

FIREGROUND CONTROL & ACCOUNTABILITY



**Deputy Chief Anthony Avillo (ret.)
Regional Tour Commander
North Hudson Regional Fire & Rescue**

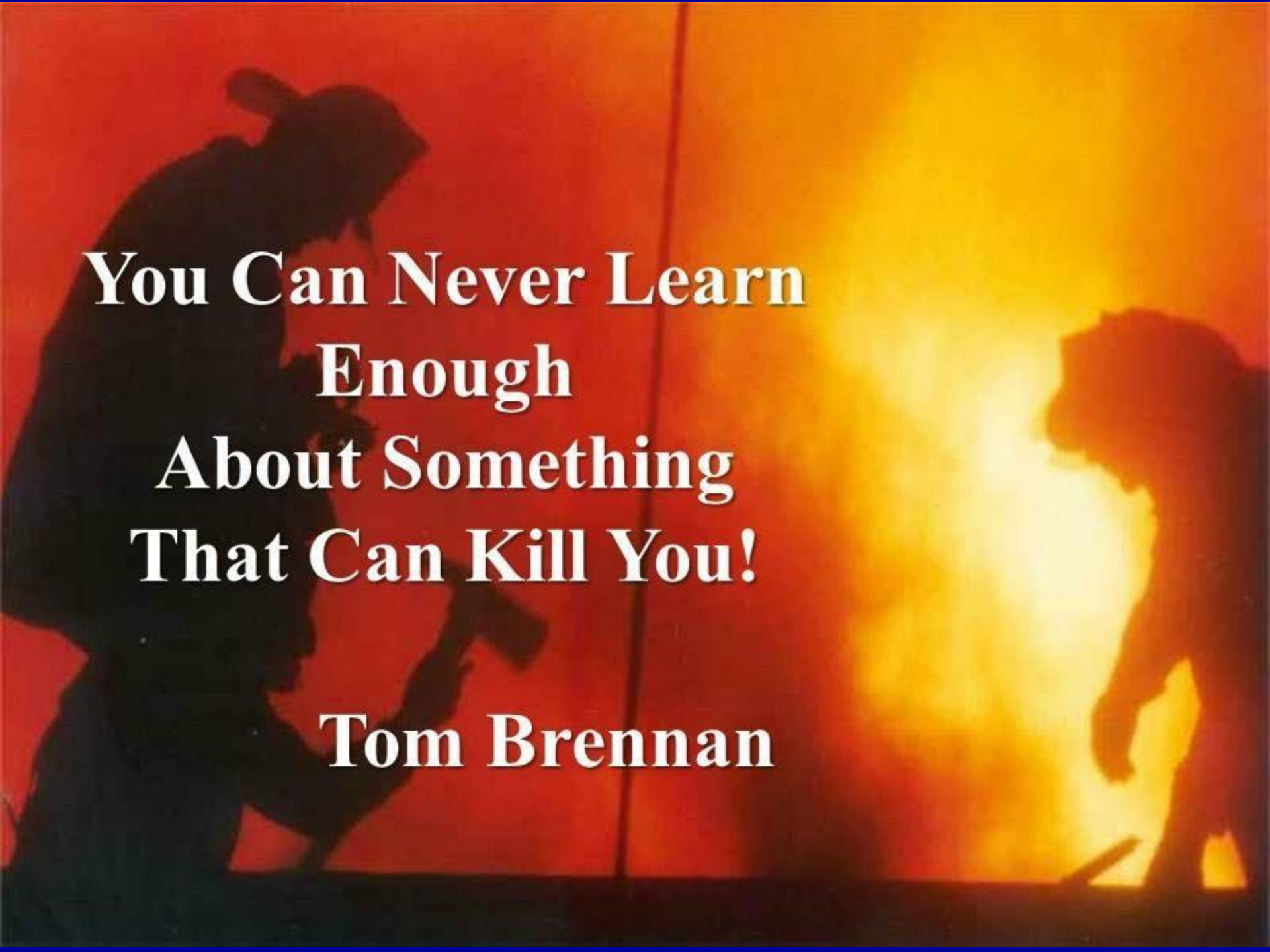
Full Contact Beliefs to Live By



**Da JOB must be a
little better each
day because you
were there**

-- Ed Flood, COD, NHRFR

**Leave DA JOB better
than you found it**



**You Can Never Learn
Enough
About Something
That Can Kill You!**

Tom Brennan

Your Plan



Must meet 3 primary objectives of the IC:

