Montgomery County, MD Fire & Rescue Service
Report of the Investigation of Event #: 124053
4806 Jamestown Rd.
December 3, 2008

House Fire with 3 Children Trapped, Multiple Firefighter Injuries & Multiple EB Activations

Completed by: A/C Chief Scott Graham, Duty Operations Chief Incident Commander
Battalion Chief James Resnick, Chief Frank Gaegler, and Captain Charles Bailey, MCFRS ECC

SUMMARY

At 13:26 hours December 3, 2008, Montgomery County ECC received a 9-1-1 call for a reported house fire at 4806 Jamestown Rd, in box area 11-01. This event involved a fire that began on the exterior of the structure (a hot tub) extending up side C to the interior and trapping infant triplets inside the house. The caller was unable to extract the victims. First arriving E711 was not aware of the possibility of trapped occupants until the children's father (the *father placed the 9-1-1 call*) met him at the cab door of the engine. Units from the 2nd Battalion were out of position at both scheduled and unscheduled activities. At the time of the alarm, Engines 720, 707, T 706, and A 711 from Battalion 2 were out of their respective first due areas attending an unscheduled drill at the Grosvenor Metro station. The Grosvenor Metro Station was 6.4 miles or approximately 14 minutes drive time from the incident location. This time does not include travel time to the units from the Metro platform. E 706 was physically located at FS 10 attending scheduled swift water rescue training. E 710 and E 730 were on the river conducting scheduled swift water training. M 730 was in quarters available. E 711 was in quarters but was preparing to leave for the metro drill when they received the call from ECC. Apparatus location is critical due to the fact that, extended travel distances and increased response times, play a critical role in the initial rescue and attack phases of the incident

This critical event quickly escalated to include, beyond the initial box alarm, a RID, a Fire Task Force, an EMS Task Force, a mutual aide task force from the District of Columbia, and numerous special calls.

Description of Events

At 1326 hours, the ECC received a call from a homeowner who advised, "…I've got a fire in my house…" The caller advised that his hot tub was on fire and that, "…it's got my house…" He goes onto say that, "…I've got three small children in the house." The call taker instructs the caller to, "…get them out of the house and stay out of the house."

This call escalated exponentially and in the end would involve the transport of seven people, including two burned firefighters. There were also three individual EB activations including one from a unit not assigned to the incident.

Montgomery was forced to go to Condition Red because the rapid application of such a large number of resources created numerous service gaps in the County.

A large number of the units that were dispatched on the initial alarm were out of position at an unscheduled METRO drill located at the Grosvenor Metro Station. This resulted in an extended response time. Other Battalion 2 units were training on the Potomac River as part of the RRATS scheduled weekly training.

During the 9-1-1 call, the caller clearly states that, "…I've got three small children in the house." The call taker instructs the caller to, "…get them out of the house and stay out of the house." When the 9-1-1 call was terminated, there was sufficient evidence present for the call taker to suspect that there were people trapped. That information should have been reported to responding units and should have been added to the text of the call. This was not communicated.

During this incident numerous requests were made by a responding Chief Officer to upgrade the assignment, including an unclear request for mutual aide from the District of Columbia. All of the requests were received and processed without question or delay. However the possibility remains that responding Chief and unit officers can make redundant and conflicting requests for resources and severely complicate and/or compromise the integrity of the command unity.

Weather at Time of Incident (NWS)

The National Weather Service reported the following conditions at 1252 hours.

Temperature - 44.1° F
Wind – South at 9.2 mph
Ceiling – Partly Cloudy

Building Structure/Site Layout

The structure is a 1601 square foot with basement, approximate 40 x 40 single family, non-sprinklered, two story, ordinary construction, Colonial with a slate roof. The exterior is brick and block. The foundation is brick and block as well. The interior construction is wooden studs and wooden joists, ceilings and walls are covered in rock lath and skim coated with plaster. The floors throughout are wooden. The interior doors are solid with small hardware locks, latches and knobs. The windows are single pane with wooden casement. The common stairwell is in centered in the structure with the up stair case open to the structure and facing side A, while the basement down stair case is enclosed and faces side C. The basement stair well has a door on the first level separating the foyer from the down stair case. The attached single car garage is on side D/C and is located in the basement. The garage is the only portion of the basement that is exposed. The electrical utilities enter from a pole on the street to a weather head on the structures side D, then drop to a box and meter on side D. The service then enters to a service panel and sub panel on the side D interior wall. The Gas service enters on side A near in the side D quadrant.

Fire Code History

This type of residence is the least regulated as it required no residential sprinkler system. Smoke alarms are required but no working alarms were noted. There is no other premise history on file.

Communications

See the attached report from Captain Charles Bailey.

Pre-emergency Planning

Montgomery County Fire and Rescue Service (MCFRS) does not typically inspect single family homes. No preplans were available for this address. MDC Ataris CAD info was available but not in use by command. Units arriving to the scene utilized local print map information and CAD information.

On Scene Operations

4806 Jamestown Road presented numerous incident challenges**.** E 711 arrived on the scene at 1331 hours, to be met by the father of three infants trapped on the second floor. This information was available but never communicated to responding units while en route. The officer of E 711 relayed the information pertaining to the trapped children. He then opted to affect the rescue of the children rather than advance a hand line. This action was a deviation from the Safe Structural Firefighting SOP. The officer and the right bucket position went to the front door and were met with heavy smoke and heat conditions. The officer ordered the right bucket to remove windows and assist the driver with advancing a hose line to the side A entrance. RS 741 arrived at 1333 hours, proceeded to side A and made entry. The right bucket of RS 741 found the stairs leading to the second floor and notified his officer. RS 741's officer made the decision to proceed to the second floor to begin the search for the children. RS 741's right bucket found the door to the children's bedroom and notified the officer. Once inside, they closed the door for protection and encountered difficulty accessing the children due to a safety net covering all three cribs. The crew had to cut through the netting to access and remove two of the three children. RS 741's crew exited the structure with the two children. While exiting, they informed E 711's officer that one child still remained. Simultaneous radio communications were interrupting on scene tactical communication. Requests from responding a command officer for additional resources complicated the scene coordination. Chief 741 E arrived on scene and assumed command. During this process, the

children were being rescued and removed from the structure, a declaration that the RS's EB had been activated, and one child was still trapped inside the structure.

