landing.

8) Re-fueling operation

Should be done on the northern apron to expedite the process. Not much traffic until 14 LT.

