



AEROKAT Mission Flight Team Job Descriptions

The Mission Flight Recorder - is responsible for completing the AREN AEROKAT Mission Flight Data Sheet and for taking notes during the Mission Flight Debrief. One sheet is completed per mission flight. The Mission Flight Recorder ideally will have a clipboard, pen, watch and GPS.

The AREN GLOBE Science Team - is responsible for taking and providing Pre-Flight Kestrel wind data to the Mission Recorder and for entering Pre and Post Mission Flight Earth Observation "Temperature and Cloud Data" Measurements into the GLOBE Data Base using the GLOBE Data Entry App or website.

The Mission Safety Officer - is to make sure that no one is on the field except the field mission team as needed and the area quiet around the pilot.

The Pilot – is responsible for having the wind at their back, initiating launch communications, getting the kite into the air, holding the kite steady while a science payload is attached, flying the kite safely over the mission area, holding the kite steady during the end of flight Carabiner Line Kite Recovery, winding recovered kite line as instructed by the Carabiner Line Recovery Specialist and participates in the Post Mission Flight Debrief.

The Pilot Assistant - is responsible for conveying communication signals to the Launch Team, and for calling first, the Payload Team to the field for payload attachment to the kite line and the Carabiner Line Recovery Specialist for kite line recovery. The Pilot Assistant ensures that the pilot isn't disturbed during the flight or trips on any obstacles on the ground.

The Launcher - is responsible for assembling the kite with the Launcher Assistant and conducting a Pre-Flight Assembly Checklist. The Launcher stands opposite the pilot with a great distance between them and listens for communications from the Launch Assistant. The Launcher will be asked by the Launcher Assistant if they are ready to launch and if so, the Launcher, having hands open, letting the center spar set at the base of each thumb will say "Ready" and lifts the kite into the air. When the Launcher assistant drops both arms and says "Launch" the Launcher will let the kite lift from their hands being pulled by the pilot. The Launcher and assistant will then walk to the safe viewing area. The Launcher will participate in the Post Mission Debrief.

The Launcher Assistant - is responsible for assembling the kite with the Launcher and conducting a pre-flight assembly checklist. The Launcher assistant stands 5 steps to the right of the Launcher and 2 steps forward to be in clear seeing view of the Pilot Assistant and Launcher. The Launcher Assistant watches for Pilot Assistant Communications. When the pilot assistant puts one arm up and yells "Ready" the Launcher assistant will ask the Launcher if they are "Ready" to launch. If the Launcher is ready

The Launcher Assistant will hold and keep one arm up in the air and yell, “Ready” to the Pilot Assistant to signify that the Launcher is ready. The Launcher assistant will continue to watch the Pilot Assistant. When the Pilot Assistant puts up both arms, so will the launcher Assistant who says, “count down” to the Launcher. The Launcher Assistant will drop their arms the same time as the pilot assistant and will say, “Launch” so the launcher will let the kite lift from their hands. The Launcher Assistant and Launcher will then walk to the safe viewing area until after the mission flight and will participate in the Post Flight Mission Debrief.

The Payload Specialist(s) – is responsible for preparing the science payload to collect mission flight data and when called by the Pilot Assistant, wearing gloves will attach the AEROPOD payload to the kite line using a Carabiner and Brooxes Hook, wrapping the kite line three times on each side of the Brooxes hook. Once the payload is attached to the kite line, the payload specialist will say, “Payload Ready” to the pilot team. The pilot will begin to release line so the kite will go higher and carry up the payload released by the payload specialist(s). The payload Specialist will then walk to the safe viewing area until called to retrieve the payload, by unwrapping the kite line from both sides of the Brookes Hook. The Payload Specialist(s) will participate in the mission team debrief at the end of the mission flight and are responsible for downloading and sharing the mission flight payload data with the entire mission team for analysis.

Carabiner Line Recovery Specialist - stands behind the pilot and listens to be told “Carabiner Recovery” at which time the Carabiner Line Recovery Specialist, wearing gloves, attaches a Carabiner to the line and begins sliding the carabiner along the line while walking which will recover kite line. Once a good distance from the pilot, the Carabiner Line Specialist twist the Carabiner, which will twist the kite line and yells back to the pilot team “I Have the Kite”. Once the pilot team responds “You Have the Kite” the Carabiner Line Recovery Specialist still holding the Carabiner with the kite line twisted will walk to the pilot and instruct the pilot to “wind the recovered line”. Once the line is recovered, the Carabiner Specialist will untwist the Carabiner line twist and tell the pilot, “You have the Kite.” After the pilot responds, “I have the kite” the Carabiner Line Specialist will recover more line, twist and walk back to the pilot repeating the procedure until the payload and kite have been recovered. The Carabiner Line Recovery Specialist will participate in the Mission Team’s Post Flight Debrief Meeting.

Optional Jobs: Mission Media Specialists

- **Mission Photographer** – from a safe viewing area takes pictures to document the AREN Field Mission. Uploads and captions photos.
- **Mission Videographer** - films short video clips summarizing elements of the Field Mission. Uploads, titles and writes short video clip descriptions

Note: Please make sure all Field Mission participants are complete and submit AREN Photo Release forms prior to the date of the field mission.

Electronic AREN Photo Release Form – [link](#)