C 741E was the only command officer on scene for an extended period of time. C 741E attempted to coordinate all of the activities which were unfolding in the first few minutes upon arrival. The second arriving command officer, Battalion Chief 702 from the Grosvenor Metro, had to be diverted to provide ALS care to the victims of the fire in the front yard, Side A.

Upon the arrival of the remaining assigned units and additional command staff, the incident was able to be coordinated in an organized manner. Upon the arrival of the Duty Operations Chief, organizational structure was established. An informal assumption of command occurred, divisions and groups were identified and units operating were formally assigned to divisions and tasks.

Water Supply

According to the Safe Structural Firefighting SOP, water supply was completed by split lay. There was adequate water pressure and volume. There were no Findings with water supply.

Staging

Due to the fact that it was a neighborhood with parking on both sides of the street, only the first alarm assignment was able to position around the address. Additional units were placed on an alternate talk group (7D). This necessitated a rapid build out of the command team. Due to the complex incident needs (ALS care), the second arriving command officer was utilized for that purpose. This hampered the Incident Commander greatly as he was not able to adequately monitor the incident until the later arrival of additional command officers.

Emergency Medical Services

Emergency Medical Service functions were a critical, yet immediately depleted, aspect of this incident. The first arriving EMS unit, A741B, was immediately overwhelmed. The second arriving command officer, BC 702, an ALS provider, was utilized to provide ALS care to the victims until additional resources arrived. EMS was assigned to 7 E for operations. Not only were there four civilian injuries, but two firefighter injuries as well. Along with patient treatment and transport, the EMS group was established to include rehabilitation sector for the firefighters on the scene. Rehab was established on the Delta side of the structure on the street. Canteen 733 and Air 741 were positioned within the Rehab area and personnel were evaluated by EMS and sufficiently rehabilitated before being reassigned or released from the incident.

Appropriate utilities were on scene or requested with a reasonable response time. Washington Gas arrived on scene first followed by PEPCO. The Red Cross was requested and did respond to assist the family with needs.

Safety

Due to the fact that there were confirmed entrapments, E 711 correctly exercised the option to affect rescues immediately and met the federally mandated stand-by requirement of the 2 out. Operations ensued without the protection of a Rapid Intervention Group until formally established later in the incident. As stated earlier, 2 firefighters were injured receiving minor burns due to exposure to heat. The injuries are consistent with operating without the protection of a hoseline. These firefighters were treated on the scene and transported to Washington Hospital Burn Center.

Safe Structural Firefighting SOP was followed in the initial phases of the attack. The officer of E 711 chose not to take a hoseline with the crew in an attempt to make a quick rescue. The driver of E 711 stretched a handline to the front door which was deployed by E 711 after they were unable to make the second floor.

A Rapid Intervention Dispatch and Task Force assignment were requested from BC 702 while en route to the scene. Additionally, BC 702 requested an EMS Task Force and subsequently requested ECC to poll DCFD for units which may be closer.

All personal protective equipment was utilized appropriately throughout the incident. Safety 700 was assigned to establish Safety on scene. The IDLH was lifted due to the recommendation of Safety 700.

Accountability

No accountability or command chart was in place or being utilized prior to the arrival of the Duty Operations Chief. Chief 741 E was utilizing personal notes. There was no assignment of divisions or groups prior to the arrival of the Duty Operations Chief. This was due in part to the amount of confusion and activity upon arrival, trapped persons, and injured firefighters. While this is not an acceptance, the lack of command support contributed to the confusion and lack of accountability. A PAR was conducted at the 26 minute mark in the incident. Units were fractured due to the need for additional drivers for the EMS units. This provided additional accountability challenges.

Initially, the incident was not controlled. As the command team was built out, there was some resemblance of command and control.

Investigations

A cause and origin investigation was completed by the Office of Fire and Explosive Investigations. The conclusion of the investigation revealed an accidental fire due to a faulty repair to a hot tub on side C.

The Fire Code Enforcement Office conducted a Total Station evaluation of the structure for the purposes of fire modeling. AS of this writing, this is not complete. The FCE personnel did not find any smoke alarms in the structure.

Lessons Learned

While this incident was unique in the fact that there were numerous rescues, there are many critical lessons learned. Provided are actual written statements from on scene personnel not identified individually but presented as a collective report. The PSCC has supplied an individual assessment of the performance of the ECC.

Finding - Units not on the scene were requesting resources without knowledge of the actual incident.
Recommendation – units responding should not call for additional resources unless requested to do so by on scene personnel.

Finding - Requests for traditional assignments (i.e. EMS Task Force) no longer represent a guaranteed number of paramedics. The EMS Task Force should be re written
Recommendation – The response assignments and compositions should be reviewed/re written every 2 years to ensure reflection of the fire service structure.

Finding - Units were out of position on an unscheduled Metro drill. Engines 707, 720, T 706, A 711 were at the Grosvenor Metro Station on an unscheduled familiarization drill. Engines 730, 706, and 710 were at FS 10 for scheduled and approved RRATS training. Medic 730 was in quarters. The Metro training was not on the apparatus movement tracker nor discussed as part of the daily conference call. This caused a significant delay of the first alarm units.
Recommendation – All movement of units for training must be coordinated through the Duty Operations Chief and placed on the Apparatus Movement Tracker.

Finding - E711’s officer made a decision not to pull a hose line and had his third break out windows and not hold the fire on first floor to protect the rescue effort with a means of egress.
Recommendation- While this is the discretion of the unit officer for this type of situation, it would not be recommended as common practice. The protection of

fire and rescue personnel must be the principle focus. A hand line is the most basic tenet of protection.

Finding - Command was overwhelmed due to a lot of activity and not enough resources on scene the first five minutes.
Recommendation – As recommended in many other PIA's and reports, the command aide position is critical. On most recent MAYDAY and critical incidents, they have occurred in the first 10 minutes after arrival. IN many locations in the county, a second command officer is not able to arrive within this critical timeframe or is immediately assigned an operation function.

Finding - Battalion 704 cancelled without notification to the incident commander.
Recommendation – ECC should have relayed the delay or cancellation due to BC 704 being involved in a PDC.