- 1. Get `em in safe**
- 2. Work `em safe**
- 3. Get `em out safe**

Accountability is based on all Officers doing their job all the time

The Prime Directive

**Allow NOTHING
to interfere with your
ability to maintain the
ready and in-service status
of your Command**



**The hardest
work is done
before you
arrive**

Full Contact Leadership

- Leadership on the fireground doesn't just magically show up out of nowhere
- Leadership comes out of the firehouse just like everything else used to "TCOB"
- So does:
 - Accountability
 - Discipline
 - Sense of Team
 - Safety Sense
 - Communication
 - Officering



Full Contact Leadership

If you are not leading
in the firehouse, you
can NEVER lead on the
fireground.

What's an order????

CULTURE of SAFETY



- **Safety must be an organizational value**
- **The 95% TO 5% RULE**
- **You can't put a value on safety**
- **You can put a price on the consequences**

DON'T SUCK AT BEING SAFE

Safety [Matters](#)

Safety [memo](#)

HVB [form](#)

LODD [review](#)

Scene Arrival: Nothing Showing



- **How are we Doing? Comfortable?**
 - “Flip the Switch” Mentality is a Myth
- **Petri Dish for Future Activities**
- **Opportune place to fix issues**
 - **No easy fix on the fireground**
- **Training opportunity**
- **Policy / SOP evaluation**

In other words, if you stink when there is nothing showing, you will stink when something is

Nothing Showing: ALL BUSINESS



- **Are these things being done right? Too Casual?**
 - **Apparatus positioning**
 - **SOP adherence**
 - **PPE**
 - **Communications**
 - **All sides coverage and report**

Dress Rehearsal Mentality

Response



- **Proceed with Caution**
- **Slow the Companies down**
- **Are these phrases used?**
- **What do they mean?**

Intelligence and Technology

- **Modern Tools of Command**
 - **Toughbook**
 - **Cell Phone**
 - **Google Earth**
 - **Google Maps**
 - **Drones**

PPE Policy Enforcement

T
H
E
B
A
S
I
C
S

- **Waist Straps**
- **Wear your Hood**
- **Chin Strap belongs Under Your Chin**
- **Wear the proper gloves!!**

[video](#)



**If you are not doing this right
what else are you doing wrong?**



In every case of negligence,

**There is a chain of
unacceptable and
unaddressed permitted
actions and behavior**



**WHAT YOU
PERMIT YOU
PROMOTE**

Initial Scene Assignment SOP



- **Accountability Mechanism**
- **Provides Standardization & Consistency**
- **Right people in the Right Place**
- **Less Micromanagement for IC**
- **Genesis of fireground control and jump-off point for organizational expansion**

- **Without I.S.A. every fire is different**

Arrival Report

-- Starts the Ball Rolling

- **Announce Arrival (Give Unit I.D. and state address)**
- **Describe Height / Construction / Occupancy**
- **State Arrival Conditions**
- **I.D. Special Concerns**
- **State Actions Taken**
- **Establish Command /I.D. C P**

Radio Reports & Scene Communications Arrival Report

-- Given by the First Unit on Scene

_____ on the Scene
Company Designation

_____ is a _____
Address Height

_____ Occupancy Type
Construction Resid / Comm / Assembly / Mixed
FR / NC / Ord / HT / WF

Description of Conditions
Nothing Showing? Fire or Smoke Showing?.....Where?

Actions Taken – Investigating / Stretching / Forcing Entry / Other

_____ establishing _____ Command
Company Designation Address

MUST NAME COMMAND

Additional Alarm Rule of Thumb



- **If the incident is still escalating and you do not have at least 3 companies in reserve, order an additional alarm**
 - **Relief / Reinforcement**
 - **Unplanned for problems**
 - **Hydraulic Reserve**
 - **Reflex Time Ripple Effect**

**ALL INCIDENTS REQUIRE A
TACTICAL RESERVE**

Resources



**Better to be
looking at them
than looking for
them**

--Tommy Gavin

Accountability and Mutual Aid



- **Do you use mutual aid for most fires?**
- **Is this the only time you see them?**
- **Is there training / planning?**
- **Are there any policies?**

The day of the incident is NOT the day to figure this out

Firefighter LODD report New York 2014



- **Identified Contributing Factors:**
 - Lack of crew integrity, FF and scene discipline
 - Span of control violations
 - Ineffective personnel accountability
 - Lack of assigned RIC (RIC to work?)
 - Lack of regular / standardized training between M/A depts.
 - Lack of common policy & procedure between M/A depts.
 - Ineffective radio communications

All too familiar??

