

SOFIA GI Flyers

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GI flyers - Overview

- The SOFIA program [currently] has 2 seats per flight set aside for GIs
- The program does not support GI flyers explicitly
 - No dedicated travel funds (GIs may use their DA grants)
 - No explicit travel or logistic support (bookings etc.)
- Flight participation requires:
 - Access to AFRC Building 703 and plane
 - Clearance through the AFRC security office
 - Foreign nationals require [nominally] >30 days notice
 - Unescorted access for foreign nationals an issue
 - Flight Participation form completed
 - Flight Medical form processed by AFRC flight surgeon
 - Egress training

GI flight invitation process

- Once Flight Plans are stable (~after SMO Director review):
 - Science Operations evaluates which GIs to invite
 - Amount of observing time in flight
 - Complexity of observations
 - Previous participation
 - Invitation is sent to GIs (in e-mail containing flight series summary, sent to all affected GIs)
 - Upon response from interested GIs, forms and instructions are sent out
 - Lisette Tanaka and/or Briana Berry support badging
 - Lisette Tanaka, SciOps and Instrument Scientists coordinate with GIs
 - Lisette Tanaka coordinates egress training opportunities

Forms

- Flight Participation form
 - Authorization to participate (from SciOps)
 - Next of Kin information
 - Check for completed training
- Flight Medical form
 - Flight Surgeon's OK to fly
- GI Flyer instruction letter
 - Required badging information
 - Instructions on how to get to AFRC Building 703
 - Basic information on requirements and logistics
- GI Guidelines
 - Information about flights
 - Rules for modifying planned observations
 - Request/invitation to supply feed-back

In-flight modifications of observations

The SOFIA GI Guidelines now state:

“In-flight changes to an observation are discouraged as observations with most SOFIA instruments are executed via pre-validated observing scripts, and as SOFIA observations are also intended to populate a well documented and calibrated data archive.

- *Changes that would result in a change of flight plan will not be considered in flight, except in exceptional circumstances.*

Authority to approve/reject such changes rests with the Mission Director.

- *In-flight observation changes that do not require a change in the flight plan (e.g. modification to the selection or relative exposure times in different photometric filters) may be requested and will be considered if they do not violate proprietary rights of other observers and can be implemented at an acceptable risk to execution of the observation. Authority to approve/reject such changes rests with the Instrument Scientist.”*

All GIs are encouraged to work with (and is routinely approached by) the Instrument Scientists in preparation for the flight series.

Issues, lessons learned and next steps

- We have now had enough GI flyers to allow meaningful analysis of activity
 - Survey of GI flyers, to date, planned for the near future
 - Based on direct feed-back most GIs have been positive
- Instruction forms will be revisited for clarity and completeness
- Main issues:
 - Flight plans typically not stable >>1 month ahead. Foreign national access is difficult to ensure in a timely manner
 - Non-escorted access is often not allowed
 - For after-hours the escort can be an issue