

National Aeronautics and Space Administration
Goddard Space Flight Center
 Wallops Flight Facility
 Wallops Island, VA 23337-5099



October 27, 2016

Reply to Attn of: 810

TO: 810/Chief, Sounding Rockets Program Office

FROM: 810/Projects Manager, Sounding Rockets Program Office

SUBJECT: Mission Initiation Conference (MIC) for Terrier Improved Malemute
 46.018 UO (Koehler/University of Colorado/G-Chaser/Norway/Jan- 2019)

The Mission Initiation Conference (MIC) for the subject mission was held on October 26, 2016 at NASA's Goddard Space Flight Center's Wallops Flight Facility (WFF). The Principal Investigator is Dr. Chris Koehler of the University of Colorado, Boulder, Colorado. The meeting agenda included a presentation by Dr. Koehler, which provided a general overview and specific requirements for the mission. The experimenter's data package is included in the mission's folder. The following individuals were in attendance:

Name	Organization/Code	Responsibility
Dr. Chris Koehler (via phone)	University of Colorado	Principal Investigator
Kolbjorn Blix (via phone)	Space Systems Director (ASC)	Experiment Team
Dr. Tim Wheeler (via phone)	Penn State University	Experiment Team
Allison Howard (via phone)	COSGC Project Manager	Experiment Team
Phil Eberspeaker	NASA/810	SRPO Chief
Libby West	NASA/810	SRPO Project Manager
Carsell Milliner	NASA/810	Contracting Officers Representative
Todd Thornes	NASA/810	SRPO Safety and Mission Assurance Manager
August Bradley	NASA/803	Ground Safety
Mike Disbrow	NASA/803	Flight Safety
Doug Voss	NASA/840	Range Instrumentation Project Manager
Rick Weaver	NSROC	Operations Manager
David Krause	NSROC	Chief Engineer
Nick Cranor	NSROC	Engineering Manager
Nate Empson	NSROC	Mission Manager
Brent Edwards	NSROC	Flight Performance
Belinda Serabian	NSROC	Flight Performance
Shane Thompson	NSROC	Mechanical Engineering
Chris Gabbard	NSROC	Electrical Engineering
Adam Blake	NSROC	Electrical Engineering
Caroline Trump	NSROC	Electrical Engineering
Brian Tibbetts	NSROC	Attitude Control Systems Engineering
Megan Tadge	NSROC	Attitude Control Systems Engineering
Alex Crain	NSROC	Launch Vehicle Engineering

Herbert Haugh	NSROC	Safety & Mission Assurance
Logan Wright	NSROC	Safety & Mission Assurance
Scott Bissett	ROC	Range Services Manager

The 46.018 UO Koehler mission, **Grand Challenge Student Rocket (G-Chaser)** will be the first flight of RockSat-X in Norway (RockSat-XN). RockSat-X has flown six previous times from Wallops Flight Facility, WFF. The mission is scheduled to launch from Andoya Space Center (ASC), Andennes, Norway with a launch date tentatively scheduled for Jan. 2019. The student science teams include foreign nationals which require a TAA, Technical Assistance Agreement. There are no radioactive sources associated with this payload.

Scientific Objectives

RockSat-XN is intended to study and do the following:

- Provide university undergraduate level students and instructors both domestic and foreign a space flight opportunity that involves minimal cost, time investment, complexity and impact to the NASA Sounding Rocket Program.
- Provide introductory flight opportunity to provide exposure to space based science missions.
- Provide customer built payloads which follow constraints in the User's Guide and are chosen by a documented selection process.

Mission Success Criteria

Comprehensive:

- Successful launch of the RockSat-XN experiment, including vehicle performance within 2 sigma of predictions
- All experiments successfully exposed to the space environment at an altitude within 2 sigma of the predicted nominal
- All individual deployment or ejection actuation impulses sent to each experiment at the programmed times
- Data collected from the majority of the telemetered channels used by the participant built experiments

Minimum:

- At least one hot count is conducted for the RockSat-XN mission

Responsibility

The Principal Investigator along with the experiment team will be responsible for overseeing the student experiment portions of the payload along with the associated Ground Support Equipment (GSE). Details of this experiment will be provided at a second MIC at a later time for the student experiments.

NASA, through NSROC will be responsible for providing the labor and materials for provision of the Terrier Improved Malemute launch vehicle and support the development and qualification of the overall payload. This will include labor and materials for design, fabrication, and qualification of the Wallops provided subsystems required to support the mission. These items include payload nosecone and skins, payload telemetry, power, and mechanical support systems as necessary. They will also be responsible for providing all rocket motors and associated vehicle support systems, performing payload integration and environmental testing activities, and conducting the field launch operations.

Actions

A Requirements Definition Meeting (RDM) will be scheduled and conducted by the NSROC contractor within 45 days of the date of this MIC if the schedule works for the science team. Additional mission definition elements (including technical requirements and approach, schedule, and cost information) will be determined in the interim period, presented at the RDM, and documented in the Requirements Definition Meeting Memorandum (RDMM).

Additionally, there needs to be a study for utilizing the space under the nosecone and the previous Attitude Control System (ACS) space for possible student experiments. The ACS and recovery system will not be flown on this mission.



Gordon D. Marsh

cc:

210/Mr. M. Merritt
250/Ms. S. Miller
500/Mr. S. Nelson
548/Mr. J. Yacobucci
569/Mr. S. Hesh
598/Mr. J. Simpson
800/Mr. W. Wrobel
800/Mr. B. Underwood
800/Mr. F. Bellinger
801/Mr. T. Winder
803/Ms. C. Turner
803/Mr. G. Liebig
810/Ms. J. Bloxom
810/Mr. G. Rosanova
810/Mr. C. Brodell
810/Mr. J. Hickman
810/Mr. E. Ransone
810/Ms. E. West

810/Mr. C. Milliner
810/Mr. B. Hall
810/Ms. C. Hesh
810/Mr. T. Thornes
840/Mr. S. Kremer
840/Mr. R. Jameson
840/Mr. R. Hurley
NSROC/Mr. J. Schafer
NSROC/Mr. R. Weaver
NSROC/Mr. D. Krause
NSROC/Mr. N. Cranor
NSROC/Ms. J. Rickmond
LJT/Ms. M. Barrett
LJT/Ms. C. Flaherty
LJT/Mr. F. Garcia
LJT/Mr. J. Jimmerson
Attendees