

After Action Review: 1475 California Street



Date: 09/21/2016 **Time:** 11:38 **Incident Number:** 16-0101110

Address: 1475 California St

Summary

Multiple 911 calls were received indicating a fire in a high rise under construction at 15th and California. On arrival, companies found heavy smoke showing from the AD corner of approximately the 5th floor of a high rise under construction. Access and water supply were some of the challenges at this incident but the fire was brought under control after 25 minutes. Construction products as well as a temporary wood frame wall fueled this fire. 2 construction workers were transported from the scene with smoke inhalation injuries.

Risk vs Benefit: Possibility of construction workers inside, concrete building (even though under construction appeared structurally sound) resulted in an Offensive Interior Attack

Units Initially Dispatched: E01, E03, E06, E08, E11, TR01, T04, T08, R01, HM01, D02, D04, D06, OPS 2

First Arriving Unit(s): E03

Additional Units Requested: E12, T12, TR15

After Action Review: 1475 California Street

Initial Assignments:

IC: D02 **RIT:** T12 **Safety Officer:** OPS2

TR01: Fire Floor (Officer- Fire Floor Division Sup)

E03 and E06: Primary Attack Line (Fire Floor Div)

E01 and E08: Backup Line (Fire Floor Div)

T04: Fire Floor

T08 and R01: Floor Above the Fire (T08 Officer- Floor Above Div Sup)

D04: Lobby

D06: Initially Charlie Side, then Fire Floor Div Sup, then Suppression Branch Director

Initial Strategy: Offensive Interior Attack

Water Supply: E03 on temporary standpipe, E06 on hydrant to complete water supply. No secondary FDC to supply

Attack Line(s): 2 ½”

Back-up Line: 2 ½”

Was the building laddered: Yes, Tower 1 AD corner, Truck 4 CD corner

Secondary Means of Egress: Yes, TR01 and T04

Building Size, Type, Number of Stories, and Occupancy: High rise, concrete, under construction, approx. 21 stories at time of incident, unoccupied

Involvement Upon Arrival and Initial Location of Fire: Heavy smoke and visual of a small portion of the fire, AD corner 5th floor

Communications: TAC2 tactical channel, Command 2 for Command, Dispatch, and Staging

After Action Review: 1475 California Street

Special Challenges, Hazards, and Safety Issues:

- Difficult apparatus placement Alpha side (street down to 1 lane due to 1 lane closed for construction, light rail stopped between apparatus, vehicles and bus stopped between apparatus). See picture at end of AAR.
- Difficult access to fire floor (only elevator was a temporary construction elevator, stairwells difficult to find due to construction).
- Temporary standpipe system had an open valve in the basement resulting in an inoperable standpipe.
- Acetylene tanks near fire.
- Heavy black smoke on fire floor in building under construction obscured possible hazards.
- AD corners of floors under construction had temporary 2x4 frame exterior walls covered in clear plastic, potential fall hazard through wall due to lack of visibility due to heavy smoke on fire floor. There were more of these same type of temporary walls further away from the fire on the Charlie side.
- Difficult to assess actual floor numbers due to building being under construction.
- High volume of radio traffic after encountering uncharged standpipe and during subsequent operations to provide water to fire floor.

Command Structure:

IC: D02

Safety Officer: OPS2

RIT: Truck 12

Other assignments:

- Fire Floor Division
- Floor Above Fire Division
- Level 2 Staging Area Manager (STAM)
- Suppression Branch Director (later in incident)
- Lobby

Span of control within ideal range. Span of control 1:4, 1:3 once Branch was created.

After Action Review: 1475 California Street

Evaluation and Summary

- 1. Tactical Priorities**
- 2. Positive Outcomes**
- 3. Additional Considerations**
- 4. Recommendations**
- 5. Safety considerations**

Tactical Priorities: Offensive interior attack, search and evacuation of building, extinguishment of fire.

Positive Outcomes:

- Due to the incomplete status of this structure under construction, all operations were made more difficult, dangerous, and time consuming. All companies overcame these difficulties in a safe, yet quick, manner.
- Even with the unforeseen circumstance of the building standpipe system being non-operational, Companies were able to implement an alternative tactic and extinguish all fire within 25 minutes.
- The Alpha side street became quite congested with vehicles, buses, and a light rail train that could not move until the conclusion of the incident. All companies, especially Engineers, were able to set-up and work around their apparatus safely. RTD personnel as well as DPD personnel were instrumental in assisting DFD with this situation.
- Using 2 radio channels was advantageous, especially when the tactical channel became overwhelmed with traffic regarding overcoming the lack of a standpipe.

Additional Considerations: N/A

Recommendations:

- Continue to address different types of outside hazards at incidents. In this case, RTD had to shut down light rail tracks. A light rail train was unmovable right in front of the address for the entire suppression portion of the incident. This hazard was addressed quickly and is a good example of the range of different obstacles encountered at an incident.

