National Aeronautics and
Space Administration

Headquarters
Washington, DC 20546-0001

Reply to Attn of: SMD – 3F71 April 14, 2006

TO: Distribution

FROM: Science Mission Directorate, Suborbital Science Program Manager

SUBJECT: FY 2007 Suborbital Science Flight Program

The Suborbital Science Office under the Science Mission Directorate (SMD) announces the annual call for flight requests to use the NASA Suborbital observing capabilities in Fiscal Year 2007.

All investigators with approved or pending proposals from the Research Opportunities in Space and Earth Sciences (ROSES) announcements that have a requirement for airborne science must submit a Flight Request. However, for investigators proposing to the ROSES-2006 A.9 Tropical Composition, Cloud and Climate Coupling (TC4) experiment, and ROSES-2005 A.31 NASA African Monsoon Multidisciplinary Activities (NAMMA), a single flight request will be submitted for each mission by the project scientist.

This call letter also serves as an introduction to the new Suborbital Science Program Information Portal. The new website is located at http://suborbital.nasa.gov. This site is a centralized portal for all components of the Program. It will host the flight request system, program capabilities, schedules, points of contact, and facility information.

Facility Update

The Suborbital Science Program has successfully implemented a catalog aircraft program consisting of a mix of NASA owned aircraft and commercial aircraft. All facilities currently available in 2006 will continue to be available in 2007 (see Appendix A). Note that *both* high-altitude NASA platforms (ER-2 and WB-57) will be available. New facilities introduced for 2007 include the Predator-B Unmanned Aerial System (UAS) named Ikhana, and the mid-size Sierra UAS. The DC-8 is now being operated through a cooperative agreement with the University of North Dakota (UND). The DC-8 is still a NASA asset under this new operational environment, but the UND/National Suborbital Education and Research Center will operate it as a national research facility for both NASA and non-NASA missions.

The Science Mission Directorate continues to support selected interdisciplinary science instruments for community use. An interdisciplinary science instrument is funded by a particular science program(s), but managed for use by all science programs. Typically there is a team that supports the operations on the instrument, and who may or may not be part of all investigations. If use of a interdisciplinary science instrument is approved by the sponsoring science program manager, only the additional mission-peculiar support costs for the instrument team are requested.

Available interdisciplinary science instruments and suitable commercial sensors with points-of-contact are listed in Appendix B. New capabilities available in 2007 include the new multi-spectral imager UAS-Autonomous Modular Sensor (UAS-AMS).

User Fees and Flight Requests

A Flight Request is necessary in order to schedule an airborne asset through the Suborbital Science Program, but it is not a substitute for a proposal. All Flight Requests should be associated with a NASA grant or proposal. If no NASA investigation is associated with your request, it will be handled as a reimbursable mission and must include justification for use of the NASA facilities. All suborbital assets are subject to user fees which reflect the marginal cost of using the asset, and are assessed by the organization operating the asset. This is true for both NASA and non-NASA facilities. Reimbursable missions using NASA assets may be subject to additional fees.

Please include on the Flight Request the name and contact information of a funding sponsor who can review and approve the user fee expense. For SMD investigators, the sponsor is the program manager who has issued your grant or contract. Once a Flight Request is approved and scheduled, the user fees must be forwarded to the performing organization before the flight can occur. For SMD funded researchers using NASA assets, the fees will normally be withheld from the investigator's budget and sent by the sponsor directly to the NASA aircraft or sensor organization. For researchers using non-NASA assets, payment of the fees will vary and the Suborbital Science business managers are prepared to assist the investigator through the financial procedures.

The Flight Request process is managed by the Airborne Science Office at Ames Research Center. In the last year an online flight request management system has been developed, and it is now the goal to have all flight requests submitted through this online portal. The URL is: http://suborbital.nasa.gov/. If you have any questions regarding the flight request system or process please contact:

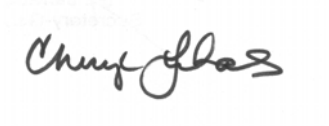
Ian McCubbin
Suborbital Science Coordinator
Ian.B.McCubbin@nasa.gov
Tel: 650.604.4388

Questions regarding the Suborbital Science Program can be addressed to:

Cheryl Yuhas	Or	Randy Albertson
Program Manager		Deputy Program Manager
Cheryl.L.Yuhas@nasa.gov		Randal.T.Albertson@nasa.gov
Tel: 202.358.0758		Tel: 661.276.7540

Please submit your completed flight requests no later than COB June 30, 2006.

Sincerely,



Cheryl Yuhas
Suborbital Science Manager
Science Mission Directorate

Appendix A - Available NASA Suborbital Science Catalog of Platforms

The Suborbital Science Program has successfully continued with the creation of a catalog aircraft program. A number of new aircraft have been added, and we are continually adding aircraft to the catalog. The Program is working to augment this catalog with additional commercial platforms, and already have a number of industry partners.

