

NCSEA COMMUNICATION MEETING:
*Structural Engineering Emergency
Response Program*

Speaker

NCSEA SEER Committee Co-Chair:
William Bracken



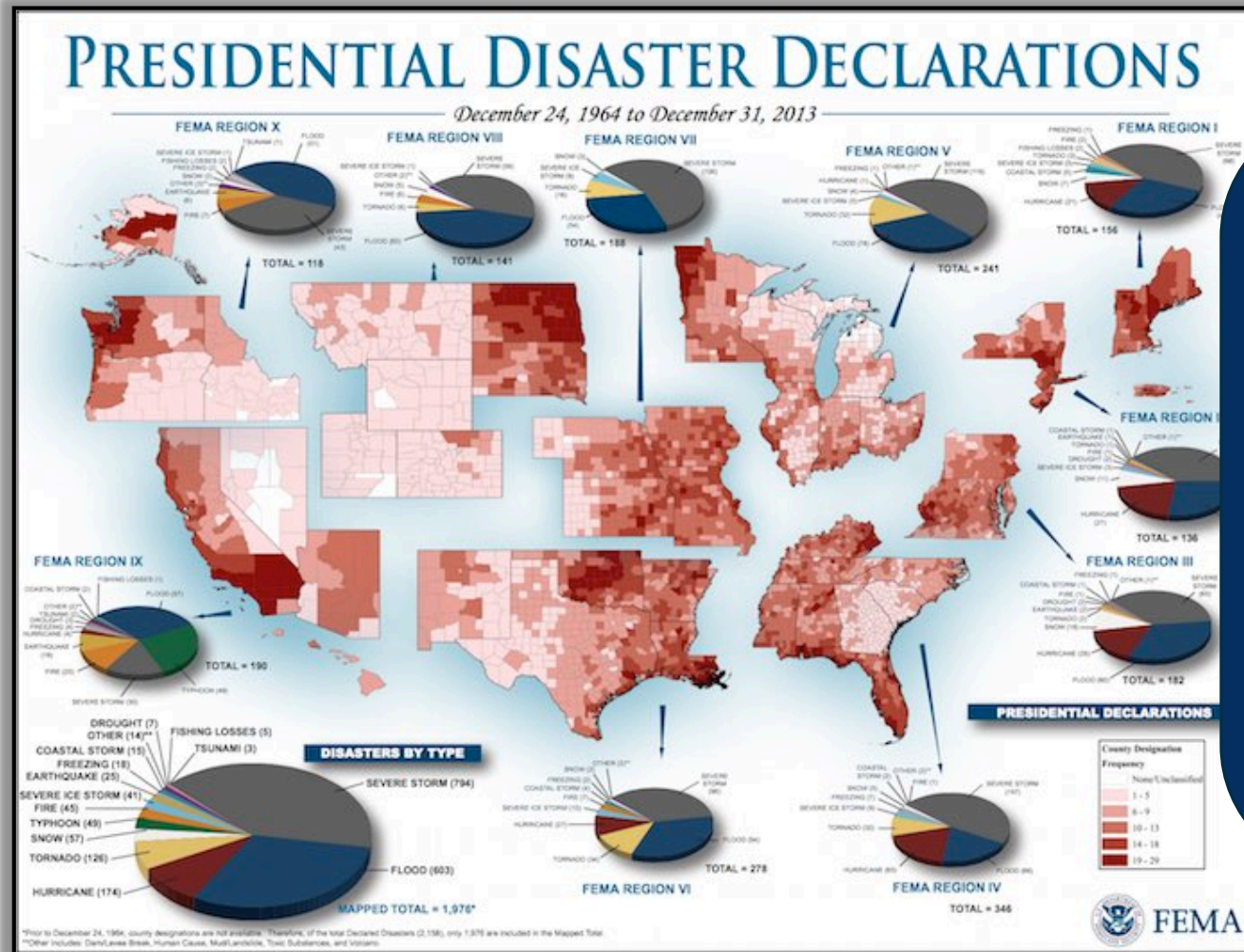
NCSEA

National Council of Structural Engineers Associations

Topics of Discussion

- SEER program
- Committee Makeup
- 2nd Responder Roster
- Collaboration & Participation

No Community is Immune



In 2016 More than 100 million people within the US (1/3 of it's population) were adversely impacted by a natural disaster

What Is Recovery?

