INTRODUCTION

This past year, 2008, was a time of growth and success for Caltech as we work towards becoming a disaster-resistant institute. Caltech engaged in four disaster exercises, each progressively more challenging, culminating in a complex functional exercise as our participation in the Great Southern California Shakeout on November 13, 2008. This effort of continuous improvement has brought about campus-wide engagement, from grass-roots volunteers to upper administration.

These exercises tested our emergency response capability and resulted in significant benefits:
- Challenged the emergency management structure to minimize the impact of a disaster to the Institute
- Improved organizational coordination and communications to get the Institute operational
- Boosted the Institute’s human resource capability by clarifying roles and responsibilities and training personnel

2008 MAJOR ACCOMPLISHMENTS

Emergency Management

- Developed detailed earthquake response plans including: volunteer management plan; food and water distribution plans; emergency generator plan; communications without electronic tools; tasks and priorities of Disaster Assessment and Building Assessment Teams.

- Developed work-arounds for finance processes: If systems are lost, it will be essential to be able to manually create emergency purchase orders, new contracts, and keep track of expenditures. Identified plan for cash set aside for emergencies.

Organizational coordination and communications

- Introduced the local emergency operations headquarters concept - Division/Department Control Center (DCC) - to academic divisions and administrative units. This allows for appropriate staffing, communication strategies, hazard mitigation, and business resumption plans unique to each DCC.

- Tested the written Institute Communications plan, which defines roles, responsibilities, and contained pre-approved templates that enables the Institute to respond promptly and credibly.

- Successfully deployed an emergency laptop blog server, deployed a stand-alone emergency network in the Facilities building, and tested ham radio equipment in the Emergency Operations Center (EOC) for upgrade to communications system.

Human Resource Capability
o Trained a core group of 100 employees at the Institute in emergency or disaster preparedness management such as the Incident Command Structure and activation of the Emergency Operations Center (EOC) to help for a quick recovery post disaster.

o Promulgated the definition of a “Institute critical” employee and their role in response to a disaster. This aids Departments and Division in managing their human resources by clearly identifying, informing, and training their staff.

o Promoted employee/family preparedness by holding safety fairs, helped develop family emergency plans, and recommend family communication strategies. Employees will only stay at work or come in after a major disaster if their families are taken care of and their homes are safe.

o Trained 20 members of the Security staff in Urban Search and Rescue techniques to make the Institute more self-sufficient.

### 2009 OBJECTIVES

- Formalize and pre-approve Human Resource policies. This would include such policies as compensation (how long to pay someone who is not working, work incentives, etc.), next-of-kin notification (in the event of serious illness or death), and disciplinary actions (for behaviors such as failure-to-report).

- Distribute Emergency Response ID and stickers for ID cards to Institute personnel.

- Convert/modify gas station Underground Storage Tanks to 10,000 gallon diesel supply.

- Establish a robust way for electronic communication with the DCCs.

- Continue to refine the EOC location, tools, and communication devices and methods. The expansion of computer tools will help to enhance campus communication over time.

- Continue to work with the Division/Department Control Centers on their business recovery plans, including improved communication strategies and hazard mitigation plans.

### 2009 EXERCISE SCENARIOS

Exercises provide excellent opportunities for individual improvements to practice skills and gain experience, as well as system improvements for group learning and refinement of processes. The following exercises are planned for 2009.

- Cold start activation of the EOC
- Volunteer Management plan drill
- Activation of the Student Affairs DCC
- Violent Perpetrator functional exercise