Listed below are the currently available platforms, points of contact, and associated user's fees on a per hour basis unless otherwise noted. The below rates do not include mission peculiar costs (MPC) for a given campaign or deployment; it is only the rate of the aircraft from its home base:

Facility	State	Contact Name	Contact Phone	User Fee (per hour)
NASA Platforms:				
DC-8	ND	Rick Shetter Anthony Guillory	701.777.6040 757.824.2161	$5000
ER-2	CA	Jacques Vachon	661.276.5318	$3700
P-3B	VA	Anthony Guillory	757.824.2161	$3000
WB-57F	TX	Ken Cockrell	281.244.8810	$3600
G-3	CA	Walter Klein	661.276.3243	Call
Learjet 23	OH	Bill Rieke	216.433.2036	$2700
Learjet 25	OH	Bill Rieke	216.433.2036	$2700
Twin Otter	OH	Bill Rieke	216.433.2036	$1700
S-3B	OH	Bill Rieke	216.433.2036	$3500
King Air B-200	VA	Mike Wusk	757-864-3937	Call
OV-10	VA	Mike Wusk	757-864-3937	Call
NASA UAS:				
Aerosonde	VA	Anthony Guillory	757.824.2161	$500
Altair	CA	Frank Cutler	661.276.3988	Call
Ikhana/Predator-B	CA	Brent Cobleigh	661.276.2249	Call
Sierra	CA	Matt Fladeland	650.604.3325	Call
NASA Contracted Aircraft:				
BAC 1-11	MD	Anthony Guillory	757.824.2161	Call
Boeing 737-200	MD	Anthony Guillory	757.824.2161	Call
Caravan	OR	Jeff Myers	650.604.3598	$1000
Islander	MD	Anthony Guillory	757.824.2161	Call
Jetstream J-31	OR	Jeff Myers	650.604.3598	$2000
King Air B-200	NV	Jeff Myers	650.604.3598	$1050
King Air B-200	VA	Anthony Guillory	757.824.2161	Call
NRL C-12	MD	Anthony Guillory	757.824.2161	Call
NRL P-3	MD	Anthony Guillory	757.824.2161	$5700 (dry lease)
Proteus	CA	Bob Curry	661.276.3915	$3000
Twin Otter	CO	Anthony Guillory	757.824.2161	$700/hr + $1400/day

Appendix B – Airborne Interdisciplinary Science Instrumentation

An interdisciplinary science instrument is sponsored within one science discipline, but managed for use by investigators in other disciplines. Use of an interdisciplinary sensor requires concurrence from the sponsor. The following is a table of the NASA Interdisciplinary Science Instruments:

Instrument	Contact	Telephone	Sponsor
Airborne Visible Infrared Imaging Spectrometer (AVIRIS)	Robert Green	818-354-9136	Diane Wickland
UAS-Autonomous Modular Sensor (UAS-AMS)	Jeff Myers	650-604-3598	Cheryl Yuhas
MODIS Airborne Simulator (MAS)	Jeff Myers	650-604-3598	Michael King
MODIS-ASTER Simulator (MASTER)	Jeff Myers	650-604-3598	Michael King

For some investigations, commercially-available remote sensing data products may be suitable. Web links to remote sensing industry organizations that responded to a request for information (RFI) in April 2004 are provided for information only as a service to investigators. NASA does not endorse any commercial product or organization, and is not responsible for maintaining or verifying the accuracy of data on non-NASA web sites. Investigators are responsible for contacting vendors to determine if the product meets the requirements of the proposed scientific investigation. Before any actual data collection flights, the Suborbital Science Program must conduct airworthiness/flight safety reviews in accordance with NASA Aviation Safety Policy for Non-NASA Aircraft.

Information on commercially available remote sensing services can be found at:

http://www.mapps.org
https://eserv.asprs.org/eseries/scriptcontent/Custom/sustaining_search.cfm?

Additional information is also available at:

Measurement Type	Instrument	Organization	Website
Hyperspectral Imagers	HYMAP	Hyvista	http://www.hymap.com
	PROBE-1	I-Cubed/Earth Search Sciences, Inc.	http://www.earthsearch.com
	CASI-550 CASI-1500 SASI-640	ITRES Hyperspectral Imagers	http://www.itres.com
	TRWIS-III LWHIS	Northrop Grumman	http://www.northropgrumman.com
LIDAR Systems	Airborne Laser Terrain Mapper SHOALS LIDAR Bathymeter	Optech	http://www.optec.on.ca
	Laser Terrain Mapper (Optec ALTM 2050)	Sanborn	http://www.sanborn.com
RADAR Systems	X-Band IFSAR	INTERMAP	http://intermaptechnologies.com