The task of restoring the infrastructure and returning a community to normal operation

How Does Recovery Begin?

By utilizing 2nd Responders to determine whether structures are suitable for re-habitation

INSPECTED
LAWFUL OCCUPANCY PERMITTED

This structure has been inspected (as indicated below) and no apparent structural hazard has been found.

Inspected Exterior Only
 Inspected Exterior and Interior

Report any unsafe condition to local authorities; reinspection may be required.

Inspector comments: _____

Facility Name and Address: _____

Date _____
Time _____
(Caution: Aftershocks since inspection may increase damage and risk.)

This facility was inspected under emergency conditions for: _____
(Jurisdiction)

Inspector ID / Agency: _____

RESTRICTED USE

Caution: This structure has been inspected and found to be damaged as described below: _____

Entry, occupancy and lawful use are restricted as indicated below: _____

Facility Name and Address: _____

Date _____
Time _____
(Caution: Aftershocks since inspection may increase damage and risk.)

This facility was inspected under emergency conditions for: _____
(Jurisdiction)

Inspector ID / Agency: _____

Do Not Remove, Alter or Cover this Placard until Authorized by Governing Authority

UNSAFE
DO NOT ENTER OR OCCUPY
(THIS PLACARD IS NOT A DEMOLITION ORDER)

This structure has been inspected, found to be seriously damaged and is unsafe to occupy, as described below: _____

Do not enter, except as specifically authorized in writing by jurisdiction. Entry may result in death or injury.

Facility Name and Address: _____

Date _____
Time _____

This facility was inspected under emergency conditions for: _____
(Jurisdiction)

Inspector ID / Agency: _____

What is A 2nd Responder?

A trained and qualified individual (resource) capable of performing post-disaster damage assessments

2nd Responders

There are 4 classes of 2nd Responders:

- **FEMA Structure Condition Evaluator (SCE) I, II or III**
- **ICC Disaster Response Inspector (DRI)**
- **CalOES SAP Assessor**
- **ATC 20 or 45 Damage Assessor**

2nd Responders

	Title	Certification Required
FEMA / NIMS Resource	SCE – Type 1 (Structure Condition Evaluator)	Yes ⁽¹⁾
	SCE – Type 2 (Structure Condition Evaluator)	Yes ⁽¹⁾
	SCE – Type 3 (Structure Condition Evaluator)	Yes ⁽¹⁾
Mutual Aid / EMAC Resource	DR Inspector (ICC: Disaster Response Network)	Yes ⁽²⁾
	SAP Assessor (CalOES: Safety Assessment Program)	Yes ⁽³⁾⁽⁴⁾
Non-Affiliate	ATC Damage Assessor	No

2nd Responders

Damage Assessment Professionals Qualifications Matrix (Domestic)

	2nd Responder (Damage Assessment)					
	FEMA Structure Condition Evaluator (SCE)			EMAC / Mutual Aid Resource		Non-Affiliate
	SCE - Type 1 ⁽⁵⁾	SCE - Type 2 ⁽⁵⁾	SCE - Type 3 ⁽⁵⁾	ICC Disaster Response (DR) Inspector ⁽⁶⁾	CalOES Safety Assessment Program (SAP) Evaluator ⁽⁷⁾⁽⁸⁾	ATC Damage Assessor
TRAINING / EDUCATION						
First Aid						
America Heart Association Cardiopulmonary Resuscitation (CPR)	✓	✓		(Recommended)	(Recommended)	
Advanced First Aid						
Incident Command System (ICS) Classes						
IS-100: Introduction to Incident Command System	✓	✓	✓	(Recommended)		
IS-200: ICS for Single Resources and Initial Action Incidents	✓	✓	✓	(Recommended)		
National Incident Management System (NIMS) Classes						
IS-700: National Incident Management System Introduction	✓	✓	✓	(Recommended)		
IS-800: National Response Framework Introduction	✓	✓	✓	(Recommended)		
Emergency Support Functions (ESF) Classes						
IS-803: ESF #3 – Public Works and Engineering	✓	✓	✓			
IS-809: ESF #9 – Search and Rescue	✓	✓	✓			
ATC Classes						
ATC-20 Seismic Damage Assessment class						✓
ATC-45 Wind & Flood Damage Assessment class						✓
Advanced: ATC-20 and ATC-45 classes with additional concepts of operations training						
ICC Disaster Response (DR) Inspector class	✓	✓	✓	✓		
California OES Certified Safety Assessment Program (SAP) Evaluator class	(Only 1 Required)	(Only 1 Required)	(Only 1 Required)		✓	
Specialty: Structure Condition Evaluator						
Building Safety Assessment Engineer	✓	✓				
Building Safety Assessment Leader	✓					

