Purpose and Scope

1) The purpose of this training is to provide health and safety rules and guidelines for the NASA ARC airborne operations component of the Spring 2023 S-MODE IOP-2 Field Campaign.

2) There are separate safety plans addressing the following areas:
   1. Instrument integration activities at AFRC and LaRC
   2. Flight operations onboard AFRC and LaRC aircraft
   3. Twin Otter International, Ltd. (TOIL) flight operations
   4. Research vessel operations
   5. Autonomous Surface Vehicle (ASV) operations
S-MODE Mission Management

NASA HQ and Earth System Science Pathfinder Program Office:
Nadya Vinogradova-Shiffer, Program Scientist – Physical Oceanography Program, NASA HQ
Bruce Tagg, NASA Airborne Science Program Director, NASA HQ
Gregory Stover, EVS-3 Program Manager, NASA LaRC/ESSP PO
Melissa Yang Martin, EVS-3 Mission Manager, NASA LaRC/ESSP PO

Mission Science:
J. Thomas Farrar, Principal Investigator, Woods Hole Oceanographic Institution
Ernesto Rodriguez, Deputy PI for Airborne Operations, NASA JPL
Eric D’Asaro, Deputy PI for Science Planning and Data Analysis, University of Washington
Andrey Shcherbina, Deputy PI for In Situ Operations, University of Washington

Instrument Principal Investigators:
Dragana Perkovic-Martin, DopplerScatt PI, NASA JPL
Jeroen Molemaker, MOSES PI, UCLA
David Thompson, PRISM PI, NASA JPL
Luc Lenain, MASS PI, Scripps Institution of Oceanography
S-MODE Mission Management

NASA ARC – Earth Science Project Office:
Erin Czech, Project Manager, NASA ARC/ESPO
Sommer Nicholas, Deputy Project Manager, NASA ARC/ESPO
Judy Alfter, Project Coordinator, NASA ARC/ESPO
Sam Kim, IT Systems Administrator, NASA ARC/ESPO

NASA AFRC – B200 Flight Ops:
Ken Norlin, B200 Airborne Science Manager, NASA AFRC
Jeff Borton, B200 Project Pilot, NASA AFRC
Hernan Posada, B200 Project Pilot, NASA AFRC
Joseph Piotrowski, B200 Operations Engineer, NASA AFRC

NASA LaRC – G-III Flight Ops:
Brian Baxley, Branch Head - Aircraft Operations and Engineering, NASA LaRC/RSD
Gregory Slover, G-III Project Pilot, NASA LaRC/RSD
Daniel Healey, G-III Project Planner, NASA LaRC/RSD
# S-MODE Mission Management

## Important Cell Phone Numbers

### NASA ARC Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Erin Czech (PM)</td>
<td>650-499-6406</td>
<td>Apr 10 – May 2</td>
</tr>
<tr>
<td>Sommer Nicholas (PM)</td>
<td>650-318-8257</td>
<td>Apr 3 – May 2</td>
</tr>
<tr>
<td>Sam Kim (IT Support)</td>
<td>650-935-0840</td>
<td>Apr 3 – May 2</td>
</tr>
<tr>
<td>Randy Hobbs (Flight Line Logistics)</td>
<td>650-605-5735</td>
<td>Apr 3 – May 2</td>
</tr>
</tbody>
</table>

### B200 and G-III Leads

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeff Borton (B200 Pilot)</td>
<td>316-350-4968</td>
<td>Apr 4-9</td>
</tr>
<tr>
<td>Hernan Posada (B200 Pilot)</td>
<td>661-341-4558</td>
<td>Apr 10-16</td>
</tr>
<tr>
<td>Scott Howe (B200 Pilot)</td>
<td>760-810-8662</td>
<td>Apr 17-21</td>
</tr>
<tr>
<td>Jim Less (B200 Pilot)</td>
<td>661-802-1523</td>
<td>Apr 22 – May 2</td>
</tr>
<tr>
<td>Greg Slover (G-III Pilot)</td>
<td>757-864-8135</td>
<td>Apr 10 – May 1</td>
</tr>
<tr>
<td>Brian Baxley (G-III Pilot)</td>
<td>757-272-4484</td>
<td>Apr 10 – May 1</td>
</tr>
</tbody>
</table>
NASA Anti-Harassment Policy

- Harassment of any kind will not be tolerated from any NASA civil servant, NASA contractor, or NASA grantee.

- If you feel you have been harassed or witnessed harassment/misbehavior in any manner, please contact NASA Ames Ombudsperson Heather Hawley at heather.g.hawley@nasa.gov.

**NOTE:** the NASA Ombuds program is an informal, independent, confidential, and neutral means of communicating and facilitating the resolution of safety, organizational performance, and mission-related issues without fear of retaliation.

- If it is determined that NASA policy has been violated, mission management reserves the right to remove any offending individual from all flight operations.
  - If the offending individual is a NASA civil servant, they will be sent home from the field.
  - If the offending individual is a NASA contractor, their contract management and NASA Procurement will be notified of the incident.
  - If the offending individual is a NASA grantee, then the appropriate individuals (Mission PI, NASA Program Office, etc.) will be notified of the incident.

