



Urban Search & Rescue Virginia Task Force 2

VOLUME 2, ISSUE 1

JANUARY 2010

SPECIAL POINTS OF INTEREST:

- Industrial Explosion
- Ammonia Gas Fills Structure Post Collapse
- Workers Buried Beneath Collapsed Structure
- ConAgra Workers Killed In Gas Explosion

UPCOMING EVENTS/ ACTIVITIES

Task Force 2
Annual
Maintenance

January 25-
February 2,
2010
0800-1700 hrs.

Inside Story 4
Structural
Collapse
Technician
School

October 2010

USAR Operations at ConAgra Industrial Explosion

by Tom Caldwell, Chris Coutu, and Lee Dingle



A VATF-2 member and two other engineers served with NCTF-8 at an industrial disaster in Garner, North Carolina last summer. The ConAgra manufacturing plant is the world's sole producer of Slim-Jims snacks and employed 500 people at a sprawling industrial site about 15 miles east of Raleigh.

A natural gas leak led to a huge explosion at 1120 hrs. on June 9th. The blast killed four workers, injured dozens, caused massive structural damage, and partially collapsed the 70,000 square-foot Packaging Area.

Dozens of agencies responded, and Raleigh Chief McLaurin mobilized NCTF-8 to the site. Wake County Emergency Management tasked TF-8 and TFL McLaurin with USAR operations for the incident.

Story continues on pages 2-4

USAR Team's Annual Maintenance

Starting on January 25th, 2010 VATF-2 personnel will begin their Annual Maintenance testing process. This process consist of all Task Force members completing a questionnaire and finally administering several fit test with

SCBA Mask, assuring that each member is equipped with the appropriate size mask in order to render the protection they require while working in hazardous environments. All Task Force members are required to participate. Task Force personnel can visit the web site

www.vatf2.com in order to establish an available date and time to register their appointment for completing their annual fit test. Confirmations will be rendered via e-mail to the recipient by the Task Force Training Coordinator, Richard Brown.

Contact information; 757-385-6680



Picture @ Top Right;
USAR Personnel
Access Structural
Damage Where Ex-
terior Walls Blow-
Out, Collapsing The
Roof Structure.

“The blast blew out wall panels at two ends of the plant, and pulverized and collapsed the overhead double-tees over several structural bays.”

Picture @
Bottom Left;
Inside Look
At The Struc-
tural Damage
Caused By
The Collapse.

Ammonia Gas Fills Structure Post Collapse

USAR Operations at ConAgra Industrial Explosion

continued from page 1

The Packaging Area structure included 24' tall concrete columns supporting precast concrete girders and precast concrete double-tees, with 30' tall precast concrete wall panels. The blast blew out wall panels at two ends of the plant, and pulverized and collapsed the overhead double-tees over several structural bays. Ruptured piping included large refrigeration lines that filled the wrecked space with ammonia gas.



ConAgra officials could account for all but three workers, and was able to identify their probable work areas and provide good quality floor plan drawings. The USAR team chose an entry route through a less-damaged administration area, down a corridor leading to the probable victim area.



A recon squad of two hazmat and one engineer with SCBA made an initial recon. Broken concrete double-tees had fallen onto the packaging line. The floor-mounted packaging machinery had been partially crushed but

many voids were left under the concrete. Oddly, the roof membrane and insulation remained in place, draped and sagging 24' above the collapse area. Within minutes after exiting, photos taken by the recon team were displayed on a flat screen within a command truck. The recon team used these photos to brief the TFL and search squads, and to sketch updates on the rescue maps.





Picture @ Top Left;
Search Teams Decon
After Entering Haz-
ardous Environment.

**“Search teams
located Victims 1
and 2 by about
2000 hrs. and
both were
confirmed as
deceased..”**

Picture @
Bottom
Right;
USAR Mem-
bers Work
Their Way
Throughout
The Struc-
ture Search-
ing For Vic-
tims.

Workers Buried Beneath Collapsed Structure

USAR Operations at ConAgra Industrial Explosion

continued from page 2

This briefing method proved to be quick and very effective, and was used throughout the deployment upon every squad's exit. Using the updated sketches, search routes and areas were defined. By about 1400 hrs. a series of search entries had begun that lasted several hours.



SCBA-equipped squads of eight to ten planned a route, entered, searched, exited, briefed the next squad, updated maps, and rehabbed. Vast amounts of lumber arrived. The TFL and engineers agonized over shoring: Shoring 23,000lb. double tees at 24' off the floor would expose SCBA equipped shoring crews to many hours of hazards. The team decided to forgo shoring so that total exposure time could be limited – a

difficult decision. By 1500 hrs. the site was equipped with rehab, medical, communications, command, and equipment staging areas. A large crane arrived. Agency cooperation was excellent and the USAR team received full support.