Is your current operation a disaster waiting to happen??

RIC TEAM



- **Do you routinely put the RIC Team to Work?**
 - **Do they chomp at the bit???**
- **Consequences of delayed 2nd RIC arrival**
- **Disciplined Command and RIC Teams make for a safer fireground**
- **Is there a plan for when the RIC goes to work?**

RIC TEAM Activation

- **RIC Checklist**
- **2 additional alarms**
- **Additional RIC**
- **Rescue Group Supervisor**
- **RIC Coordinator**
- **Communications plan**

R. A. T.

RIT Assist Team



- **Frenzy Control Mechanism**
- **Part of the Tactical Reserve**
- **R.A.T in Available Mode in Staging until Declaration of Mayday – then committed to RIT operation**
- **Duties**
 - **Provide RIT Team with tactical support**
 - **Tool / equipment shuttle**
 - **Removal assist**

S.O. Duties



- **Full gear / SCBA**
- **360 Hot Lap**
- **Report to IC**
- **Go to Where Problems Are**
- **Should be “all over the fireground”**
 - **Not doing Job by Hanging out at the CP**

Firefighter Accountability



- **I.C.'s Primary Responsibility**
- **Riding Lists / Tags / Tool Asgnmnts**
- **Are you letting them do the job of your Company and Chief Officers?**

All Based on Discipline

Unsafe actions



- **The most unsafe action on the fireground is FREELANCING**
- **How do you prevent it?????**

UNITED FRONT

Freelance Prevention



- **Only three places a Company should be:**
 - **Operating**
 - **Initial Cylinder Changes**
 - **Staged**
 - **Rehab**
- **All status or area of operation changes shall go through the CP**
- **If disciplined and tracked properly, accountability violations disappear**

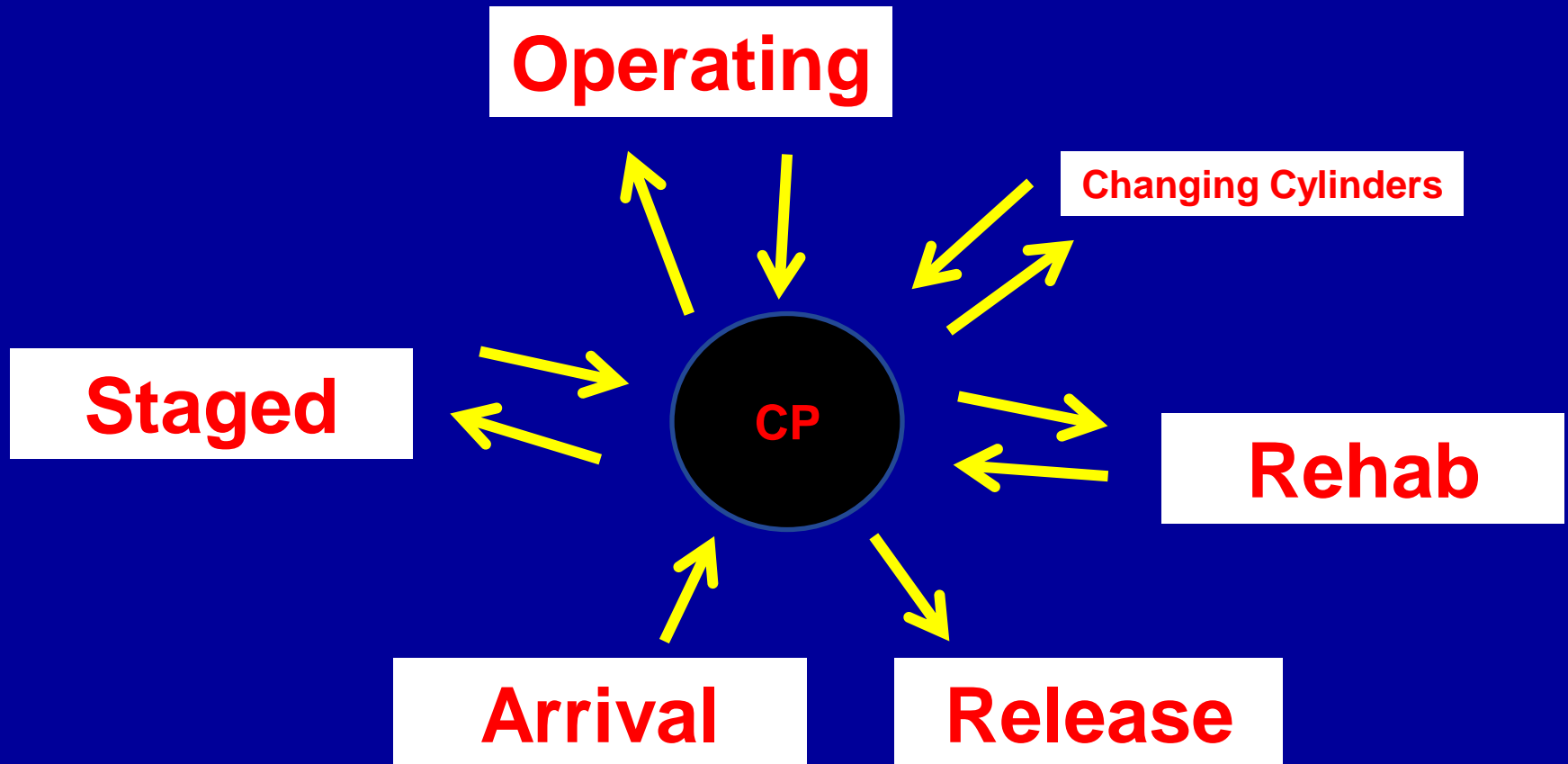
Task Assignment Model (Decentralized Command Ops)



