POST INCIDENT ANALYSIS

STRUCTURE FIRE

17121 Queen Victoria Court
Gaithersburg, MD. 20877

November 6, 2007
Incident #07-0110860

Submitted By
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I. Introduction

a. provide a general overview of the incident

The fire began in a carpet shampoo machine in the rear bedroom of a top floor garden apartment. The resident attempted to fight the fire herself so the 911 call was delayed. Upon fire department arrival, fire was showing from the single window of the rear bedroom. Residents were evacuating the building. The officer on E708 initially went with a leader line but, seeing a standpipe riser, changed his mind. The standpipe system failed forcing the engine crew to return to the leader line. During this delay the truck company ventilated the apartment which drew the fire into the rest of the apartment. The fire was eventually controlled with moderate extension into the attic above the involved apartment. Other units in the building were damaged by smoke and water. The fire displaced the residents of 16 apartments.

b. unique circumstances/problems, etc.

II Building Structure/Site Layout

a. Review type of structure

The building is a four story, ordinary construction garden apartment building with a wood truss cockloft, concrete floors, and an open central stairway

b. Construction or design features contributing to fire spread or prevented fire spread, i.e. sprinklers, fire doors, etc.

None in this case although the presence of concrete floors would have provided an excellent barrier if the fire was on a lower floor.

c. Did the topography and/or type of fuel affect fire control efforts?

Topography and fuel were not unusual.

d. Did fire alarm and/or suppression devices work properly?
The alarm system functioned. There was no suppression system. The standpipe system, which personnel from FS08 were apparently wary of, failed after being charged by E708. The failure occurred at the bottom of the riser (underground) and filled the lower part of the stairwell with thick mud.

e. Did personnel or apparatus encounter any problems in gaining access? There was no vehicle access to side Charlie of the structure

f. What is needed to correct these problems? N/A

III Fire Code History

a. Review of Fire Code requirements and history.

The structure had not been inspected in quite some time but problems with standpipes in that complex were common knowledge to some personnel from FS08.

IV Communications

a. Did dispatcher verbally provide all information available at the time of dispatch?

Yes

b. Was the fire ground channel adequate? Yes

c. Were the proper communications procedures followed?
Yes

d. Were there problems communicating with Mutual Aid companies?

N/A

e. Was the communication network controlled to reduce confusion?

Yes

f. Did units, Divisions/groups/branches and Montgomery communicate effectively? Yes

g. Was there effective radio discipline?

Radio discipline could always be better.

h. Did Incident Commander provide timely updates to Communications? Yes

V Pre-emergency Planning

a. Were the pre-fire or other plans needed on the scene? No
1. Were they available? Yes, in old complex map books
2. Should they be updated? No

VI On Scene Operations

a. Structural integrity of building based on fire conditions on arrival, at 10 minutes, 20 minutes, 30 minutes, etc.

Structural integrity was not an issue

b. Was Command identified and maintained throughout the incident? Yes

c. Was a Command Post established and readily identifiable? Flag, Green Light, or other?

Yes, in the Battalion 3 vehicle, which does not have a green strobe. The command post was on side alpha.

d. Size up decisions by command

Heavy smoke pushing from the cockloft and the presence of fire showing from a top floor apartment led me to call for a second alarm.

e. Was additional apparatus requested in a timely manner?

Yes, almost immediately

f. Strategy/action plan Fire containment and property conservation

g. Did personnel, units, teams execute tactics effectively?

There were water supply issues that were later addressed. These issue forced personnel to make the initial attack with only one hand line. There was some confusion on the part of E708's driver as to whether the attack crew was using a standpipe or leader line.

h. What training needs were identified? Provide examples.

Personnel from FS53 were unfamiliar with the use and operation of the Humat valve. Extensive training was conducted with them after this fire.

i. Were Standard Operating Procedures used, were they adequate, need to be updated? If not used, why?

The SOPs were effective for the initial minutes of this incident. After that, as with most growing incidents, and action plan was developed and implemented by command.

j. Offensive/defensive decisions by command? Yes, offensive

k. How was risk analysis applied to the incident?