Finding - M309 told to transfer to Station 10 when they were on River Rd. at Bradley Blvd. and were in fact miles closer than Rescue 2 Medics that were just dispatched.
Recommendation – Better coordination between personnel at the ECC. This occurred on different talk groups.

Finding - Second command officer on scene had to be diverted to EMS care due to lack of Medics on scene.
Recommendation – Assignment of duties is the discretion of the IC. The lack of appropriate resources are to be managed by the IC. Command Competency evaluations should be geared to more complex incidents where within the first 10 minutes of an incident, critical Findings arise.

Finding - Next command officer arrived on scene nineteen minutes into event to assist command.
Recommendation - As recommended in many other PIA's and reports, the command aide position is critical. On most recent MAYDAY and critical incidents, they have occurred in the first 10 minutes after arrival. IN many locations in the county, a second command officer is not able to arrive within this critical timeframe or is immediately assigned an operation function.

Overall Analysis of the Incident

While there was a positive outcome of this incident, once again MCFRS experienced a critical finding within the first few minutes of arrival without warning. Critical information such as the possibility of victims trapped in the structure, units out of location, and the lack of needed resources, framed this incident with numerous complexities from the onset. While many decisions were made by the initial arriving units, in retrospect, these decisions could have had a much more devastating outcome. Crew integrity, organizational discipline, and command improvement are vital to the success of the MCFRS mission. This

incident characterizes the low frequency, high risk event. It also emphasizes the need to relay critical information, command build out, 4 person staffing, as well as identifying units which may be out of position.

Appendix A

Montgomery County, MD Fire & Rescue Service
Emergency Communications Center
Report of the Investigation of Event #: 124053
December 3, 2008
4806 Jamestown Rd.

House Fire with 3 Children Trapped, Multiple Firefighter Injuries & Multiple EB Activations

Completed by Captain Charles Bailey
ECC Operations Supervisor

SUMMARY

At 13:26 hours on December 3, 2008, the ECC received a 911 call for a reported house fire at 4806 Jamestown Rd, in box area 11-01. The call taker was situated at CAD93 and would eventually become the tactical talk group operator for the event. This event involved a fire that began on the exterior of the structure extending to the inside and trapping infant triplets inside the house. The caller was unable to extract the victims. First arriving E711 was not aware of the possibility of trapped occupants until the children's father (the *father placed the 911 call*) met him at the cab door of the engine.

This critical event quickly escalated to include, in addition to the initial box alarm, a Rapid Intervention Dispatch, a Fire Task Force, an EMS Task Force, a mutual aide task force from the District of Columbia, and numerous special calls.

From the time of the initial call entry into the CAD until the bulk of the dispatches were complete was about 11 minutes.

Intent

This report hopes to:

1. Provide a basic event timeline (ECC specific)
2. Provide a basic description of events
3. Provide insight into the decisions that were made
4. Provide a mechanism for positive growth aimed at improving future decision making

Basic Timeline

EVENT	TIME	ELASPED TIME FROM ENTRY	ELAPSED TIME FROM PREVIOUS ENTRY
Call entered	13:26:22	0	0
Call dispatched	13:27:23	1 min 1sec	1 min 1sec
First unit on scene	13:31:10	4 min 48 sec	3 min 47 sec
RID dispatched	13:33:05	6 min 43 sec	1 min 55 sec
RS741 on scene	13:33:28	7 min 6 sec	23 sec
TF dispatched	13:34:33	8 min 11 sec	1 min 5 sec
EMSTF dispatched	13:37:05	10 min 43 sec	2 min 32 sec

Basic Description of Events

At 1326 hours the ECC received a call from a homeowner who advised, "…I've got a fire in my house…" The call taker asks for standard information including the address and a call back number. The caller advises that his hot tub was on fire and that, "…it's got my house…" He goes onto say that, "…I've got three small children in the house." The call taker instructs the caller to, "…get them out of the house and stay out of the house." The 911 call was processed in about 30 seconds. The CAD event was created and forwarded the call to the 7 Alpha position with no delay. From the time the call was entered into the CAD until the call was dispatched was slightly over 60 seconds.

Six minutes after the first dispatch the ECC dispatched the rapid intervention dispatch. Subsequent to that they created and dispatched three additional supplemental assignments, including a non-standard request for a fire task force from the District of Columbia.

This call escalated exponentially and in the end would involve the transport of at least seven people, including two burned firefighters. There were also three individual EB activations including one from a unit not assigned to the incident.

Montgomery was forced to go to Condition Red because the rapid application of such a large number of resources created numerous service gaps in the County.

Conversations with the ECC Supervisor, the call taker, and the tactical talk group operator revealed that while this house fire assignment was the third full assignment of the day, they did not feel as if either they or the resource allotment of the county was strained in any way. None of the personnel interviewed remember the exact allocation of resources at the time of the call. However, a

large number of the units due on the house fire assignment were out of position at a METRO drill and had an extended response time because of this.

Decision Making at the ECC

The creation and dispatch of a house fire assignment is well within the parameters of a normal day at the ECC. What made this call unique and critical was the presence of three critically injured people who were still trapped in the structure when the first due engine arrived.

There were many critical decisions made during this incident but this report only evaluates a small number of them, namely:

1. How we arrived at the decision not to report that there were children trapped in the house.
2. Why ECC did not fill extraneous resource and response requests, especially the denial of units who bid on the call and the request for additional units made by an EMS officer.
3. Why there were no AFRAs included in the EMS Task Force.
4. The decision to query units directly concerning EB statuses

The Decision to Not Report People Trapped

Each day call takers are tasked with extracting, from unreliable callers, enough information to properly code a request for service into the CAD system. The type of caller and their emotional state at the time they place the call is subject to wide variation. In most cases a calm caller is indicative of a minor situation while an agitated or excited person is indicative of a more advanced or involved incident. Over time call takers develop an intuitive sense about the nature of the call simply based on the emotional disposition of the caller.

Unlike EMS call processing during which the call taker has a rather rigid script to follow, the processing of other calls, including house fires, is necessarily ad hoc. Based on experience and the information provided by the caller the call taker makes a decision on how to code the call into the CAD.

