

INTRODUCTION

The Crisis Management Council's vision is that the Caltech campus community is prepared to respond to and recover from any disruption and will sustain core research, teaching, and critical operations. Major initiatives for 2016 included: our first campus-wide emergency exercise in February, strengthening of our Emergency Coordinators' network, and the writing of several new Campus Emergency Management Plans for publication in early 2017.

INCIDENTS / EVENTS

- **Carjacker - Armed Intruder on Campus**

On Tuesday, October 25, 2016, at 9:04 pm, Pasadena Police received a call that a car had been stolen at gunpoint from a location close to campus. At 9:27 pm, after a short pursuit, the stolen car collided with a parked car on Holliston Ave. The suspect fled on foot westbound into the campus. Law enforcement from six jurisdictions responded to campus and established a perimeter. A Caltech Alert advised campus to lockdown. A virtual EOC was activated. The suspect was apprehended by law enforcement just before midnight. There were no injuries to members of the campus or law enforcement.

EXERCISES AND TRAINING

- **Floor Warden and Building Coordinator Training – Jan / Feb and Ongoing**

In anticipation of the campus-wide earthquake exercise, over 200 members of our campus emergency coordinator network received training between January and February. Building-specific training and monthly classes were conducted.

- **Emergency Operations Section Training – February 2016**

EOC Section Leaders and members of their teams participated in refresher training. An overview of the Incident Command System and the roles and responsibilities of the functions within the Emergency Operations Center were reviewed, followed by a tabletop exercise.

- **Campus Wide Earthquake Exercise – February 2016**

The goal of the exercise was to train building occupants on evacuation procedures, test emergency processes for accounting for people and conducting initial building assessments, stress-test our communication process and technical capabilities, and test the Emergency Operations Center's process for collecting and organizing incoming information from campus. Over 2800 participants were recorded in our first ever all campus exercise.

- **Building Evacuations Drills – June 2016**

Twice a year, in coordination with fire alarm testing, campus buildings are individually evacuated. This year, while Building Coordinators and Floor Wardens were accounting for individuals in their assembly areas, building occupants were provided with cards instructing them on their responsibility to report to their Floor Warden, Building Coordinator, or Lab Safety Officer and report any hazardous conditions they have observed. This approach will continue in 2017.

- **Campus Violence Prevention Exercise – July 2016**
 Expanding on the format practiced annually since 2013, all Divisions and Departments were encouraged to conduct workplace violence tabletop exercises with their groups. Scenarios tailored to reflect their individual work environments were provided facilitators along with facilitator training and guidance. Participating groups discussed and physically practiced response procedures.
- **Building Assessment Training – August 2016**
 The goal of building assessment training is to educate participants to make a visual assessment of the exterior of a building after an earthquake. While it does not qualify the participants to do an actual structural evaluation of a building, it empowers members of our campus emergency response network to make a preliminary evaluation of their building. This year’s training was led by Professional Structural Engineer Carl Wilford, Vice President at Thornton Tomasetti.
- **Hazardous Materials Spill Tabletop Exercise – April 2016**
 The objective of the exercise was to identify potential impacts to building environments and research following a strong earthquake and release of hazardous materials in order to improve response plans and identify potential mitigation strategies.
- **Natural Gas Curtailment Tabletop Exercise - July 2016**
 The purpose of the natural gas curtailment exercise was to examine internal and external notification processes during flex alerts and curtailments, identify actions to be taken in Central Plant during a curtailment, and identify areas to strengthen within the Natural Gas Curtailment Plan.
- **Great California ShakeOut Drill – October 2016**
 For the 9th consecutive year, members of the Caltech community, along with over 10.5 million other Californians, practiced earthquake preparedness by following the, “Drop, Cover and Hold On!” procedure during the annual Great ShakeOut Earthquake Drills, now a global initiative with over 22.2 million participants worldwide. A Personal Preparedness Fair was held on San Pasqual Mall following the drill.
- **Information and Assistance Hub Activation Exercise - November 2016**
 The Information and Assistance Hub, referred to as the “Hub” is an indoor or outdoor location that provides basic information pertaining to the emergency and resources available to members of the Caltech community. Resources provided will reflect the unique nature of the situation and might include: information on available counselling services, location of medical assistance, and status of assessed buildings. The objectives of the exercise were to: review team notification and reporting protocols, further develop roles and responsibilities of the Hub team, identify necessary resources and training, and practice EOC-to-Hub radio communications.
- **Division Engagement**
 Several Divisions and Departments strengthened their own readiness by procuring additional VHF radios and emergency supplies and revising Emergency Action Plans. Multiple Divisions and Departments conducted internal training and exercises during the year.

