



**NASA Kentucky EPSCoR
Suborbital Flight Opportunity (SFO) 2022
Request for Information**

Announcement: RFI-22-002

Release Date: Feb 23, 2022

Responses Due: Monday, March 7, 2022

Submit via email to nasa@uky.edu

NASA Kentucky

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FAQ and additional information available:

nasa.engr.uky.edu/epscor and
nasa.engr.uky.edu/requests-for-proposals



NASA KY EPSCoR SFO 2022 Request for Information
NASA EPSCoR Suborbital Flight Opportunity (SFO)

The NASA EPSCoR Program, in collaboration with the NASA Space Technology Mission Directorate (STMD) [Flight Opportunities](#) (FO) Program, is soliciting proposals for the fiscal year 2022 NASA Established Program to Stimulate Competitive Research (EPSCoR) Suborbital Flight Opportunity (SFO) program ([NNH22ZHA002C](#)). This solicitation is for current or previously funded EPSCoR projects or other research projects that are mature enough to design a research experiment or develop research experimental hardware to the point that it can be flown in a suborbital environment.

Proposals strongly aligned to this funding opportunity will demonstrate how suborbital flight will influence/mature the results/quality of any prior ground-based research or technology development and will provide insight into how the suborbital flight fits into a larger scientific research or space technology development context, as applicable.

The maximum research funding request per proposal is \$250,000 over 3 years, plus the cost of flight services. Flight costs, including indirect facilities and administrative (F&A) costs on the flight provider quote, are delimited by the maximum number of allowable flights (see 1.3 attached) as described in the solicitation. Cost-sharing is not required. Costs for special purpose equipment and foreign travel are allowed. Proposals have a limitation of 15 pgs for the technical section. Each jurisdiction may submit one proposal, to be submitted at the discretion of Kentucky's NASA EPSCoR Director. Four proposals are expected to be selected by NASA from the 28 EPSCoR jurisdictions.

Please submit a 1 pg response by March 7, 2022 using the guidelines below if your research group has strong alignment with this flight opportunity. The NASA Kentucky EPSCoR program will review the responses and may contact responding research teams to discuss developing a proposal to this opportunity. Proposals will be due to NASA by April 15, 2022.

Eligibility:

- 1) All institutions of higher education within Kentucky
- 2) No citizenship restriction

Response guidelines – Each response should address the following in no more than 1 pg:

- 1) Goal and specific objectives of the envisioned experiment, including potential flight providers
- 2) Description of existing or proposed NASA collaborations
- 3) Description of personnel and partners

Please provide responses no later than **Monday, March 7, 2022 to:**
nasa@uky.edu

Contact **NASA KY** at 859-323-4542 with questions about this opportunity

1.3 Eligible Flight Providers & Maximum Allowable Number of Flights

The proposer will directly purchase the proposed flight(s) on a currently available U.S. commercial vehicle. The proposer is responsible for choosing which vehicle best meets their needs. *The proposer is not restricted to flight providers previously funded by the Flight Opportunities program.* However, the proposal shall only utilize vehicles whose providers have conclusively demonstrated successful flight(s) – test flights or commercial flights that were launched and recovered successfully with payload intact and have achieved the minimum flight capabilities as described in the table below.

The proposer is limited to proposing to use one (1) flight provider in one (1) vehicle class. For Suborbital Rockets, Rocket-Powered Lander Vehicles, and High-Altitude Balloons, the maximum number of allowable flights is one (1). For aircraft following reduced-gravity flight profiles, up to four (4) flights (one flight is one take-off/landing) may be proposed, to be performed within the proposed project duration. Human-tended flights other than for aircraft following reduced-gravity flight profiles are not allowed to be proposed and will be rejected under this solicitation.

Table 1 Minimum Demonstrated Flight Capabilities of Eligible Vehicle Classes. Note: Proposals may include flights to lower altitudes, however, the minimum demonstrated flight capability requirements for the vehicle are still applicable.

Vehicle Class	Sub Class	Minimum Demonstrated Flight Capabilities	Allowable Flights
Rocket-Powered Vehicles	Suborbital Rocket	Minimum altitude of 80 km above Mean Sea Level (MSL)	1
	Rocket-Powered Lander Vehicle	Controlled descent and controlled vertical landing of a free-flying vehicle using a propulsion system of a class that can operate in a vacuum	1*
High-Altitude Balloons		Minimum altitude of 30 km above MSL	1
Aircraft Following Reduced-Gravity Flight Profiles		No minimum requirement	Up to 4

* For Rocket-Powered Lander Vehicles, one flight may include precursor shakedown/tethered testing.

NASA holds no safety responsibility for suborbital flights conducted in response to this NOFO. All flights will be regulated by the Federal Aviation Administration (FAA). An award recipient’s institution and the flight service provider are responsible for meeting all applicable local, state, and federal regulations. In the event of an in-flight anomaly, the Flight Opportunities program considers all payloads being flown under this solicitation as expendable. If human or other living test subjects are involved in the research, the proposer’s institutional review board and the flight providers are responsible for meeting all applicable research requirements. The Flight Opportunities program is unable to provide a list of currently available flight providers. Historical flight providers can be found using the following link; however, proposers are not restricted to using these flight providers. <https://www.nasa.gov/directorates/spacetech/flightopportunities/flightproviders>