ARM Aerial Instrumentation Update and Discussion Agenda

2:00-4:00 pm EST (11:00-13:00 PST), June 24

Webinar mode:

host/co-hosts: Schmid, Beat Beat.Schmid@pnnl.gov ; Mei, Fan Fan.Mei@pnnl.gov ; Tomlinson, Jason Jason.Tomlinson@pnnl.gov ; Dexheimer, Darielle ddexhei@sandia.gov ;

- We will collect all the presentations together to two computers (host/co-host) as a backup.
- Attendees have no audio/video by default and can only post their questions through Q/A; then host/co-host/panelist can address the questions via "answer live" or "type answers".
- One co-host will monitor the Q/A session for questions and read it out loud.
- All host/co-host/panelists can broadcast the questions to the attendees if there is any.
- Encourage everyone to present with full name, including a call in person. *9 to raise hands
- For small group discussions, host/co-host can unmute the audience or promote them to panelists.

Polling questions (titles) are highlighted in light blue.

- The participants can be anonymous.
- The questions are multiple answers.
- We would like to have the pulling questions pop up following the presentation.

Beat – Intro, workshop goals, structure and participants
Beat - Challenger 850 and ArcticShark update
Jason: Challenger 850 modifications performed under contract and infrastructure requested would go beyond that

- Please choose the first engineering effort you think that ARM should undertake for the Challenger 850
    - LiDAR
    - Radar beyond PMS canister based
    - Dropsonde unit and chute
    - Turbulence Radar for aircraft
- Please choose the second engineering effort you think that ARM should undertake for the Challenger 850
- Please choose the third engineering effort you think that ARM should undertake for the Challenger 850
- Please choose the fourth engineering effort you think that ARM should undertake for the Challenger 850

Fan: Instruments proposed for Challenger 850 aircraft

- Please choose the first **THREE** capabilities you think that ARM should implement for the Challenger 850 in the near term.
    - Vertical Cavity Surface Emitting Laser (VCSEL) hygrometer
    - 2nd Dual-column CCN counter for scanning flow operation
    - FIMS

- CAPS-PM_{SSA}
- WIBS
- Fast ozone
- Open-path ammonia
- Isotope water
- RADAR (Wing pylon)
- Hyperspectral imaging

Dari/Fan: Instruments (existing and proposed) for TBS and UAS

- Please choose the first **THREE** capabilities you think that ARM should implement for vertical profiling (TBS) flights.
  - microAeth MA200 Black Carbon monitor
  - 3D wind speed and direction
  - VOC gas sampling
  - Compact CH_4 sensor
  - SO_2 sensor
  - Sharkeye
  - Magic CPC
  - SP2-XR
  - UAS laser hygrometer
  - Aerosol/gas payload from NOAA NightFOX
- Please choose the first **THREE** capabilities you think that ARM should implement for UAS flights.
  - Compact CH_4 sensor
  - SO_2 sensor
  - Sharkeye
  - Magic CPC
  - SP2-XR
  - UAS laser hygrometer
  - Remote sensing payload from NOAA NightFOX

All – Discussion

During the discussion, we will use “raise hands” features.