- 1. Stay Together as a Unit**
- 2. Report to C.P. for Assignment**
- 3. Report to Assigned Operational Area**
 - Report Progress to Division Supervisor
- 4. Operate in Assigned Division ONLY**
- 5. When Relieved, Report Back to C.P. for Re-assignment or Rehab**
- 6. If Re-assigned, Go Back to Step #3**
- 7. When Rehab is Complete, Go to Step #2**

The Accountability Model

Foundation of Fireground Organization



Accountability and the Command Board



- **Company Officer roles:**
 - **Ensure company integrity**
 - **Keep Command informed of status**
 - **All changes of status or area of operation shall go through the CP and be reflected on the Command Board**
 - **Status change is best done verbally at the CP**

— **Whatever you think
is the right thing to do
is the WRONG thing
if it does not go through
the
COMMAND POST**

GET IT?

INITIAL PROGRESS REPORT

Given within first 5 minutes of operation

Dispatch from _____ Command
Initial Progress report:

_____ is a _____
Address Height

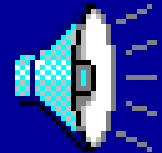
_____ Occupancy Type
Construction Resid / Comm / Assembly / Mixed
FR / NC/ Ord / HT / WF

Description of Current Conditions
Fire / Smoke Showing.....Where?

Exposures – A/B/C/D – Attached? / How far away? / Threatened?

Actions Thus Far -- Lines stretched / search progress / Ventilation

Incident Status
Doubtful / Probable / Improving / Unchanged / Under Control



Strategy Selection



- **Critical Factors in the Strategic Decision:**
 - **What is Causing Main Problem?**
 - ❖ **Fire / Haz Mat / Tech Rescue**
 - **Life Hazard? Can anyone be alive?**
 - ❖ **Firefighter / Civilian**
 - **Primary search extent?**

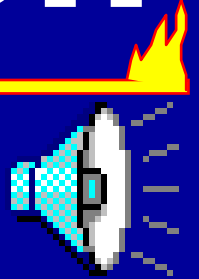
Strategy Selection



- **Critical Factors in the Strategic Decision:**
 - **How much Building is Involved Now?**
 - **How Much is Uninvolved & Threatened?**
 - **Is Structural Stability Compromised?**
 - **What is Personnel / Apparatus Profile?**
 - **How's my Water?**

Decentralization

- **Breaks the fireground into manageable portions**
- **Assigns responsibility to major operational areas**
- **Provides greater accountability**
- **Decreases span of control**
- **Reduces radio traffic**
- **Breaks up the opinion brigade**



Command Limitations



- **Virtually ALL Command problems come from areas he/she can't see**

- **Rear**
- **Roof**
- **Shafts**
- **Interior**
- **Exposures**

BE NOSY!!!!!!

