

DEERING FIRE AND RESCUE  
AFTER ACTION REPORT  
LIVE BURN TRAINING  
AUGUST 2007

The Deering Fire and Rescue was fortunate enough to acquire a building for live fire training thanks to the Beard Family. The dwelling, located at 161 Fish and Game Road, was scheduled for demolition but the Department was able to use the structure for training evolutions on three separate dates.

Our goal was to spend the first evening of August 21<sup>st</sup> performing Search and Rescue activities within the structure utilizing a non-hazardous smoke generating machine from the New Hampshire Fire Academy. The second evening on August 23<sup>rd</sup> would be to advance hoselines into the structure again using the smoke generating machine while other members on "the scene" would perform ventilation techniques on the roof. Our third day, August 26<sup>th</sup>, would be spent lighting and extinguishing single room fires in the building prior to the final burn which would take the building to the ground (the goal of the property owners) while supervised by a Fire Watch assignment from the Department of Fire and Rescue.

The prescribed training activities, including prep work and the final burn, was conducted under the standards set forth in NFPA 1403 Live Fire Training in Acquired Structures. This involved receiving permission to conduct the burn from the New Hampshire Department of Environmental Services and the Department of Resources and Economic Development, both of which we received in a timely fashion. An asbestos inspection was conducted by Les Cartier Associates of Candia on August 19<sup>th</sup> and was found to be clear of this hazardous material.

An initial inspection of the residence was made by Chief Andy Anderson and Deputy Chief Chris Ladue. Upon our recommendations all windows were removed and replaced with boards and all of the highly flammable flooring (carpets and linoleum) was removed by the property owner.

With the assistance of the property owner the building was well prepared for our training sessions which began on August 21<sup>st</sup>.

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Search and Rescue Training  
Tuesday, 21 August 2007  
1830-2230

The evening training was attended by 17 members of our Department. Deputy Chief Ladue conducted the training assisted by Firefighter Steve Brooks and Instructor Eric Uitts of the New Hampshire Fire Academy.

The smoke generating machine that we had borrowed from the Academy malfunctioned almost immediately and forced us to obtain a machine from the Hillsboro Fire Department. This machine worked very well and reduced visibility to zero within the structure in a very short time.

Our group was split into search teams of two and we began work inside the building, locating and removing a "victim" which was a one hundred pound hose dummy from the Fire Academy. Each group was able to rotate through four search evolutions while taking time to rehab after each search.

Two members were examined by our medical staff for heat related issues. One was treated at the scene and another required transport to Concord Hospital where he was treated and released.

Since we were not using live fire, we were able to send the search teams into the structure without the benefit of a "walk through" tour of the building. This made navigating the structure much more challenging for our members and provided the Department's Chief Officers with an opportunity to evaluate the performances of our members.

The smoke generating machine from Hillsboro enabled us to continue our evolutions without interruption. The purchase of such a machine by our Department should be considered since this enables members to operate in nearly the same conditions as live fire but without the danger of injury if a Firefighter runs out of air or takes their face piece off during training.

We were loaned a portable cascade system from the New Hampshire Fire Academy for the week but quickly determined that this would not be sufficient since we went through nearly all of the supply filling our cylinders during just the Search and Rescue evening.

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Ladders, Ventilation, Hose Handling Training  
Thursday, 23 August 2007  
1830-2230

The evening training was attended by 14 members of our Department. Deputy Chief Ladue, assisted by Firefighter Steve Brooks, conducted the Ladder and Ventilation training while Chief Andy Anderson conducted the Hose Handling evolutions.

Members were split into three groups to perform simultaneous evolutions on and in the structure. While the Ladder and Ventilation groups were working on the outside the Hose Handling teams advanced a 1 ¾" attack line into the building much the same way as they would be expected to fight fire during the upcoming weekend evolutions. Crews were rotated through all of the events using two Firefighters to vent the roof with the K-12 saw, three Firefighters to throw the 24' ground ladder and 16' roof ladder, and three Firefighters to advance the hoseline into the building. Other members were assigned Safety positions as well and EMS/Rehab and to run the pump on Engine Two.