SEER program - Mission

The SEER Program is a comprehensive nationwide program consisting of four main components:

- Training
- Roster Management
- Advocacy
- Assistance Coordination




NCSEA

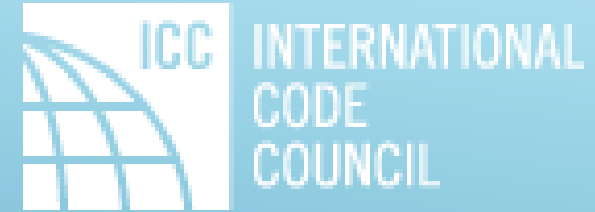
National Council of Structural Engineers Associations

SEER program - Training

Facilitate and/or deliver training to design and construction professionals so as to qualify them to participate as 2nd responders at a local, State or national level.

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SEER program - Training



NCSEA Sponsored / Delivered

- ICC Disaster Response Inspector (DRI)
 - 2-Day On-site Institute (includes a 1-Hour exam)
 - Scheduled upon request
 - Receive: ATC-20, ATC-45, ICC Certificate & CEUs

SEER program - Training



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

NCSEA Sponsored / Delivered

- CalOES Structural Assessment Program (SAP) Assessor
 - 6-hour NCSEA Webcast
 - Regularly scheduled through NCSEA
 - Receive: CalOES Certificate & Card

SEER program - Training

FEMA Online

- NIMS/ICS IS-100 & 200
- NIMS/ICS IS-700 & 800
- NIMS/ICS IS-803 & 809

(<https://training.fema.gov/nims/>)




FEMA

*Emergency
Management
Institute*

SEER program - Roster Management

Compile and maintain a database of Structural Engineers who are willing to assist with post-disaster condition assessments of structures at a local, State or national level

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2nd Responder Roster

The SEER: 2nd Responder Roster is a self-reporting system accessed through the NCSEA website


<http://www.ncsea-seer.com/>




The screenshot shows the NCSEA-SEER Volunteer System interface. At the top left is the NCSEA logo with the text "Classification Matrix" to its right. Below the logo is the title "NCSEA-SEER Volunteer System". To the right of the text is a banner image of a damaged building with the words "DISASTER RESPONSE" overlaid in large, bold, black letters. Below the banner is a "User login" section with two input fields for "Username *" and "Password *". Below the password field are two links: "Create new account" and "Request new password". At the bottom left of the login section is a blue "Login" button.

SEER program - Advocacy

Education of AHJs, allied associations, members and the public on the benefits of having engineers participating in 2nd response and performing post-disaster assessments

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SEER program - Advocacy

- Education and promotional materials are being developed and disseminated
 - Existing ties will be strengthened
 - New relationships will be established
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Existing Ties



National Response Framework

Second Edition
May 2013



Homeland Security

Facilities

Tech Tips

United States Department of Agriculture
Forest Service



Technology & Development
Program

December 2005

7300

0573-2345-MTDC

Inspecting Buildings after Natural Disasters

James "Scott" Groenier, Project Leader

The recent hurricanes in the United States and the earthquake in Pakistan show the need for rapid structural safety assessments of buildings after natural disasters. After a disaster, public officials who regulate building safety need to determine the damage to buildings and let the public know whether the buildings are safe. These assessments are difficult, particularly because building department employees also may be victims of the disaster and may be overwhelmed with the workload.

for an immediate response by structural engineers who perform the structural assessments after a major disaster. The plan would help States assemble teams of structural engineers ready to respond safely and efficiently to a structural disaster. The *SEERPlan Manual* was completed in 2003 (figure 1). The manual can be ordered from the NCSEA for \$25 plus shipping. An order form is available at <http://www.ncsea.com/downloads/seerplanorder.pdf>.