During this call the caller clearly states that, "…I've got three small children in the house." The call taker instructs the caller to, "…get them out of the house and stay out of the house." When the 911 call was terminated there was sufficient evidence present for the call taker to suspect that there were people trapped. That information should have been reported to responding units and should have been added to the text of the call.

It is not as if the call taker made a conscious decision to not announce the possibility of trapped occupants. The call taker did not have a high index of suspicion about the severity of the call and terminated the call without ever

feeling that there might be some further inquiry necessary. In other words there was a misinterpretation between what the caller said and what the call taker heard. It is difficult to offer conjecture as to why misinterpretation was present. Again, the caller clearly states that the house is on fire and clearly states that there were three small children inside the house.

A possible reason for the disconnect between what was said and what was heard is that the call taker had already made up in his mind that there was a house fire, he had the address, he had the call back number, and mentally he had already left the interview process and was beginning to work on the call itself. Based on what he heard from the caller the call taker advises in interview that his mental picture was of a small fire outside where the father would be able to quickly extract the children. **He did not pass on the information to responding units because it never occurred to him that the children were still trapped.**

Framed in terms of adherence to or deviation from protocol there was no error made by the call taker. There is no script to follow for fire calls. There is no set of standard instructions. There is no call taking doctrine to refer to for atypical situations. The call taker exercised judgment with incomplete information just as he has thousands of times in the past and this time he missed critical information. Emergency Fire Dispatching (EFD) protocols exist and may have made this exchange of information more reliable.

There is a partial solution to this Finding and that was included in a document that specifically addressed how occupant status was to be determined and reported for structure fires. The document in question was recalled hours before it was scheduled to be implemented. Below is the text from that document that addresses occupant status.

> OCCUPANT STATUS
>
> One of the most important bits of information that the ECC can glean from a caller reporting a structure fire or serious call is occupant status. With medical calls, to include vehicle collisions, occupant status is a part of the standard questions posed by the call taking protocol. With structure fires the ECC has to make determination by either direct questioning or by inference.
>
> By dispatching a structure fire with a report of person(s) trapped the ECC "ups the ante" to a certain extent. It is therefore important that the ECC is as clear as possible when reporting occupant status. The best way to make occupant status and the reliability of that report clear is by using direct quotes. For example if the occupant says that, "…everyone is out of the house." The ECC should provide this quote on the second vocal, "…caller states that everyone is outside the house," or "…caller states he/she unsure of occupant status," or as a final example, "…caller states fire in upstairs bedroom, elderly grandmother confined to bed still in basement bedroom."
>
> By providing the direct quote the ECC provides the first in officers with a way to apply judgment to the reliability of the information. How the unit officer manages

this information in the development of a risk/benefit analysis is beyond the control of the ECC.

Had the call taker been working under the suggested protocol he would have been forced to make a comment about occupant status that may have likely led to a more informed initial assignment.

Also people, especially non first responder people, are historically poor witnesses under stress. Call takers must develop a focused skepticism when processing information received from people under stress.

- *Recommendation 1: The document that covered occupant status and other critical factors in the dispatch of full assignments be revisited and implemented as soon as practical. This would be the first known official direction at how call takers are expected to develop and report occupant status.*
- *Recommendation 2: The above referenced document be amended to compel call takers to directly ask about occupant status anytime there is a reported fire or other emergency in a structure that requires the assignment of more than one engine company. This information must be included the comments and transmitted verbally to responding units on the operational talk group.*
- *Recommendation 3: ECC should begin to develop more cogent call taking paradigms for non-EMS calls, including a series of standard "pre-arrival" instructions.*

The Refusal to Accept Bids and Fulfill Request not made by Command

Bidding

Our day-to-day response paradigms are based on static models. Those models assume static resource locations and are based on the center of the box. There are many areas where one company is physically closer to a call than another, but because we base response models on the center of the box proximity to specific points are not useful.

The ECC does not have access to any technological aids that tell them which unit is closer than another unit to a given address. CAD's Automatic Vehicle Location (AVL) and Automatic Vehicle Response Recommendation (AVRR) features are non-functional. An average dispatcher cannot always reliably determine who is closer in this dynamic environment. They can not know all the streets in the County.

Units that bid on calls often bid conditionally which means that they do not say definitively that they are closer than another unit, they ask if they are. For example, "…"A 70x to Montgomery I am at Fleet and Main, can I be of assistance?" When a unit bids conditionally they ask the dispatcher whether they are closer; however they are invariably critical when the ECC denies their request to respond. In the end which unit is closer, especially when a unit bids conditionally, is a judgment call made by the talk group operator.

Bidding places additional decision-making stress, often unnecessarily, on the shoulders of the talk group operator. During stressful times at the ECC bidding causes more harm that good.

Previous direction from the Operations Chief has instructed unit not to bid on calls unless they were in a position to make an immediate impact on the incident. This is usually restricted to being first or second due on the initial assignment. Over time unit officers are drifting further and further away from this direction.

- *Recommendation 4: Field units should be reminded of the adverse effect of bidding on calls, the likelihood of hearing "…remain in service…" when they bid conditionally and that they should only bid when they are in a position to make an immediate impact on the situation as defined by the Office of the Operations Chief.*

Resource Requests Not Made by Command

Our system has no mechanism for honoring resource requests not made by command after command has been established. While I cannot locate any document that prevents a responding officer from making requests for additional resources I can say that it is generally not normal practice.

During this incident numerous requests were made by a responding Chief Officer to upgrade the assignment, including an unclear request for mutual aide from the District of Columbia. All of the requests were received and processed without question or delay. However the possibility remains that responding Chief and unit officers can make redundant and conflicting requests for resources and severely complicate and/or compromise the integrity of the command unity.

There are obvious times when responding units need to make resource requests. The new Special Operations Response Plans place a large onus on specialty team leaders to make decision about resource allocation on the fly. Outside the realm of Special Operations the practice of making resource requests while not on the scene is non-standard behavior.

Later into the incident an EMS Officer made specific requests for additional resources without going through command and those requests were denied. The EMS Officer was directed to go through Command. The obvious impact of honoring this request is the likelihood of resource duplication. Another impact is that units will be assigned to the incident that the incident commander is responsible for by default but not aware of.

Being able to adequately account for all personnel operating at an incident is a fundamental need for an Incident Commander. Honoring requests for additional resources that do not come from command will quickly erode that ability.

- *Recommendation 5: The ECC must continue to honor request for resources only if they ordered by command or the "command post." All others should refrain from making these requests.*

Obviously there are exceptions to this rule:

1. When a full NIMS structure has been developed and Logistics requests resources. Typically this will fall outside the purview of day-to-day operations and those requests will be made through and EOC not ECC.
2. When the staging area manager requests units to backfill staging.

<u>Why There Were No AFRAs as Part of the EMS Task Force</u>

The EMS Task Force is a fixed compliment of apparatus. It has some possible flaws including having a rescue squad as part of the assignment. Perhaps the biggest flaw is that since the transition to one and one medic deployment the number of paramedics assigned to the EMS Task Force was cut by 50%.

It is not in the purview of ECC personnel to make add hoc changes to standard response plans especially when not under Condition Red.

- *Recommendation 6: Operations revisit the paramedic allocation on EMS Task Forces and other related assignments in light of the reduction of actual paramedics on the assignment, as they feel necessary. Until such time ECC should continue to dispatch assignments as they are configured in the CAD unless obvious errors present.*

Direct Query of Units with EB Status

More that once Montgomery received an EB status from a unit assigned to this incident and directly queried that unit regarding their status. The Incident Commander is responsible for personnel assigned to them and as such should be provided with EB information directly.

Further complicating the situation was an EB activation from a unit not assigned to the incident. Again, a critical event was interrupted because of an inadvertent EB activation.

- *Recommendation 7: ECC personnel should be directed to inform the Incident Commander first of all EB activations pertinent to them and that direct queries be limited to those situations where an attack command is in effect or when the Incident Commander does not acknowledge the EB activation notification by ECC.*
- *Recommendation 8: ECC should document all instances of EB activations from units not assigned to an incident that occur on tactical talk groups and forward that information to ECC Operations Supervisor. The ECC Operations Supervisor will forward these instances to the appropriate Battalion or LFRD Chief for disposition.*

Improving Tactical Talk Group Allocation and Management

Normal minimum staffing at the ECC is 5 telecommunicators. This complex assignment was spread of three separate tactical talk groups; 7C, 7D, and 7E. Many units were confused about which talk group they were supposed to be on. Many peripheral units marked up on the air on the primary tactical talk group potentially interfering with critical transmissions. The ECC can reasonably support the primary tactical talk group where command resides in most situations. ECC cannot be expected to monitor and support additional tactical talk group assignments for any specific incident.

Despite design the current expectation is that the ECC has to ability to support each talk group of each incident simultaneously. This is simply not the case.

Perhaps one of the most distressing facets of this incident is that ECC had no way to confirm that dispatched units were indeed responding. The incident escalated so quickly and the additional alarms were called for simultaneously. There was no one place for the tactical talk group operator to go to query unit about their response. This poses the question of "how can this be accomplished?"

- *Recommendation 9: Ancillary units who wish to add themselves to a given call switch to 7 Bravo, advise of their response and then switch to the tactical talk group silently after being acknowledged by the 7 Bravo operator. (This includes canteen units, FMs, air units etc…)*

- *Recommendation 10: Incident Commanders calling for additional resources to operate on a separate tactical talk group, should also assign the appropriate NIMS based sub structure of authority to guide the response and actions of units assigned to that tactical talk group.*

- *Recommendation 11: units, officers, and commanders be reminded that while the ECC typically assigns a tactical talk group operator, they are not obligated to in all circumstances and that additional tactical talk groups assigned to an incident are solely in the purview of the incident commander to assign and support.*

**** This document was generated prior to the release of FCGO 08-19 which covers the intent of recommendation 10.***

Improving Decision-Making

ECC personnel are faced with a series of visual and auditory displays that do little to enhance their base line situational awareness in all but the most common day-to-day operations. When critical events occur, especially those with rapid progression, personnel typically find that the technology works against them more than it helps them.

There are no obvious indicators of resource deficits and no graphical indication of unit location or status. The ECC operator begins the day at a deficit. When critical events occur they rarely have the chance to be proactive.

To improve decision-making a series of steps is necessary:

1. Improvement of CAD functionality and graphical user interfaces.
2. Improvement of crew resource management and critical decision-making training.
3. Increase in the number and scope of ECC specific drills.
4. Increased support of operational judgment vis-à-vis clearer policy direction.

Each of these suggestions warrants extended discussion that are beyond the scope of this discussion but what is clear is that ECC operators are not provided with the full range of decision-making support currently possible.

This discussion is not intended to imply that ECC performance is sub-standard but rather to emphasis that the exceptional performance of ECC personnel is more a function of individual resolve that of a well designed decision support system.

In the end, after all the dust settled, no one made any attempt to ensure that the talk group operator, call taker, floor supervisor, and others exposed to this critical event received the emotional support that is critical to maintaining effective employees.

The failure to provide or even offer critical stress support may not seem to have a direct impact on decision-making but it does. Critical stress management may not have changed the outcome of the incident in question, but certainly would have allowed ECC personnel to continue the rest of their day more effectively.

- *Recommendation 12: a program including ECC specific crew resource management and critical decision making skills, should be developed and delivered for all ECC personnel.*

- *Recommendation 13: ECC personnel must be included in the critical incident support for all incidents where critical incident support is provided.*

Summary

The fire at 4806 Jamestown Rd. was a critical event that taxed not only the material resources of the Montgomery County but also the mental resources of the personnel involved. Personnel at the ECC generally performed within the specifications of their mission. This call was processed in a shorter time than average and all requested resources were provided without delay.

Even though the ECC portion of this call went well the circumstances point to failures in our approach to providing systemic decision-making and emotional support. This document provides a series of recommendations that if implemented will not come with the promise of improved decision-making but will certainly provide personnel with a more robust framework around which to build out better decision support mechanisms.

Summary of Recommendations

- *Recommendation 1: The document that covered occupant status and other critical factors in the dispatch of full assignments be revisited and implemented as soon as practical. This would be the first known official direction at how call takers are expected to develop and report occupant status.*

- *Recommendation 2: The above referenced document be amended to compel call takers to directly ask about occupant status anytime there is a reported fire or other emergency in a structure that requires the assignment of more than one engine company. This information must be included the comments and transmitted verbally to responding units on the operational talk group.*

- *Recommendation 3: ECC should begin to develop more cogent calltaking paradigms for non-EMS calls, including a series of standard "pre-arrival" instructions.*

- *Recommendation 4: Field units should be reminded of the adverse effect of bidding on calls, the likelihood of hearing "…remain in service…" when they bid conditionally and that they should only bid when they are in a position to make an immediate impact on the situation as defined by the Office of the Operations Chief.*

- *Recommendation 5: The ECC must continue to honor request for resources only if they ordered by command or the "command post." All others should refrain from making these requests.*

- *Recommendation 6: Operations revisit the paramedic allocation on EMS Task Forces and other related assignments in light of the reduction of actual paramedics on the assignment, as they feel necessary. Until such time ECC should continue to dispatch assignments as they are configured in the CAD unless obvious errors present.*

- *Recommendation 7: ECC personnel should be directed to inform the Incident Commander first of all EB activations pertinent to them and that direct queries be limited to those situations where an attack command is in effect or when the Incident Commander does not acknowledge the EB activation notification by ECC.*

- *Recommendation 8: ECC should document all instances of EB activations from units not assigned to an incident that occur on tactical talk groups and forward that information to ECC Operations Supervisor. The ECC*

Operations Supervisor will forward these instances to the appropriate Battalion or LFRD Chief for disposition.

- *Recommendation 9: Ancillary units who wish to add themselves to a given call switch to 7 Bravo, advise of their response and then switch to the tactical talk group silently after being acknowledged by the 7 Bravo operator. (This includes canteen units, FMs, air units etc…)*

- *Recommendation 10: Incident Commanders calling for additional resources to operate on a separate tactical talk group, should also assign the appropriate NIMS based sub structure of authority to guide the response and actions of units assigned to that tactical talk group.*

- *Recommendation 11: units, officers, and commanders be reminded that while the ECC typically assigns a tactical talk group operator, they are not obligated to in all circumstances and that additional tactical talk groups assigned to an incident are solely in the purview of the incident commander to assign and support.*

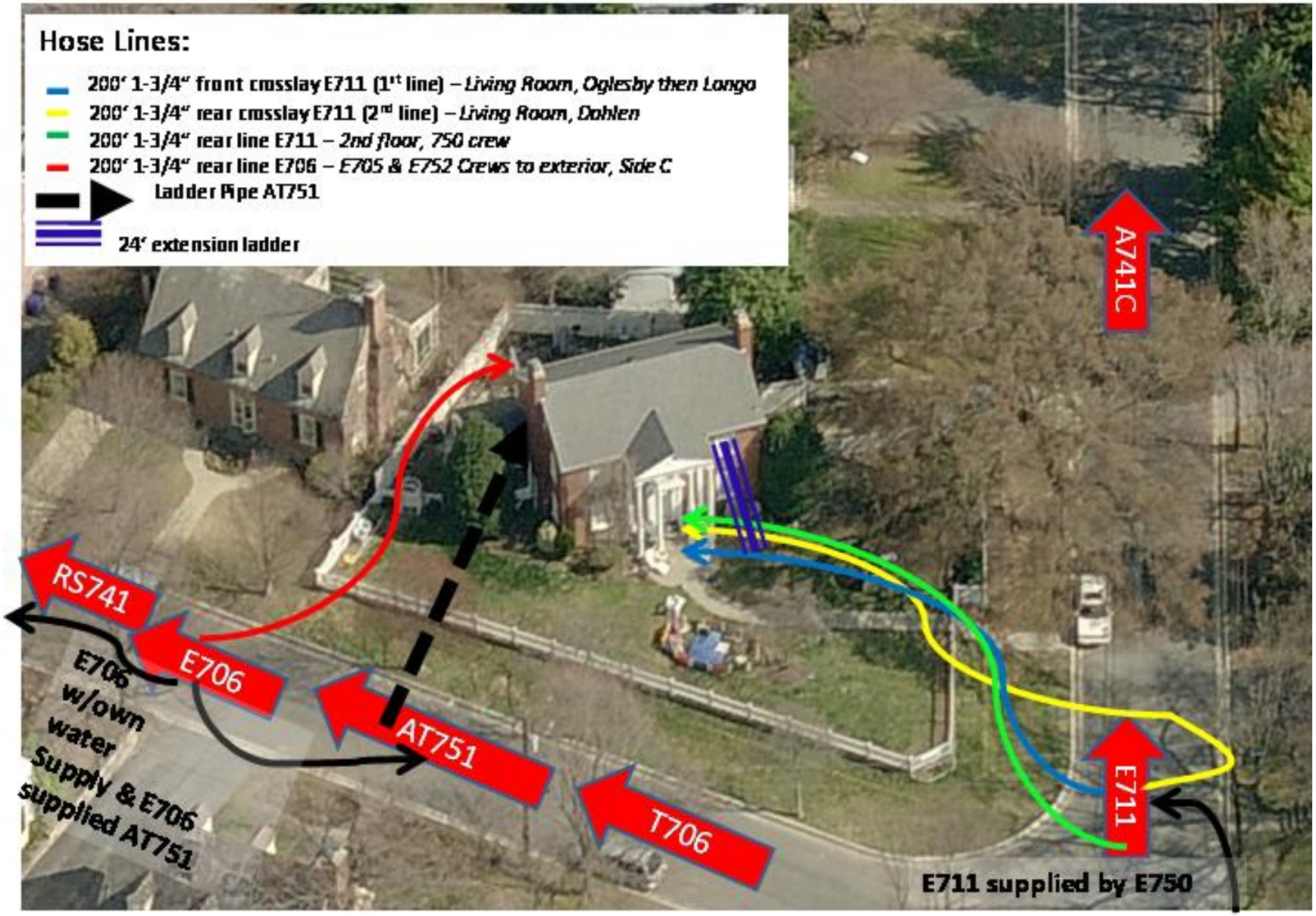
- *Recommendation 12: a program including ECC specific crew resource management and critical decision making skills, should be developed and delivered for all ECC personnel.*

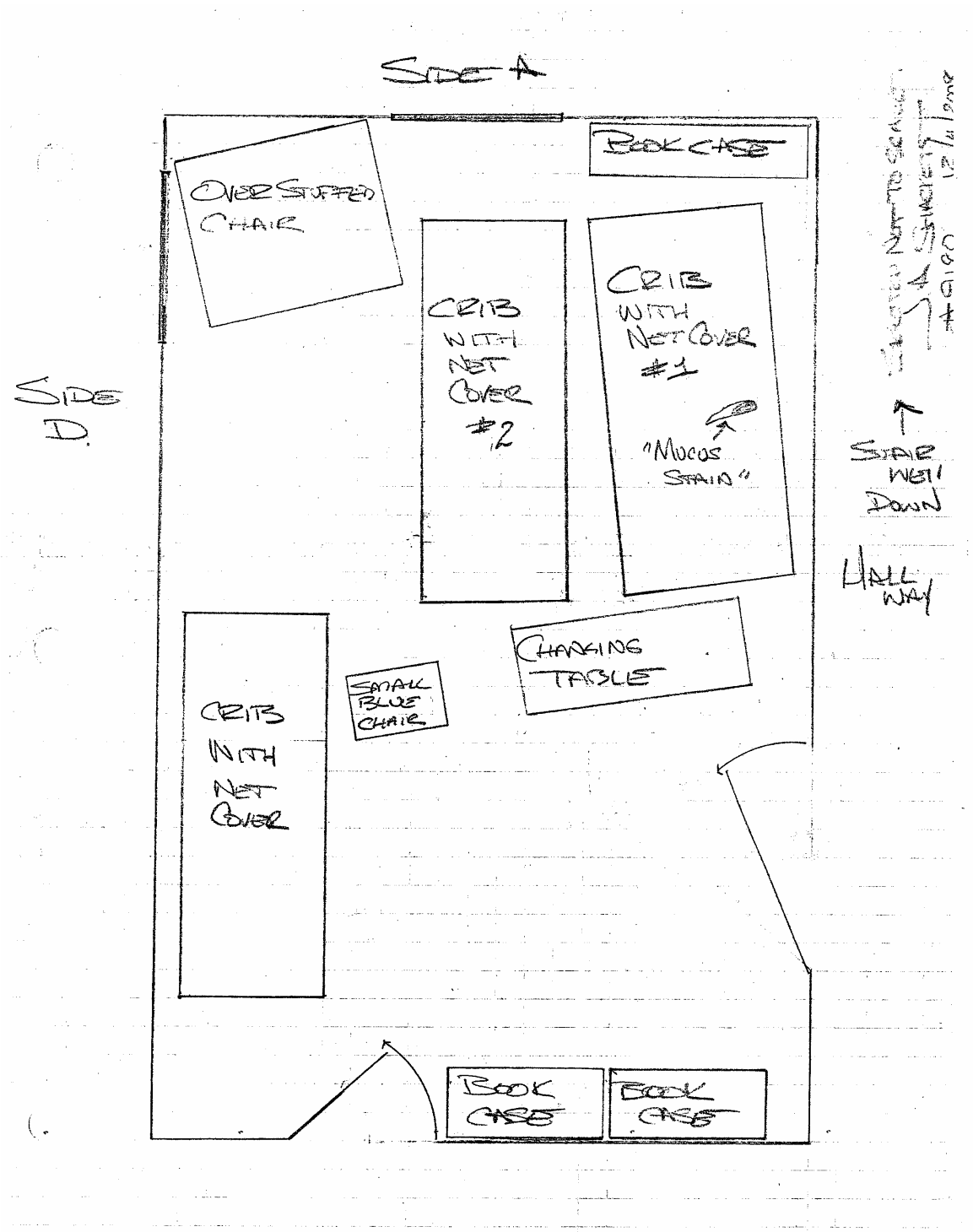
- *Recommendation 13: ECC personnel must be included in the critical incident support for all incidents where critical incident support is provided.*

**** This document was generated prior to the release of FCGO 08-19 which covers the intent of recommendation 10.***

Appendix B

Photos from 4806 Jamestown Road


Hose Lines:
200' 1-3/4" front crosslay E711 (1st line) – Living Room, Oglesby then Longo
200' 1-3/4" rear crosslay E711 (2nd line) – Living Room, Dahlen
200' 1-3/4" rear line E711 – 2nd floor, 750 crew
200' 1-3/4" rear line E706 – E705 & E752 Crews to exterior, Side C
Ladder Pipe AT751
24' extension ladder
A741C
RS741
E706
E706 w/own water Supply & E706 supplied AT751
AT751
T706
E711
E711 supplied by E750


SIDE A
BOOK CASE
OVER STUFFED CHAIR
CRIB WITH NET COVER #2
CRIB WITH NET COVER #1
"MUCUS STAIN"
SIDE D.
SIDE WALL DOWN
HALL WAY
CHANGING TABLE
SMALL BLUE CHAIR
CRIB WITH NET COVER
BOOK CASE
BOOK CASE

Appendix C

Safety Office Report

Safety Section Post Incident Analysis

2 Injured Firefighters

4806 Jamestown Rd Bethesda, MD

MCFRS Incident # 08-124053

December 3, 2008

Assistant Chief Michael E. Nelson, Jr
Safety Chief

On December 3, 2008 the Safety Chief responded on Incident # 08-124053 at 4806 Jamestown Road Bethesda, Maryland for reported injured firefighters at the scene of a working house fire.

Upon arrival at the scene the Safety Chief Reported to the Incident Command Post check-in and receive an update of the incident. DC700 advised there were 2 firefighters from RS741 that had sustained burn injuries while effecting rescue of trapped victims that were located on the second floor of the single family dwelling. Command assigned the Safety Chief to the Safety Group for the purpose of investigating the injured personnel and there protective gear. Safety 700 was operating at the scene as the Incident Safety Officer. Safety 700A was requested to the scene to assist with the investigation.

The Safety Group immediately located the 2 firefighters from RS741 who were being evaluated and treated by EMS702, M741 and other EMS personnel. The Safety Group was able to speak the 2 firefighters to assess their condition, the fire conditions that they faced, the performance of their PPE and any Findings that they may have had with their gear. The 2 injured firefighters were identified as RS741 Officer and RS741 Right.

The Safety Group as part of its investigation immediately impounded the PPE from the 2 personnel and began documenting and evaluating all their equipment.

The 2 injured personnel were transported to the Burn Center at the Washington Hospital Center for care of their injuries. Injury documentation was done by the EMS Duty Officer, the on-duty Fire Investigators and the Duty Chief from Rescue Company 1.

The entirety of this report will focus on the PPE of RS714 Officer and RS741 Right, the SCBA, injury cause and recommendations based upon the investigation.

Gear Documentation of RS741 Officer

Coat:
Globe G-Xtreme # 2964292 Size 54 NFPA 1971

Notes:
Had hand light attached and it was in the off position; noticed heavy soot to left sleeve and some heat damage to scotch light on back left side

Pant:
Globe G-Xtreme # 3698237 NFPSA 1971

Notes:
No suspenders were attached to the pant; smoke stains; no obvious burns or heat hits

Helmet:
Cairns N6A w/ NFPA 1971 label

Notes:
Ear flaps were found tucked into helmet; chinstrap was found on rear brim; heavy heat and smoke discoloration

Gloves:
Fire Dex Model GO3 GL Size XL # 75871 NFPA 1971-2000

Notes:
Dirt & some heat hits on finger area of left glove

Hood:
Life Liners Model BP1CP84 Lot# 021717 6/07 NFPA 1971 – 2007

Notes:
Dirty, no apparent heat impact

Portable Radio:
Motorola XTS3000R MC ID#720894 as RS741B

Notes:
Units was found in the on position and on 7C; marked as BC702 Spare1; ECC reported EB activation (no mayday); damage to lapel mic

SCBA:
Scott AP50 MCFRS Regulator # 0775 & Harness # 0775

Notes:
Cylinder pressure showed approximately 900 PSI; unit found turned off; smoke damage to unit

SCBA Facepiece:
Scott AV3000 Size Med with FDID of RS741 Officer

Notes:
Was assigned to correct personnel; heavy heat and smoke damage to lens

Boots:
Warrington Pro Boots Leather

Notes:
Dirty with no apparent damage; firefighter was instructed to keep the boots to wear to hospital

The coat & pant for RS741 Officer was delivered to MD Fire Equipment in Rockville, MD by SA700 for advanced inspection, cleaning and repair.

The SCBA w/ facepiece was delivered to the MCFRS SCBA Shop by SA700 for inspection and repair. Post incident report for SCBA # 0775 attached.

Portable Radio #720894 was exchanged by BC702 and sent for repairs.

Gear Documentation of RS741 Right

Coat:
Globe G-X7 # 2102211 NFPA 1971-1997 6/00

Notes:
Smoke soiled no apparent heat hits

Pant:
Globe G-Xtreme # 3543996 NFPA 1971-2007

Notes:
No suspenders were attached to the pant; smoke stains; no obvious burns or heat hits

Helmet:
Cairns Model 1044 NFPA 1971-2001 yellow

Notes:
Ear flaps were found rolled up into the helmet; chinstrap was found released @ quick release; smoke stained

Gloves:
Black Firefighting Gloves, no manufacture or NFPA compliance labels

Notes:
No labels; had Crosstech liner; wear to had area

Hood:
Life Liners Lot # 348 White Style 9723ES 100% Nomex NFPA 1971

Notes:
Soiled at front and neck area; heat hits to ear area could see outlines of both ears

Portable Radio:
Motorola XTS3000R MC ID#720445 as RS741 Right

Notes:
Units was found in the off position and on 7C in sling case; no identification markings; ECC reported EB activation (no mayday); smoke/heat damage to LCD screen and top of radio; unit was operable

SCBA:
Scott AP50 MCFRS Regulator # 0785 & Harness # 0785

Notes:
Cylinder pressure showed almost depleted; unit found turned off; smoke damage to unit

SCBA Facepiece:
Scott AV3000 Size Med with FDID of RS741 Right

Notes:
Was assigned to correct personnel; heavy smoke damage to lens

Boots:
Warrington Pro Boots Leather

Notes:
Dirty with no apparent damage; firefighter was instructed to keep the boots to wear to hospital

The coat & pant for RS741 Right was delivered to MD Fire Equipment in Rockville, MD by SA700 for advanced inspection, cleaning and repair.

The SCBA w/ facepiece was delivered to the MCFRS SCBA Shop by SA700 for inspection and repair. Post incident report for SCBA # 0785 attached.

Portable Radio # 720455 was exchanged by BC702 and sent for repairs.

PPE Analysis and Recommendations

Inspection and analysis showed that the PPE of both firefighters performed as designed. Neither firefighter reported any performance Findings.

The PPE received advanced inspection and cleaning by MD Fire Equipment and was returned to the individuals.

Several Findings were noted during the investigation as it relates to PPE:

- Neither firefighter had suspenders attached to their PPE pant per MCFR Fire Chief General Order 05-03 *Mandatory Use of Turnout Pant Suspenders*

- Both firefighters helmets were found with the earflaps rolled or tucked into the helmet.

- RS742 Right had a miss matched coat and pant. One was Globe G-Xtreme and the other was Globe GX7

- No NFPA compliance tags were found in the gloves of RS741 Rights gloves

SCBA

The SCBA shop performed a post incident inspection on SCBA # 0775 and #0785. Both units were noted as being covered with lots of soot

SCBA # 0785 initially failed the standard work rate flow test. After cleaning and lubrication the unit passed testing without problems. SCBA # 0775 passed all tests.

Injury Cause

The burn injuries that both firefighters received were minor in nature not requiring admittance to the Burn Unit. The injuries were apparently caused by being exposed to a high heat environment for a long period of time. One firefighter received a compression burn to the shoulder area probably caused by the cinched SCBA straps compressing the air space.

The injuries to the ear and face area may have been prevented or lessened if the helmet earflaps had been deployed and worn properly.

Recommendations

- Personnel must comply with FCGO 05-03
- Personnel must wear helmet earflaps; use may have prevented or limited injuries to the ear and face area
- Personnel must wear matched pant and coats; the ensemble is designed and tested as one unit
- Personnel must wear Findingd gloves that comply with NFPA 1971 standards and tag must not be removed or altered.
- Ensure all portable radios are aliased to the proper riding position.