The full NASA Anti-Harassment policy can be downloaded at https://drive.google.com/file/d/1qZYQJY0yl3InfPFc16J5dfWKdKafawli
General Safety

IN AN EMERGENCY:

● Call 9-1-1 from any Ames phone
● Call 650-604-5555 from cell phones

Center Emergency Status:

● 650-604-9999 – Centerwide Emergency Status Report
● Center Emergency Radio Station, AM 1700

If you are injured:

● 650-604-5287 – Immediately Report to the Ames Health Unit (Building 215)
● After hours call 911
General Safety

In case of a fire alarm or other emergency, the primary escape routes from Bldg N248 are indicated by the red arrows.

All N248 occupants shall go directly to the Assembly Area across Hall Road indicated by the gold star and wait until the Ames Fire Department gives and “all clear” to return the building.

In the event of an evacuation, leave all belongings and exit the building immediately.
General Safety

- Closed-toe shoes are required in the hangar and on the ramp. No high heels, sandals or open-toes or ‘webbed’ shoes are allowed.
- No smoking is allowed in any building. Smoking is only allowed in outside areas where designated. Be aware that there are fuels and other hazards nearby.
- Boxes of hearing protection plugs will be available in the second floor office space in Building N248.
- If you bring hazardous materials into the hangar, please provide ESPO a copy of the SDS in advance.
- Use proper personal protective equipment (PPE) when you are handling hazardous products/materials or performing tasks that would require additional protection.
- Be aware of a loud bell that rings while hangar doors are being opened or closed.
- Always make sure someone in your group knows your whereabouts in case of an emergency.
- 24/7 access – the last one out must turn off the lights. See a member of the ESPO team if you are unsure how to do this.
As of 3/27/23, NASA ARC (Santa Clara County) is in the low (green) COVID-19 Community Level.

Face masks are currently not required indoors at Ames, unless an area is specifically posted that masks are required. However, a face mask may be required in some circumstances, such as a recent exposure to COVID-19 or a recent COVID-19 diagnosis.

Everyone may also wear a mask if they wish to do so.

Project management will alert the team if there has been a change in the Santa Clara County COVID-19 Community Level, or if there is any change to the Ames COVID-19 policies for working on base.

In general, the COVID-19 guidelines throughout NASA are based on the latest CDC recommendations for what to do when you are sick (i.e., isolation) and what to do if you were exposed to someone who is sick.
CDC Guidelines

If you begin to experience COVID-19 symptoms while deployed for S-MODE, then you shall take the following steps:

• Do not report to work and self-isolate. If at work, put on a high-quality mask (e.g., N95, KN95) and go back to your hotel immediately.
• Take a COVID-19 test. ESPO will supply you with rapid antigen tests.
• Follow the CDC guidelines for isolation if your test is positive.
• Notify your supervisor and the S-MODE project manager as soon as possible by phone or email, even if on the weekend.
• Take care of yourself. Get rest and stay hydrated. Take over-the-counter medicines, such as acetaminophen, to help you feel better.
• Stay in touch with your doctor. Call before you get medical care. Be sure to get care if you have trouble breathing, or have any other emergency warning signs, or if you think it is an emergency.
• You will be able to end your isolation and return to work at the discretion of the Ames Chief Medical Officer (CMO), who will work in consultation with the AFRC and LaRC CMOs.
COVID-19 Symptoms

Patients with COVID-19 may have these symptoms:

- Fever or Chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea
Sickness or Confirmed COVID-19 Test During Deployment at ARC

If you begin to experience COVID-19 symptoms, please take the following steps:

● Do not report to work and self-isolate. If at work, put on a high-quality mask (e.g., N95, KN95) and go back to your hotel immediately.
● Take a COVID-19 test. ESPO will supply you with rapid antigen tests.
● Follow the CDC guidelines for isolation if your test is positive.
● Notify your supervisor and the S-MODE project manager as soon as possible by phone or email, even if on the weekend.
● Take care of yourself. Get rest and stay hydrated. Take over-the-counter medicines, such as acetaminophen, to help you feel better.
● Stay in touch with your doctor. Call before you get medical care. Be sure to get care if you have trouble breathing, or have any other emergency warning signs, or if you think it is an emergency.
● You will be able to end your isolation and return to work at the discretion of the Ames Chief Medical Officer (CMO), who will work in consultation with the AFRC and LaRC CMOs.
ESPO will have a supply of rapid antigen COVID-19 tests available for use.

If after consultation with their personal physician, it is determined that the participant should take a COVID-19 PCR test, the participant shall get tested as soon as possible. Contact ESPO for recommendations on local testing locations.

Note that there are no out-of-pocket costs for COVID-19 testing in California. An insured person can get a COVID-19 test when needed by any provider, in or out of their health plan network, at no cost. If you are uninsured, the government pays for your test.
Waiting for Test Results


Other Mission Participants
While a participant waits for test results, the S-MODE PI and PM will act on the advice of the ARC CMO, and in consultation with ARC, AFRC and LaRC management, with regard to continuing mission operations.
In the Event of a Confirmed COVID-19 Case

If there is a known case of COVID among the S-MODE participants during airborne operations, the following steps shall be taken:

- Wear a high-quality mask as soon as you find out you were exposed and continue to wear a mask until instructed otherwise by project management.
- Follow the latest CDC guidance for exposure.