The analysis was based on the potential for significant property loss and the relocation of multiple families.

l. Were the divisions/groups used appropriate to the type and complexity of the incident. Yes

m. Was apparatus properly positioned? If not why? Yes

n. Attack line selection and positioning

The attack line selection was correct based on conditions at the time the line was pulled (one room). It was marginally appropriate after uncoordinated ventilation efforts caused the fire to intensify and spread. Because the standpipe system failed, the attack crew was forced to use a leader line. They had begun deployment of that line prior to discovering the standpipe and their return to it was fairly quick but getting it charged and getting E708 adequate continuous water took some time.

o. Ventilation operations

Ventilation was conducted prior to having a charged hose line in place (old story). This gave to fire the opportunity to spread from the room of origin to all other rooms of that apartment as well as the attic. Water supply and standpipe system problems prolonged the time between ventilation and fire attack.

p. Salvage operations

Salvage operations were conducted in the lower apartments to minimize damage from water runoff. These operations were begun fairly quickly but had limited impact. This is an area that our department lacks in and should be a future training subject.

q. Night time and interior lighting operations N/A

r. Were Mutual Aid companies effective in operation?

No. E753's actions had significant consequences on the incident.

s. Was water supply adequate?

Not if we had found it necessary to go to master streams. We would have adapted but it would not have been as expeditious as normal.

VII Staging

a. Location adequacy The location was adequate
b. Site Access There were no access issues to the staging area.

VIII Support Functions

a. Was a Rehab group established? Yes
b. Were Fire/Rescue personnel provided with food and drinks? Yes
c. Was adequate shelter provided for fire/rescue? N/A
d. Were crews relieved by fresh crews on a regular and frequent basis? Yes
e. Were there any equipment or apparatus failures? No
Did failures have a detrimental effect on incident outcome? No
f. Were functions with outside agencies properly coordinated? (i.e. Red Cross, Power company, Gas Company) Yes

IX Safety Group

a. Was a standby team established? Yes if not why? N/A
b. Were there any fire/rescue personnel injured?

Yes. One firefighter received a minor second degree burn on his face.

c. Were all safety SOPs and regulations enforced? Yes
d. If there was a Safety Dispatch were they used for Safety, Accountability or RIC? If not, why?

They were used as the Rapid Intervention Group.

e. What actions are necessary to change or update current safety and health programs to improve the welfare of members?

I have no recommendations at this time.

X Accountability

a. Were actions taken to ensure accurate personnel accountability? Yes

b. Was the status of units, Divisions/Groups/Branches and support personnel maintained? Yes

c. Did personnel provide adequate feedback? Yes

d. Was the incident continuously controlled and monitored? Yes

XI Investigations

a. Was the Origin and Cause of fire determined?

Yes. The fire began in a malfunctioning carpet shampoo machine in the rear bedroom

b. Factors contributing to fire spread?

A significant fire load (bedroom furniture) and an uncoordinated attack by the fire department

XII Lessons Learned

a. Specific training needs identified?

We need to constantly remind our personnel of the importance of coordinating ventilation and fire attack activities. Too often our crews work in oblivion to the tasks of those around them. We also need to focus on and practice basics, such as completing water supply evolutions. Our department REALLY needs to refocus and retrain personnel on the art and necessity of salvage. Our personnel rarely make salvage efforts on their own and do mediocre work at best without close supervision.

c. Recommended improvements

Make sure salvage and overhaul practices and techniques are rolled into “In Service” training exercises.

XIII Overall Analysis of Incident

-Good? Bad? Why?

We did “okay”. Our crews made an excellent stop on a raging fire but our actions contributed to it becoming so large in the first place.

Critique

If post incident analysis indicates that a positive learning experience would result, or where it may be necessary to complete the analysis of an incident, a critique may be held at the discretion of the Incident Commander or their superior.

Not necessary for this incident. The issues that were identified, such as water supply and coordination, have been addressed with the crews involved.