Where to Find Information about Assessments

Recently, the National Council of Structural Engineers Associations (NCSEA) developed a manual and training package for these assessments. The manual outlines a comprehensive *SEERPlan Manual: Structural Engineers Emergency Response Plan*. The primary focus of the plan is to develop a framework

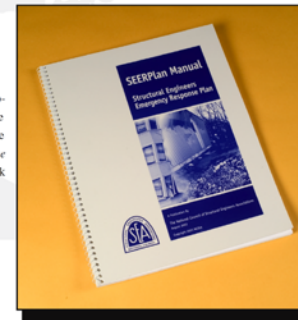


Figure 1—The *SEERPlan Manual: Structural Engineers Emergency Response Plan* was developed for structural engineers who need to perform structural assessments after natural disasters.

In the late 1990s, the Applied Technology Council (ATC) developed and published *Post-Earthquake Safety Evaluation of Buildings* (ATC-20). The ATC recently published guidelines on safety evaluations of buildings after windstorms and floods

Highlights...

- Structural engineers need to be prepared to make rapid safety assessments of buildings after natural disasters.
- Manuals and guidelines published by the National Council of Structural Engineers Associations and the Applied Technology Council can help structural engineers prepare themselves for these assessments.

TD

For additional information, contact: Scott Groenier, project leader; USDA Forest Service, MTDC; 5785 Hwy. 10 West; Missoula, MT 59808-9361. Phone: 406-329-4719; fax: 406-329-3719; e-mail: jgroenier@fs.fed.us



ATC




NCSEA

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SEER program - Assistance Coordination

Coordinating and/or providing 2nd response assistance to AHJs and other stakeholders based on the roster

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SEER program - Assistance Coordination

- At the local and State level through MOs
 - At the National and International level through NCSEA
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Topics of Discussion

- SEER program
 - Committee Makeup
 - 2nd Responder Roster
 - Collaboration & Participation
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Committee Makeup

Redundancy

- Co-Chairs
- Voting Members
- Corresponding Members
- SMEs

Committee Makeup

9 Regional Voting Members

- North West
- Mid-Pacific
- South West
- North Mid-West
- Mid-West
- South Mid-West
- North East
- Mid-Atlantic
- South East

Committee Makeup

Corresponding Members

- One for each member organization

SMEs

- As Needed

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- Collaboration & Participation

2nd Responder Roster

A database of trained and certified 2nd responders who are willing to assist with post-disaster condition assessments of structures at a local, State or national level

2nd Responder Roster

NCSEA-SEER Volunteer System

WELCOME to the NCSEA Structural Engineers Emergency Response (SEER) volunteer system. This system is a database of Structural Engineers who have various levels of post-disaster training and are interested in assisting with post-disaster condition assessments of structures (ATC-20 and ATC-45 type assessments).

PLEASE NOTE this database is a self-reporting system used to track individuals willing to participate in post-disaster assessments. Contact information contained within this database will be shared with local, state and federal agencies requesting post-disaster assessment assistance on an as-requested basis. NCSEA will also utilize contact information contained within the database to disseminate information relevant to Disaster Response professionals such as event notices, training opportunities and credentialing initiatives.



This system exists
and is supported
by NCSEA

<http://www.ncsea-seer.com/>

2nd Responder Roster

User
Account

User account

[Create new account](#) [Log in](#) [Request new password](#)

Address

Street *

City *

State/Province *

Postal code *

Username *

E-mail address *

First Name *

MI

Last Name *

Cell Phone *

Volunteers are able to login and update contact, licensure & certification information

2nd Responder Roster

Licensure
Upload &
Experience

Volunteers check
licenses held and
upload PDF copies
of licenses

Licensure *

SE BO
 PE CO
 RA FM
 Other

Other Licensure

Year Started in Professional Practice *

Previous Deployment Experience *

No
 Yes

- SE (Engineer)
- PE (Engineer)
- RA (Architect)
- BO (Building Official)
- CO (Code Official:
Plans/Inspection/Compliance)
- FM (Fire Marshal)

