

To: ASP email distribution  
From: Earth Science Division, Airborne Science Program Director  
Subject: FY24 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 2024 Flight Requests. This call applies to Earth Science activities anticipated to occur between October 2023 and September 2024 that will utilize ASP-supported aircraft, ESD facility instruments, or any ESD-funded activities/missions using aircraft. Please see [Appendix A](#) for the SOFRS flight request requirements decision tree.

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

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

## User Fees

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

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 and may be required to include a justification for the use of NASA assets and subject to unsubsidized flight hour rates and additional fees.

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. More information regarding integration costs and MPCs, including those for satellite communication (SATCOM) and the National Suborbital Research Center (NSRC) is located in [Appendix B](#). All relevant aircraft MPCs should be discussed with the aircraft manager.

### **ROSES, EOS, and Multi-Aircraft Missions**

Anyone with a requirement for an Airborne Science Program (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. FR and user fee information for Earth Observing System (EOS) Investigators can be found in [Appendix C](#). If the campaign is planned to take place during multiple fiscal years (FY), a flight request or flight request placeholder needs to be submitted for each FY.

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

### **ASP Supported and Other NASA Aircraft**

The Airborne Science Program continues to support an inventory of unique highly modified “science-ready” platforms, as well as to coordinate access to other NASA aircraft. See [Appendix D](#) for the list of current flight hour costs and visit the [ASP platforms page](#) for a detailed list of available aircraft.

Special note about AFRC-supported aircraft: The NASA AFRC C-20A and ER-2 aircraft will be moving to the main Edwards AFB campus sometime during FY24 as ASP is ending operations from hangar B703 in Palmdale, CA by the end of FY24. Please check the ASP calendar for the latest information on move dates. The NASA AFRC DC-8 aircraft will be retired in April of 2024.

Another large passenger aircraft, a Boeing 777, has been purchased and is expected to be ready for science deployments in FY25.

## 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/or the EOS Project Science Office, and are made available to the wider NASA science community via SOFRS. When using a facility instrument, an operations support team may or may not 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 (MPC) and flight hour costs. Approval for the use of a facility instrument is granted by the sponsoring science Program Manager/Scientist. [Appendix E](#) shows available facility instruments with Point of Contact (POC) info.

## Piggyback Instruments

A piggyback instrument is one that is not part of an existing flight project payload but hopes there will be room for them to be added on a non-interference basis. The addition of piggyback instruments is at the discretion of the mission's PI. The piggyback instruments should have no impact on the primary mission objectives, flight plans, and flight hours.

By agreeing to fly a piggyback instrument, the mission's PI is committed to providing and meeting the needs of the instrument requirements (such as cabin space, power requirements, operator needs, etc.) on a non-interference basis.

## Science Operations Flight Request System (SOFRS)

All flight requests for U.S. locations should be submitted at least 3 months before the desired 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 before desired data collection dates. However, advanced notice of proposed missions should be provided to aircraft managers as soon as possible to get the project on the schedule and to provide sufficient time for flight planning, engineering, and integration efforts, which are driven by location and total aircraft payload size.

**IMPORTANT:** Investigators wishing to use any of the facility instruments listed in [Appendix E](#) are requested to submit FY24 Flight Requests before September 30, 2023, 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 September 30, 2023, may still be approved, but will be accommodated on a "best effort" basis for FY24 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 [SOFRS\\_curators@airbornescience.nasa.gov](mailto:SOFRS_curators@airbornescience.nasa.gov). If you have any questions regarding

SOFRS, please see the [ASP Flight Request Procedures document](#) and/or contact: [Vidal Salazar](mailto:Vidal.Salazar@nasa.gov) at [vidal.salazar@nasa.gov](mailto:vidal.salazar@nasa.gov) (650) 604- 5313.

Please submit your completed FY24 Flight Requests as soon in your planning process as possible.

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