Summary of the 01/07/04 GeoRecon Working Group Meeting

The first meeting of the GeoRecon Working Group (WG) took place at UC Berkeley on 01/07/2004. The meeting was attended by David Frost, Bill Lettis, Ellen Rathje, Nick Sitar, Les Youd, Dimitris Zekkos (student assistant), and Jon Bray. J.-P. Bardet could not attend because of a NSF review site visit in the Midwest. The meeting agenda is attached.

Following the meeting agenda, the primary objectives of the GeoRecon WG were first reviewed following the slides prepared by Jon Bray, which are provided as a separate pdf file. The necessity for a collaborative group of reconnaissance teams that could quickly respond to an earthquake in the United States or abroad was stressed. Each reconnaissance team had an important role to play, as in the past, so coordination of a collaborative response was felt to be essential. The NSF GeoRecon team should be adequately trained and equipped to collect useful geotechnical data that will provide information and high quality data that can be used in empirically based methods. Safety is an important issue to address. The WG agreed that to achieve these objectives it is necessary to take advantage of the technological advances (such as the GPS, satellite data, and access to real-time information collected in the field) and also to assemble teams that complement those assembled by the USGS, EERI, among others.

Ellen Rathje presented a talk on the potential use of satellite data, such as InSar but also other types of optical images and airborne photos, for reconnaissance purposes. Nick Sitar presented lessons learned from previous reconnaissance efforts and the use of technologies such as GPS in connection with digital maps and digital drawings that should help collect high quality data in the field. Les Youd presented and discussed the USGS circular 1242, which defines the current NEHRP plan on coordinating post-earthquake investigations. It was explained that currently EERI, USGS, and NSF support post-earthquake investigations, with EERI taking the lead on foreign investigations and USGS taking the lead on investigations within the United States. Les stressed the importance of collaboration with the aforementioned organizations to develop a common scheme that will ensure that the collection of satisfactory geotechnical information within the time and cost restrictions is maximized. All members of the WG were asked to thoroughly review USGS Circular 1242, as well as the 2003 EERI document entitled "Collection and Management of Earthquake Data." The GeoRecon activity should be positioned to participate in the Phase II meeting delineated in USGS Circular 1242.

The WG discussed key issues listed on the meeting agenda, except those listed as items 5 though 7 due to time. It was agreed that the objectives and tasks of the GeoRecon activity as described in the proposal were reasonable, but they should continue to evolve in the future. The composition of the WG was discussed, and it was decided to move Rob Kayen up from the Advisory Panel to the WG due to his experience in post-earthquake reconnaissance and his important role within a key organization, i.e. the USGS. Rob Kayen, who was attending the conference at Berkeley, agreed to join the GeoRecon WG. Les Youd already represents the EERI Learning From Earthquakes effort. Some additional suggestions were made regarding the composition of the GeoRecon Advisory Panel. Jon Bray was asked to invite the proposed members of the Advisory Panel to participate in this activity and to finalize its composition. The next meeting of the WG should be held in March or April of 2004. Jon Bray will contact members to finalize a meeting date. A larger meeting with the GeoRecon Advisory Panel and WG would follow in the Summer of 2004.

NSF GeoRecon Working Group Activity

NSF-Sponsored Post-Earthquake Geotechnical Reconnaissance Efforts

01/07/04 GeoRecon WG Dinner Meeting: 6 pm - 10 pm

UC Berkeley Faculty Club "E Room"

Meeting Agenda

- 1. Introductions and Dinner
- 2. Review of Primary Objectives of the GeoRecon Activity
 - a. Research Needs and Objectives
 - b. Intellectual Merit and Broader Impacts
 - c. Proposed Research Activity
 - d. NSF Review Comments
- 3. Some Opportunities and Challenges
 - a. Use of Satellite Data from 2003 Tokachi-Oki Japan EQ Ellen
 - b. Responses to Recent Earthquakes Nick
 - c. USGS Circular 1242 "The Plan to Coordinate Post-Earthquake Investigations" Les
 - d. National Center for Airborne Laser mapping (NCALM): UF & UCB Jon
 - e. Other Issues
- 4. Feedback on Proposal (attached)
 - a. Objectives and Activity
 - b. Anticipated Research Accomplishments
 - c. Composition of GeoRecon Working Group and Advisory Panel
 - d. Coordination with EERI-LFE, USGS, and Other U.S. and International Post-EQ Reconnaissance Organizations.
 - e. Coordination with Other Activities, such as NEES, PEER, USUCGER.
 - f. Dissemination of GeoRecon WG Activities and Accomplishments
 - g. Archiving Post-EQ Reconnaissance Data (e.g. EERI Workshop Report Aug 2003)
- 5. Preliminary Post-EQ Response Plan
 - a. Threshold for Response
 - b. Decision Process and Coordination
 - c. Application for NSF SGER Funds
 - d. Execution
- 6. Equipment Required
- 7. Other Issues
- 8. Schedule
 - a. Next GeoRecon WG Meeting
 - b. Next GeoRecon Advisory Panel Meeting
 - c. Future Activities