**TIMELY PROGRESS REPORTS FROM ALL
AREAS HELP DEFEAT THIS HANDICAP**

Accountability

- **Division Supervisors set up early are the REAL Accountability Officers**
- **Account for:**
 - **Who is in Division (Div. PAR)**
 - **Where they should be**
 - **What they are doing**
 - **When they should come out**

DECENTRALIZATION

Company / Division Progress Report



- **Conditions Encountered**

- What do you have?

"CAR"

- **Actions Taken**

- What are you Doing About it?

- **Resources Needed**

- What Do you Need?

**YOU ARE THE POINT OF CONTACT WITH THE
CONCERN**

Rehab Guidelines



- **Rehab does not mean go and get lost**
- **Rest the company and get back to the CP**
- **Minimum 15 minute rest period after 2 cylinder uses**
- **If you are closing in on 1/2 hour at rehab, you are there too long – we need you back to CP**
 - **We shouldn't have to call you**

Water Supply



- **If you are using 1, set up for 2**
- **If you are using 2, set up for 3**
- **If you are using 3.....**
- **Manifolds**

Manifolds

- **Bring the hydrant right to where you want it**
- **Avoids apparatus congestion**
- **Takes advantage of best mains**



Case study



- **Rapido Taxi 4800 Broadway
Union City 2122 hours 85°**
- **1 story ordinary commercial
1600 square feet**
- **Repair-area held heavy fire load**
 - **Cars / tires / motor oils / gases**
- **BIG exposure issues**

Case study



- **Fully involved on arrival with fire igniting B exposure and telephone pole / transformer**
- **Exposure issues**
 - **B side – attached occupied 3 story wood frame MD – trapped occupants**
 - **C side – 5 story ordinary MD with combustible mansard**
 - **Many windows exposed**
 - **Power lines Side A**

Initial Actions

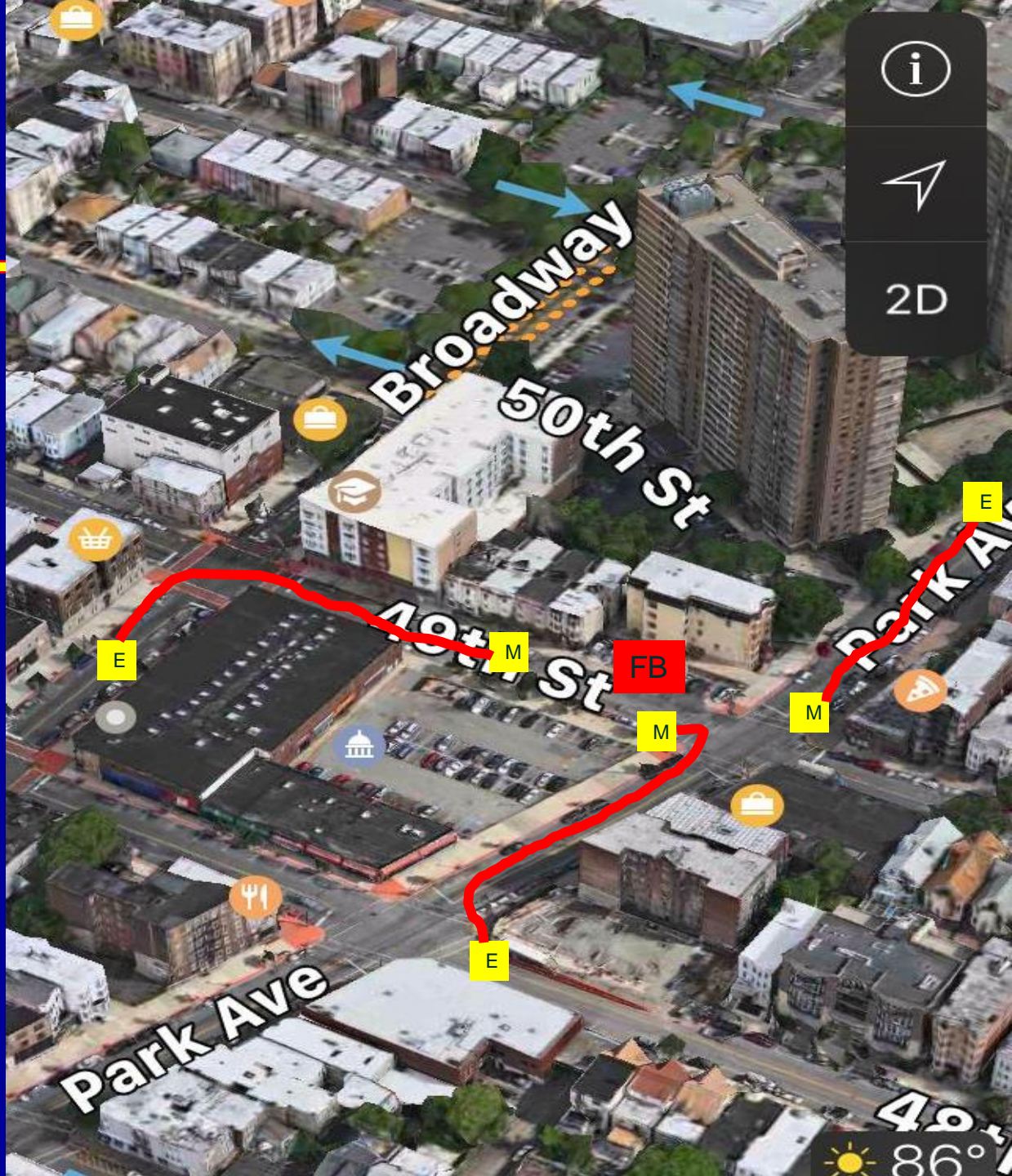


- **Squad 1**
 - **establish water supply**
 - **deck gun on B exposure**
 - **Begin 2-1/2" stretch to front of building**
- **Ladder 3**
 - **Search and evacuate B exposures**
- **R1 and L1**
 - **Search & Evac C exposure**

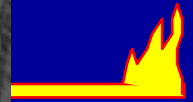
Additional Actions



- **Decentralize Command**
 - **B and C Divisions**
- **Lines into all exposures**
 - **Operate from windows on C side**
- **Three 2-1/2" lines to fire bldg.**
- **3 manifolds used from additional water supplies**
- **Ladder pipe to fire building**



Information panel with three buttons: 'i' (info), a compass icon, and '2D'.



86°

Lessons Learned / Reinforced



- **Even small buildings can have a lot of fire in them.**
 - **How will it influence exposures?**
- **Building construction a key to exposure protection**
 - **Asbestos siding beneath vinyl siding on Exposure B**

Lessons Learned / Reinforced



- **Get water on parent body of fire**
 - **Reduce radiant heat toward exposures**
- **Multiple Alarms**
- **Plan for multiple water supplies**

MAJOR BREAKDOWN



- **Failure to recognize when the building changes the rules**
- **Attempting to fit your “common operation” to all situations**
- **The 2 -1/2 story frame mentality**
 - **Lightweight Construction**
 - **Vacant Buildings**
 - **Large Area Structures**

Decision of 1st-arriving company often makes or breaks the operation

Control the Nuts



**Doing things
the same way
all the time
might get you killed
some of the time**



NEVER
get
EMOTIONAL
with a building

Rule Changers



- **Lightweight Construction**
- **Vacant Buildings**
- **Large Area Structures**
- **Renovated Structures**
- **Collapse-zone violations**
- **Structural Carcass**

Lightweight Construction



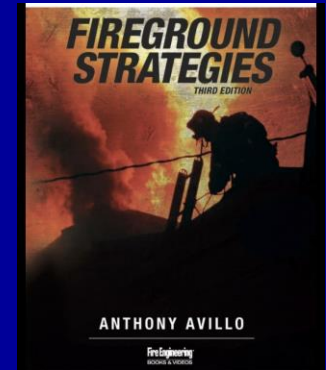
- **LODD alert:**
- **An Assistant Chief was killed and a firefighter injured at a truss roof failure in a commercial structure. Heavy fire was showing through the roof on two sides when the first companies arrived. Command did not know they entered the structure.**

