To: ASP email distribution

From: Earth Science Division, Airborne Science Program Director

Subject: FY25 Airborne Science Flight Program

The Airborne Science Program (ASP), under the Earth Science Division (ESD) of the Science Mission Directorate (SMD) announces the annual call for Fiscal Year 2025 Flight Requests (FRs). This call applies to Earth Science activities anticipated to occur between October 2024 and September 2025 that will utilize ASP supported aircraft, ESD facility instruments or any ESD funded airborne activities/missions.

Flight Requests for U.S. locations using flight approved instrumentation should be submitted at least 3 months before the desired data collection dates, except in cases of rapid response missions to support hazard mapping. Flight Requests for non-U.S locations must be submitted at least 6 months prior to desired data collection dates to enable clearance planning. However, Flight Requests should be submitted as soon as possible to provide advanced notice of the proposed mission and allow sufficient time for scheduling, flight planning, engineering, and integration efforts, or special clearances which are driven by location and total aircraft payload size.

Detailed and continually updated aircraft and instrument information can be found on the <u>Airborne Science Program website</u>. This site is a centralized portal for all program components, including the <u>Science Operations Flight Request System (SOFRS)</u>, platforms, instrument capabilities, schedules, and points of contact (POCs). For a comprehensive list of ESD program managers, please visit the <u>Earth Science Division Website</u> or the <u>Program Officers list</u>. In addition, investigators in the pre-proposal planning stage may contact Matt Fladeland at (650) 604-3325 for help with platform selection, engineering questions, or integration concerns. Additional investigator support information can be found on the SOFRS <u>Principal Investigator (PI) support tab</u>.

PLEASE NOTE: All airborne missions utilizing NASA instruments, NASA personnel, NASA aircraft or funded through a NASA contract must be in compliance with the NASA Aircraft Operations Management Manual (NPR 7900.3D).

ROSES and Multi-Aircraft Missions

Anyone with a requirement for an ASP supported aircraft and/or facility instrument is required to submit a Flight Request. This includes ESD funded investigators with approved or pending proposals from Research Opportunities in Space and Earth Sciences (ROSES) announcements. The Flight Request is the method to acquire a cost estimate for inclusion in proposals but is not a substitute for a proposal. If the campaign is planned to take place during multiple fiscal years (FY), a Flight Request needs to be submitted for each FY.

Please note, for investigators proposing to participate in large experiments (i.e. multi-aircraft), Flight Request(s) may be submitted for the mission by the Project Manager or Project Scientist.

User Fees

All airborne assets (aircraft and instruments) are subject to user fees. These fees reflect the usage cost and are assessed by the operating organization. This is true for both NASA and non-NASA assets. A Flight Request is required for scheduling the usage of an ASP supported aircraft, and/or facility instruments. See <u>Appendix A</u> for a list of these assets and a decision tree for Flight Request requirements.

Flight Requests should be associated with a NASA program, grant, proposal, or if funded from a non-NASA source, deemed to be directly related to a NASA area of interest. If no NASA investigation is associated with the request, it will be handled as a Reimbursable Mission, subject to unsubsidized flight hour rates and additional fees, and may require a justification for the use of NASA assets.

Once a Flight Request is approved and scheduled, the user fees must be forwarded to the performing organization(s). In most cases, user fees must be available to the performing center(s) before mission activities, such as integration, can occur. For SMD funded researchers using NASA assets, the fees will normally be withheld from the investigator's budget by the sponsor and sent directly to the NASA aircraft or instrument organization. For researchers using non-NASA assets, the fee payment process will vary and the Airborne Science business managers, together with the aircraft managers at each center, are prepared to assist the investigator with the financial procedures.

Integration and Mission Peculiar Costs

In addition to user fees, integration costs (aircraft and instrument dependent) and Mission Peculiar Costs (MPCs) may be applied to the FR budget by the aircraft manager. Detailed information on integration costs and MPCs, including those for satellite communication (SATCOM) and the National Suborbital Research Center (NSRC) are located in Appendix B. All relevant aircraft MPCs should be discussed with the aircraft manager.

ASP Supported and Other NASA Aircraft

The Airborne Science Program continues to support an inventory of unique, highly modified "science-ready" platforms and coordinates access to other NASA aircraft. See <u>Appendix C</u> for the list of current flight hour costs and visit the <u>ASP platforms page</u> for a detailed list of available aircraft.

The NASA AFRC C-20A and ER-2 aircraft have moved from B703 in Palmdale, CA to the main NASA AFRC campus at Edwards AFB. A Boeing 777 and a G-IV have been added to the ASP fleet and are expected to be ready for science deployments in FY26.

Facility Instruments

Several remote sensing systems are identified as NASA facility instruments, in part because they support multiple science disciplines and a variety of NASA science objectives. They are supported by managers in the ESD Research and Analysis program, and are made available to the wider NASA science community via SOFRS. When using a facility instrument, an operations support team may be required to deploy with the instrument. User Fees for the instrument team and data processing costs may be required in addition to aircraft Mission Peculiar Costs (MPCs) and flight hour costs. Approval for the use of a facility instrument is granted by the sponsoring science Program Manager/Scientist. Appendix D shows available facility instruments with POC info.

IMPORTANT: Investigators wishing to use AVIRIS, eMAS, MASTER and UAVSAR are requested to submit FY25 Flight Requests before September 30, 2024, to allow the ASP Program Managers, instrument teams and NASA Headquarters managers to plan appropriately for the upcoming flight season. Any Flight Requests received after that deadline may still be approved, but will be accommodated on a "best efforts" basis for FY25 or may be scheduled the following year.

SOFRS is managed by the Earth Science Project Office (ESPO) at Ames Research Center. If you did not receive this message directly and would like to be included in further distributions, please send an email to the <u>curators</u>. If you have any questions regarding SOFRS, please see the <u>ASP Flight Request Procedures document</u> and/or contact: <u>Sommer Nicholas</u> (650) 604-5966.

Please submit your completed FY25 Flight Requests as soon in your planning process as possible.

Sincerely,

Bruce Tagg Director, Airborne Science Program Earth Science Division Science Mission Directorate