The apparatus was positioned in the driveway in the same manner as we intended to use for the Live Burn. Engine Two provided all of the water for the evening since once again we were training without live fire.

Each team was able to get some hands on experience advancing the hose line into the building as well as running the K-12 saw on the roof. Two 2'x10' trench cuts were made in the roof for practice without "opening up" the ceiling area within the building. One 4'x4' ventilation opening was made over the living room area of the structure in compliance with NFPA 1403 in preparation for the live burn; this area was covered with ½" plywood until the final day.

Members who had been at the Search and Rescue training two days prior were surprised to see what the interior of the building looked like now that they could see clearly.

There were no injuries to reports. Two lengths of 1 ¾" Jaff Rib hose (at least 20 years old) began to leak and after the training is completed these lengths will be taken out of service.

After training we experienced some difficulties drafting through the front suction of Engine Two. This has been an ongoing problem with this apparatus. We had no problems using the mid-ship intake on the pump.

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Live Fire Evolutions  
Sunday, 26 August 2007  
0600-1400

The morning event was attended by 13 members of the Deering Fire and Rescue, six members of the Antrim Fire & Ambulance, and two members of the Weare Fire Department.

Deputy Chief Ladue conducted the training. He was assisted by Firefighter Steve Brooks and Instructor Eric Uitts of the New Hampshire Fire Academy. This pair acted as Interior Safety personnel during the evolutions as well as being in charge of lighting the fires. Chief Andy Anderson acted as the Line Officer for the two Deering attack lines and Captain Eric Phillips of the Antrim Fire & Ambulance supervised his personnel during the evolutions.

Antrim's primary role was to provide Fire and Ambulance coverage for Deering for the duration of the fire and they sent sufficient staffing to do that and to participate in the training. Weare sent their Heavy Rescue to fill air cylinders. Chief Bob Richards from Weare and Chief Mike Beauchamp of Antrim observed the training.

Nearly all of Deering's apparatus was involved in the event. Ambulance One was designated as EMS/Rehab for the training. Engine Two was the primary Engine using its 1000 gallons of on board water to feed one 1 ¾" attack line. This piece also drafted from a 1500 gallon "Folda-Tank" with Tanker Two positioned at the tank with another 1500 gallons on board.

Engine One was the back-up Engine with its 1000 gallons of water on board feeding one 2 ½" line. Tanker One was positioned to feed Engine One if the need arose with its 1750 gallons of water.

Engine Three was in reserve duty on the scene but could have been placed into service to respond to calls in town with Antrim's Engine and Ambulance if necessary.

Deputy Chief Ladue did a pre-burn checklist following NFPA 1403 guidelines and everyone participating in the training received a walk-through of the structure so they would be aware of the two means of egress as well as the lay out of the building. All of the teams operated in full turnout gear and SCBA and each team was assigned at least one portable radio.

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Live Fire Evolutions  
Sunday, 26 August 2007  
0600-1400

The ventilation hole that had been pre-cut and covered with plywood was exposed prior to starting any of the training fires.

We hoped to get at least four burns out of the building before we would have to close down the training and let the structure go to the ground. However, we were fortunate enough to achieve nine burns before terminating the training.

Since we were short of manpower for the event, our assignments consisted of one attack line, one back-up line, and one Rapid Intervention Team. Three teams rotated through these positions so each crew had three fires to fight. As we became more aware of the skill level of our participants, the fires became more difficult to extinguish as the morning went on. It's important to note that although we had the back-up line charged, manned, and ready to go, we never had to deploy that line during any of the fires.

After the nine fires were completed, we brought the building to the ground with a final burn under the supervision of the Department. Once the building was nearly consumed and our air cylinders were filled, the Mutual Aid Companies were released and all of our apparatus was put back in service with the exception of Tanker One. This piece stayed on the scene until the building was down to coals.

The homeowner had an excavator on site to assist in controlling the burning embers. Once we determined that there was no danger of fire spread from our live burn the property was left to the homeowner.