After Action Review: 1475 California Street

- **Recommendations (cont'd):** Continue the use of expanding the ICS structure at incidents to meet the complexity of the incident. At the height of this incident, the IC created a Fire Floor Division and a Floor Above the Fire Division, this kept the IC well within his span of control and should have cut down on radio transmissions (with more face to face communications occurring within each Division). However, numerous radio transmissions were made between Companies assigned to a Division and the IC. Many of these could have been made face to face to the Division Supervisor with the Division Supervisor giving periodic updates to Command regarding the status of the Division. Furthermore, personnel that are assigned to a Group/Division/Branch should not be contacting the IC directly but should communicate only with their Supervisor/Director. This would have freed up air time on the tactical channel. Two areas to consider for future incidents; 1. Division Supervisors and higher establish a location within the assigned area well known to the Companies working in it and be available for face to face communications. 2. All personnel should consider the content of a radio message before transmitting it- urgent communications on the radio, non-urgent messages given face to face when possible.
- Personnel/Companies that are given a specific Division assignment should remain where assigned until assigned elsewhere. At this incident several companies left their assigned Division, for accountability purposes it is crucial to remain in the assigned area.
- Continue the use of multiple radio channels at an incident to meet the complexity of the incident. At this incident 2 channels were used and even with 2 channels, the tactical channel was overwhelmed at times. Incident Commanders, take into account that multiple channels increase the complexity for the IC and it may be advantageous to assign personnel as aides to assist with the increased workload at the ICP. Also, if in a supervisory position at an incident, be aware of traffic on your assigned channel as well as have an awareness of operations occurring on other channels. At this incident, for example, the Staging Area Manager (STAM) was operating on Command 2 and only had one radio. It would have been a benefit for the STAM to have an additional radio to monitor the tactical channel or, in this case and assignment, scanning the tactical channel would have been appropriate. District Chiefs would benefit from carrying both of their portables at major incidents in case of incident expansion to multiple channels. At times,

After Action Review: 1475 California Street

if a company officer were to be placed in a position of Division/Group Supervisor or above, it would be advantageous for that officer to use their radio plus a radio from one of the crew members. The safety factor of every person having a radio is diminished in this case but ideally members should be working in pairs and can share one radio for a short period of time. Scanning multiple channels may be an option but be aware that in the scanning process, certain transmissions may not be heard. If in an area or assignment where hearing all transmissions is critical, multiple radios may be a better option.

- At this particular incident, it was very difficult to ascertain the exact floor number where the fire was located. The terminology of “Fire Floor”, “Floor Above the Fire”, and “Floor Below the Fire” was helpful. Even so, it was difficult to determine and verify where Companies were operating. Care was taken by the IC and officers to make sure that all floors were searched and nothing was missed. After the fire was extinguished, several face to face communications occurred at the Command Post between the IC and Division Supervisors/ Company Officers in order to clearly define assigned areas and confirm that nothing was overlooked. This was very beneficial and would be helpful at future incidents.
- At this incident, a Level 2 staging location was designated. However, that location was changed while one company was enroute and when another company had just arrived at the staging location. Also, during the location change, an additional radio channel (Command 2) was implemented and Staging moved to the new channel. All of this created confusion for a short period of time. For future incidents, realization of the complexity of multiple changes in a short time frame should be accounted for by the IC, his/her staff, and Staging Area Manager (STAM). Communication of these changes is sometimes difficult yet critical. For units being added to a call and responding to a designated Staging Area, close attention should be paid to any changes made in route.

After Action Review: 1475 California Street

- **Recommendations (cont'd):** Continue the use of a backup plan for water supply for standpipe equipped buildings. Begin the backup plan early in the incident. At this incident, there was only one FDC and it was a temporary FDC. The first and second Engine completed the water supply to the FDC. There was not a second FDC and even if the 3rd and 4th Engines would have backed up the 1st and 2nd Engines (as mentioned in the High Rise SOG) on the only FDC, there would have been no water on the fire floor. Incidents like this (fire in a high rise building under construction), as well as buildings with questionable or old standpipes would benefit from the establishment of a Water Supply Group. The Water Supply Group Supervisor could be tasked with evaluating building systems, deciding on a backup plan(s), obtaining needed staffing from the IC, and implementing the backup plan. If needed, a separate radio channel could be utilized by this Group.

Safety considerations:

- Multiple hazards outside of the building (light rail train, Alpha side street down to one lane, RTD bus and several vehicles blocked in by apparatus on Alpha side).
- Building under construction with heavy smoke on fire floor.
- Construction materials, including Acetylene tanks, on fire floor.
- Temporary exterior walls on the AD corner of the building and also the Charlie side.

Summary:

Companies responded to what, at first glance, appeared to be a small amount of fire in a concrete building. Many challenges were encountered, several of which were related to the incomplete construction status of the building. This incident quickly became very complex but was handled well both at the Command level and the tactical level. The fire was put under control in 25 minutes and all building personnel were safely evacuated except for 2 construction workers that were treated and transported with smoke inhalation related injuries.

After Action Review: 1475 California Street



After Action Review: 1475 California Street



After Action Review: 1475 California Street

Example of street width on Alpha side:

