

Visiting and Operations at the DAOF



William B. Latter
USRA DAOF Project Manager

Outline

- What is the DAOF?
- What happens there?
- Why go to there?
- What to do and what to bring....

This cannot be comprehensive.
Please ask questions!

What is the DAOF and Why Go There?

- Dryden Aircraft Operations Facility
 - Houses SOFIA and several other NASA flight programs.
 - Located in Palmdale, CA near the 14 freeway.
 - About 55 miles from Bob Hope (Burbank) Airport
 - About 73 miles from Los Angeles International Airport
- SOFIA normally flies out of the DAOF, so if you are going to participate in a science flight, you will need to come to the DAOF.
- How do I know if I can fly to support my program?
 - SOFIA is primarily queue observing.
 - GIs are welcome to participate, but it is generally not necessary.
 - You will be contacted directly by the SOFIA Science Center well in advance of your scheduled flight.

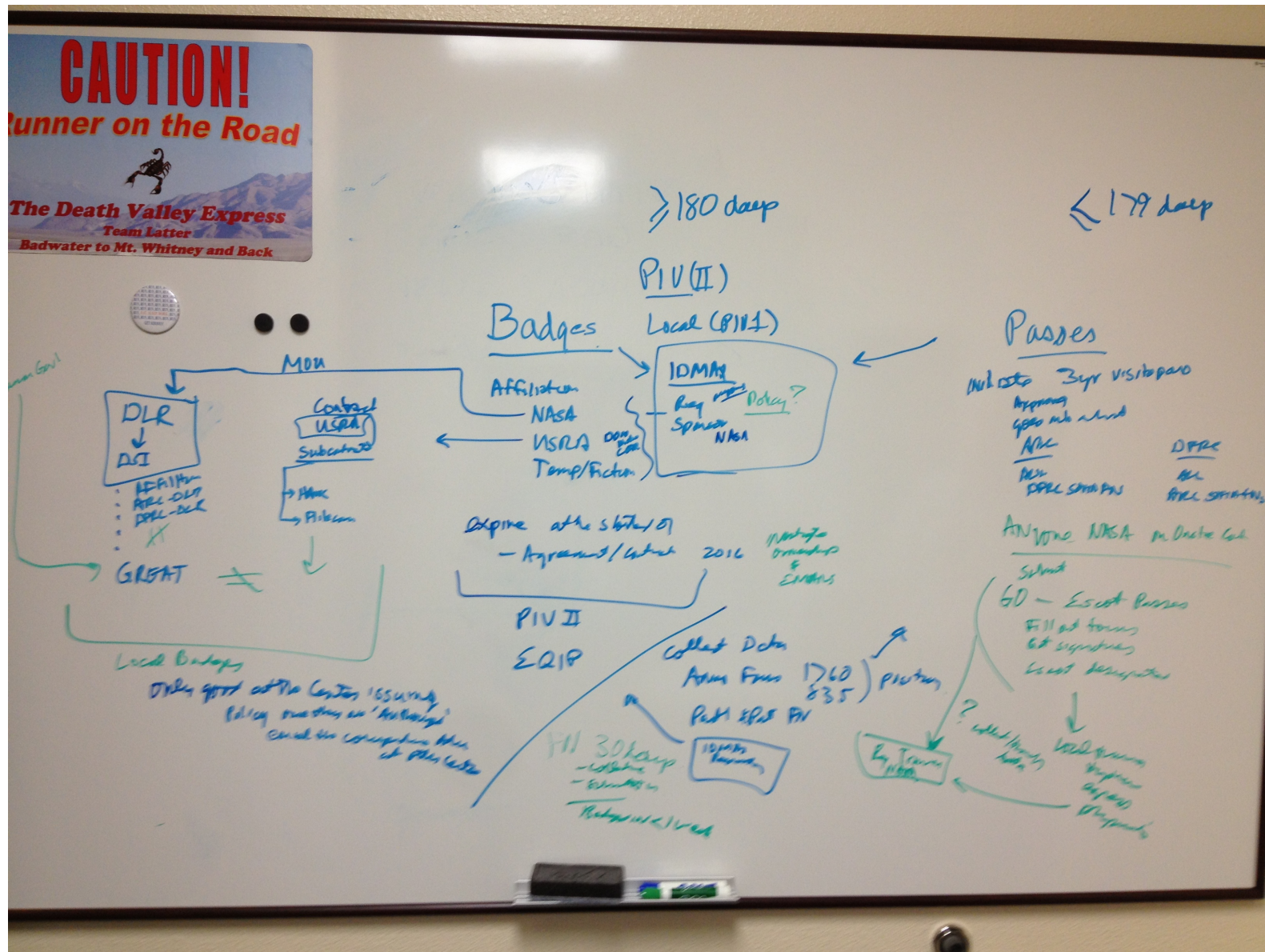
General Information about Flying

- Plan to arrive in Palmdale a full day prior to the flight.
 - Required training will take place in the afternoon on the day before flight, except for Monday flights.
 - Hotels are plentiful nearby.
 - A DAOF Visitor's Guide oriented for GIs in in work.
- The DAOF is a secure NASA facility – Requires badging (more later...)
- Who is at the DAOF? Can I meet with the SOFIA Science Center Director? Can I get help with last minute AOR editing?
 - The answer to the 2nd two question is No.
 - The DAOF is the operations center for SOFIA. The SOFIA Science Center is located at the Ames Research Center.
 - Staffing at the DAOF are primarily operations support. Science support is limited.
- Generally, the GI should come prepared and ready to fly

DAOF SOFIA Staff

- **SOFIA Platform Team (Includes DSI)**
 - Aircraft support and maintenance
 - Telescope Assembly support and maintenance
 - Observatory Systems
- **USRA Operations Team**
 - Ground Support Engineers
 - Science Instrument Laboratory for support of facility and PI instruments
 - Install/Removal
 - Cryogenics Support
 - Electronics Support
 - Mirror Coating Facility for primary mirror maintenance
 - Operations Support Staff
 - Mission Directors
 - Mission Specialists (telescope operators)
 - Instrument Operations
 - Flight Planners and IT
 - Other – Management/Chief Scientist
- **Program Office is currently at the DAOF – will move to Ames at or near FOC.**

Badging - Start Early



Badging – Start Early (cont.)

- Forms will be sent by email.
- Most General Investigators flying on SOFIA will be provided with a temporary Visitor Badge.
 - Must be escorted by a NASA badged person. The escort will most often be the USRA Administrative Assistant or Logistics Engineer. But, could be anyone, including myself and Eric Becklin.
 - A Visitor Badge does not give access to the hanger or SI laboratories.
 - Typically, a standard Visitor Badge takes a week to process.
- Investigators with permanent NASA Badges can enter the DAOF through Security. Unless previously arranged, direct access to the hanger and labs will not be available.
- Foreign Nationals must go through a security check. This typically takes about a month to process. Some countries are considered special risks, and might not be able to gain DAOF access at all, e.g. China, Iran.

The hanger and flight line are active work areas – Be Aware of Hazards!

Do not enter the aircraft or go out on the flight line without being accompanied by a USRA staff member



Training and Meetings and More

- Flight Egress Training – Typically at 1400 or 1500 on the day before flight.
- Pre-flight Crew Briefing – about an hour before boarding time.
- Forms:

*Airborne Science Flight Participation
Medical Flight Clearance*

- Fatigue:
Do not come to the DAOF much before the Crew Briefing on the day of flight. If you feel you are too tired to drive on the morning after – ASK FOR A RIDE.

The Flight

- Flights are typically 8 to 10 hours in durations.
- Typically start near dusk and end at dawn.
- The Mission Director is The Boss
 - Leads Crew Briefing
 - Oversees all activity on the Main Deck
 - Responsible for Safety
 - Responsible for execution of the science mission
 - Oversees communications and primary contact to the Flight Deck.
 - If you want to visit the Flight Deck, check with the MD first.
 - If unsure or in doubt about anything, check with the MD.
- Your interactions during your observations will be with the Instrument Scientist and/or the Instrument Operator.
- At this time, daytime observations are not allowed to protect the telescope, instruments, and surrounding structures.

What to Bring and Wear and More

- Wear closed toed shoes. This is a DAOF requirement.
- Bring current passport. Many flights go over Canada.
- Dress comfortably and for the weather. Palmdale can be both **HOT** and **COLD**.
- Food and drink for the flight. Drinks must be in a screw top container.
 - We have experimented with having food ready for flight crews and will continue to do so. Results so far have been mixed.
 - Bottled water is provided onboard. Remember to drink.
 - There is currently no galley or microwave.
- Office space: Ask before arrival. We will find you a spot.
- Internet: Guest internet available in the DAOF. No internet on the aircraft (yet).
- Are you sick? If so, please consider not flying. This is for your benefit as well as the flight crew. Also, discomfort from illness can cause a flight to Return to Base early.

Be Prepared!



SOFIA Users Group

November 2013