Geological and Planetary Sciences General Guidelines for Fieldwork in the GPS Division

The GPS Division recognizes that there are safety risks that are inherent in doing fieldwork in remote areas, and that we should minimize risks to the maximum extent that is consistent with our mission. Just like in the laboratory setting, advisors are expected to discuss with their advisees and employees the risks and dangers in any assigned fieldwork, and to outline appropriate responses. This type of discussion constitutes an ongoing educational process and is the main mechanism by which safe field practices are conveyed. It is not the goal of this document to substitute for such substantive discussion; instead this document focuses on specific suggestions for field research that is performed in remote and rugged areas.

Guidelines:

- 1. In rugged or remote areas the Faculty Advisor will require an assistant to accompany their advisee field researchers. In less rugged or remote areas it is up to the advisee to decide on the need for an assistant.
- 2. The Division has acquired the following that are available to be checked out by researchers working in remote areas where there is no Wi-Fi or cellular phone service:
 - a. A GARMIN Satellite Communicator
 - Can send and receive text messages to any cell phone number or email address
 - Built-in GPS provides basic navigation, location and tracking data within 5 meters
 - b. Satellite Telephones
 - Can be used to make and receive voice calls to and from any phone number
 - Include voicemail capabilities
 - Have the ability to send and receive text messages
 - c. Two-way Radios
 - For communication between separated participants in the field
 - 30+ mile range depending upon terrain
 - Water resistant
- 3. Experience tells us that Division vehicles left unattended in remote areas for several days at a time invite suspicion or concern with local people. A standard form on Division letterhead introducing the researcher(s) by name, a general statement about fieldwork activities, and a date of return to the vehicle will be available in each vehicle. This form also includes contact information to the Division and to Caltech Security. It should be left on the inside dash board so it can be easily read from the outside. All field researchers should carry with them field identification that includes emergency contacts, contacts at Caltech, and a briefing of any chronic medical conditions, blood type, active medications and allergies.

4. The professor of the course or sponsoring the research is required to contact Caltech Wellness Services to seek advice from Jennifer Howes on who should be contacted to provide an assessment of health risks for the sites where they and/or their students/members of their research group will be working, both for course field trips as well as for field research trips. Caltech Wellness Services will not conduct the risk assessment but will rather be a point of contact to someone expert in the area of the fieldwork. The professor will then need to either speak with that external authority or access a resource (e.g. website) that provides an official list of current concerns in the area of the site(s) selected.