- **VHF Radio Drills**
Commencing August 2016, radio drills are held the first Thursday of every month between Division Control Centers and the Emergency Operations Center. The objective of the monthly drill is to ensure functionality of radios and allow participants to practice radio protocols.

PLANNING

- **Campus Emergency Management Plan (CEMP)**
The Caltech Campus Emergency Management Plan is under regular review and revision. A new revision will be published in January 2017. New plans include: Disaster Financial Recovery, Emergency Warnings, and Natural Gas Curtailment. Existing plans that have been revised include: Incident Command System, Active Shooter, Communications, Hazardous Materials, Information and Assistance Hub, and Water.
- **Continuity Planning**
Progress towards establishing departmental continuity plans continued in 2016. Twenty-four new plans were developed in 2016, totaling 104 plans in the Caltech Ready continuity planning tool. Continuity planning across campus is a multi-year effort and will continue to be a focus into 2017 and beyond.
- **VHF Radios**
A second VHF radio repeater was installed this summer on the roof of Millikan Library for greater operational capacity. In addition, all campus radios have been reprogrammed to display channels consistently.
- **Purchase of a Water Filtration Unit**
The Institute has purchased a portable water filtration system, the Divvy, that is human powered and can filter at a rate of up to 2000 gallons/day, without the need of fuel or electricity. The Divvy was set up and demonstrated during the Personal Preparedness Fair in October.

CAMPUS OUTREACH AND EDUCATION

- **Campus Emergency Responders Forum – May 2016**
The Emergency Responders' Forum is an event that brings together all members of our campus community who have a designated emergency role. This year's Forum consisted of a morning keynote presentation by Joseph Threat, former head of FEMA's Louisiana Recovery Office and President and CEO of Threat Defense, followed by interactive sessions that allowed participants to learn or practice life-saving skills such as hands-on fire extinguisher use, use of an automated external defibrillator (AED), as well as attending a demonstration on cribbing.
- **Threat Assessment Regional Evaluation Team (TARGET) meeting – July 2016**
Caltech hosted the 2016 annual all day training event coordinated by the FBI and specifically designed for mental health practitioners, law enforcement officials, technology partners, and members of colleges and universities responsible for the investigation and management of threats posed to institutes of higher education. The agenda included: a presentation of the Caltech Threat Assessment Team, overview of the 2015 Inland Regional Center Mass Shooting,

retrospective examination of workplace violence and future considerations, and dark web investigative techniques.

- **Personal Preparedness Fair – October 2016**

Caltech's annual Personal Preparedness Fair, held in conjunction with the Great California ShakeOut Drill, again saw record numbers in attendance; there were over 600 people in attendance. There were representatives from Caltech's emergency coordinator network and other key response groups as well as numerous community vendors and resources, such as the American Red Cross and the City of Pasadena's Disaster Council.

2017 OBJECTIVES

- Strengthen undergraduate and graduate student awareness of emergency procedures and readiness;
- Continue to strengthen Emergency Action Plans in both academic and non-operational Divisions and Departments;
- Continue to fortify our emergency coordinators network; and
- Continue continuity planning efforts with academic and operational Divisions and Departments.

2017 PLANNED EVENTS AND EXERCISES

- EOC team training (Jan and Aug)
- Active Shooter Exercise Series that includes EOC tabletops, an undergraduate student drill, and a campus-wide drill (Feb to April)
- Annual Emergency Responders Forum (May)
- 2017 Great California ShakeOut Drill and Personal Preparedness Fair (October)
- Infectious Disease Tabletop Exercise (October)
- Functional Earthquake Exercise (November)

This report is published on the Emergency Management website along with past years' reports at: <http://www.emergencypreparedness.caltech.edu/about/annualreports>