Search teams located Victims 1 and 2 by about 2000 hrs. and both were confirmed as deceased. Victim 1 was uncovered using hand tools but Victim 2 appeared pinned under heavy concrete. Rather than lift the debris with airbags it was decided to cut the roof membrane overhead and use the crane to lift large sections of concrete off the victim. For safety, this operation was delayed until daylight.



Violent lightning storms with heavy rain swept in by midnight and operations ceased until 0200 hrs. By 0400 hrs., ammonia levels had dropped, SCBA was no longer needed, and search operations could accelerate. An apprentice search dog arrived on site but was distracted and made ineffective by the thousands of scattered Slim-Jims.



Picture @ Top Left;
Collapse Area
Where Victims
Were Located.

“All three of the victims appeared to have been killed suddenly by falling debris.”

Picture @ Bottom Right;
Victims Trapped & Killed By Heavy Structural Members.



ConAgra Workers Killed In Gas Explosion

USAR Operations at ConAgra Industrial Explosion

continued from page 3



By daylight, the probable victim area had been thoroughly searched and operations moved to other collapse areas nearby. Crane operations began, to uncover Victim 2, and this victim was extricated by 1000 hrs. Victim 3 was finally located by about 1400 hrs. about 120' away from the victim's work area. All three of the victims appeared to have been killed

suddenly by falling debris.

With all the plant workers accounted for, USAR operations ended at 1615 hrs. on June 10, after 30 hours of continuous operations. NCTF-8 logged 600 man-hours inside the building, much of it under SCBA, without a significant injury. Although the site was crowded with local, State, and Federal agency responders, the incident command system was effective and the USAR team had great support. The loss of life, massive structural damage, poisonous gas, and bad weather made this the most intense and complex deployment for NCTF-8 since the team's inception in 2002.



TF8 engineers Caldwell, Coutu, and Dingle were proud to have served with our State team at this incident.

~ 2010 Structural Collapse Technician School ~

Looking for a hands-on experience in Technical Rescue Operations like no other? Come join the many rescuers throughout the country, attending the week long intense, physical demanding challenge that'll not only test your wits, but your skills like no other school in the region. Hosted by the Virginia Beach Fire Department, this school provides both intellectual and physical challenges throughout its entirety. Utilizing top-notch instructor's, this training will prepare students in a variety of technical rescue scenario's, preparing them for handling much more dynamic incidents within their jurisdictions.



Virginia Task Force 2

513 Viking Drive, Suite 9
Virginia Beach, Va. 23452

Ph. (757) 385-6680
Fax (757) 431-4161

September 11, 2001



We will
never forget



Administrative Staff:

Sponsoring Agency Chief: Steve R. Cover

District Chief Oversight: Mark I. Piland

Program Manager: Patrick M. Seigh

Training Coordinator: Richard L. Brown

WebMaster: Ron S. Quesenberry

Assistant WebMaster: William D. Hyatt

Newsletter Editor: Ron S. Quesenberry



Task Force Meetings:

- VATF-2 BOD Meetings: 3rd Wednesday of each Month
- Jurisdictional REPS Meeting: 4th Thursday of each Month
- Training Committee Meeting: 2nd Tuesday of each Month
- PLANS/TIS Meeting: Last Monday of each Month

VATF-2 Mission Statement

The Virginia Task Force 2; hereinafter referred to as the Task Force; shall react immediately to the call to duty, be it local, state, or federal. The mission of the Task Force is to develop, maintain, and deploy Urban Search and Rescue resources to locate, extricate, and provide initial medical treatment to victims trapped in collapsed structures, and to conduct other life-saving operations when called into service through the Federal Response Framework. It will maintain an operationally-ready staff, equipped with modern tools and supplies, that are prepared to mobilize, deploy, and perform tactical assignments. It will achieve this by providing professional advice, recommendations, and technical assistance to the Department and its state, and federal partners on the following;

- Domestic US&R Preparedness and Response.
- US&R Policies, Processes, and Procedures.
- US&R related Equipment, Supplies and Technologies.
- US&R Task Force Organizational and Operational Management.
- Improved methods for coordinating multi-agency US&R resources during major incidents.
- Standard terminology for improving Task Force and Incident Management.
- Improved Communication, Cooperation and Coordination for Task Force and multi-agency incidents.
- Multi-disciplinary training on US&R developed components, documents, and

Component Training: Please check web site for posted training announcements.

- | | |
|------------------|-----------------|
| • SAFETY | • MEDICAL |
| • LOGISTICS | • HAZ-MAT |
| • RESCUE | • HEAVY RIGGING |
| • SEARCH | • STRUCTURAL |
| • COMMUNICATIONS | |