2nd Responder Roster

Training & Certification Upload

Formal Disaster Inspection Training *

- None
- FEMA/USACE Structures Specialist I
- FEMA/USACE Structures Specialist II
- NIMS/ICS IS-100
- NIMS/ICS IS-200
- NIMS/ICS IS-700
- NIMS/ICS IS-800
- NIMS/ICS IS-803
- NIMS/ICS IS-809
- ICC Disaster Response Inspector (DRI)
- CalOES Safety Assessment Program (SAP)
- Building Safety Assessment Leader
- Building Safety Assessment Engineer
- GPS Familiarization
- CPR Certification
- ATC 20
- ATC 45

Volunteers check
certifications held
and upload PDF
copies of
certificates

Locating 2nd Responders



Locating 2nd Responders

Roster Reports

Admin Users are able to locate volunteers by specifying:

- Responder Classification
- Deployment Experience
- Distance from Incident

2nd Responder Roster

Enter a zip code and filter the results based on Licensure, Classifications, and/or Deployment Experience of responders according to the credentials selected and the responder's distance from the event.

Licensure	Responder Classification	Deployment Experience	Distance / Proximity
<input type="text" value="SE"/> <input type="text" value="PE"/> <input type="text" value="RA"/> <input type="text" value="Other"/>	<input type="text" value="StS"/> <input type="text" value="SCE-I"/> <input type="text" value="SCE-II"/> <input type="text" value="SCE-III"/> <input type="text" value="DRI"/> <input type="text" value="CalOES SAP"/> <input type="text" value="ATC 20"/> <input type="text" value="ATC 45"/>	<input type="text" value="- Any -"/>	<p>Postal Code of Incident</p> <input type="text" value="33618"/> <p>Distance of Responder to Incident (Miles)</p> <input type="text" value="30"/>
<input type="button" value="Download Report"/>	<input type="button" value="Print PDF"/>	<input type="button" value="Run Report"/>	<input type="button" value="Reset Filters"/>

Locating 2nd Responders

Roster Reports

Currently the roster includes 700 volunteers

[Download Report](#) [Print PDF](#)

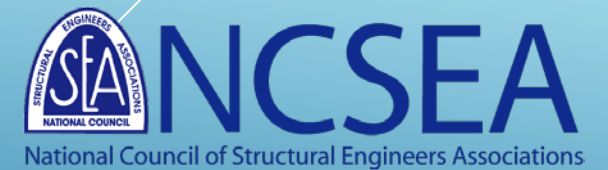
Distance	Name	City	State	Postal Code	Cell Phone	Licensure	NCSEA Member Organization	Disaster Response Classifications	Deployment Experience	Where Deployed
	David Compton	Tampa	Florida	33618	813-477-7539	PE	FSEA Florida	ATC 20, ATC 45	Yes	Mississippi
	Geoffrey Chambers	Tampa	Florida	33618	9047424215	PE, Other	FSEA Florida	ATC 20, ATC 45	No	
	William Bracken	Tampa	Florida	33618	813-927-7055	SE, PE	FSEA Florida	StS, SCE-III, DRI, CalOES SAP, ATC 20, ATC 45	Yes	9 Hurricanes, 2 tornados, 5 collapsed Structures / Gulf & Atlantic Coast / Eastern and Mid-West US

Topics of Discussion

- SEER program
- Committee Makeup
- 2nd Responder Roster
- Collaboration & Participation


Collaboration

National Level



Collaboration

State & Local Level

- Working to develop and maintain legislative protections for 2nd responders
 - Participating in State and regional response programs
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Participation - Member Organizations



Member
Organizations

Training

- Promote and Facilitate SEER Program Training

SEER 2nd Responder Roster

- Promote Participation in the 2nd Responder Roster
- Provide Regular Updates and Feedback to NCSEA

Participation - Member Organizations



Member
Organizations

Advocacy

- Disseminate Educational and Promotional Materials to AHJs, Members and the Public
- Educate AHJs at a State and Local Level on the SEER Program and the 2nd Responder Roster
- Work to Establish and Strengthen Relationships with AHJs at a State and Local Level

Participation - Member Organizations



Member
Organizations

Assistance Coordination

- Provide Instruction and Guidance to members regarding the 2nd Responder Roster and Activation Protocols
- Provide Assistance and Volunteers in response to State and Local Requests

Questions?

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