Lightweight Construction



- **LODD alert:**
- **FF killed after falling through wood I-beam supported floor. Fire started in basement. Zero visibility on 1st floor. NO TIC was used. Collapse occurred 18 min. after arrival**

Lightweight Construction Safety Flowchart



Is Lightweight Construction present?
(Recognition)

Yes

No

**Involved or
threatened?**

Yes

No

**Operate in safe manner
consistent with building
construction and structural
conditions**

- 1. Withdraw from area or building**
- 2. Prepare for collapse**
- 3. Consider “stop” point based on fire extent and defensible spaces / building layout**

- 1. Increase Supervision**
- 2. Operate cautiously**
- 3. Continue to monitor voids**
- 4. Reinforce operation as conditions dictate**

Large Area Structures



- **LODD alert:**
- **FF dies after becoming disoriented in 7,000' sq. retail store. Ran low on air and attempted to exit alone. Ran out of air**

Large Area Structures



- **LODD alert:**
- **2 FF's killed in roof collapse of auto parts store with wood truss roof. Smoke from roof upon arrival.**

**Three 1,000 lb. HVAC's on roof.
Collapse occurred 20 minutes
after arrival**

Large Area Structures



- **What is holding up the roof?**
- **Search Tactics**
 - **How far do we enter?**
- **Hoseline Choices**
- **Beware fire above the ceiling**
- **Big lines / Life lines /**
- **Extra Chiefs**
- **Extra RIC**

Vacant Buildings



- **LODD alert:**
- **2 FF's killed, 19 injured after extinguishing a rubbish fire in a building that was abandoned for 5 years and gutted, having been the scene of previous fires. Shortly after control of the fire, a wall collapses. Deteriorated bowstring trusses were present**

Vacant Building



- **LODD alert:**
- **Lt Killed / FF injured by roof & ceiling collapse. Had re-entered to put out hot spots. Roof was reported as sagging 1/2 hour into incident. Collapse occurred approx. 2 hours into incident. Company freelanced into structure**

Vacant Bldgs

15% of all LODD's

WHY SO HIGH??

Vacant Buildings



- **Open them up before entering**
- **Strict control**
- **Multiple means of egress**
- **Pessimistic approach**
- **Don't risk your neck tonite for something that will be put in a dumpster tomorrow**

Renovations



- **LODD alert:**
- **Firefighters are forced to jump from the top floor of a multiple dwelling which had been illegally renovated. Renovations split apartments and negated access to the fire escape. Two firefighters are killed and four others are injured in the fall.**

Renovations



- **LODD alert:**
- **Two firefighters are killed and three injured at a variety store when an added-on rooftop HVAC collapsed through the roof and the floor where renovations had removed structural supports and utilized substandard materials.**

Renovations



- **LODD alert:**
- **1 FF killed while searching a structure for a reported victim. Fire originated in air shaft that had been covered over with Lexan skylight. Backdraft in shaft and cockloft led to rapid fire development and ceiling collapse. Nothing was showing on arrival**

Renovations



- **Never strengthen a building**
- **Often found during operations**
- **Take notice of your area**
- **Awareness mechanism**

Defensive Ops Control



**NO HALF ASS
COLLAPSE
ZONES**

[video](#)

[Video](#)

Collapse Zone Violations



- **LODD alert:**
- **2 FF's killed, 2 injured from wall collapse. Defensive operations were occurring and collapse zones had been established. Company was in an alley breaking windows in fire building when collapse occurred**

Collapse Zone Violations



- **LODD alert:**
- **1 FF killed, 1 injured retrieving equipment inside collapse zone. Upon arrival, building well involved and section of roof already collapsed. Defensive ops pursued.**

The Structural Carcass



- **LODD alert:**
- **Firefighters extinguish a fire in a building that was already gutted, having been the scene of previous fires. Shortly after control of the fire, a wall collapse kills a firefighter and injures many others**

Structural Carcass



- **LODD alert:**
- **Firefighters enter an exposure building which sits adjacent to a four-story shell of a factory where a fire completely gutted the interior causing total floor collapse. One of the remaining free-standing walls collapsed onto the exposure, killing two firefighters and injuring several more.**

Structural Carcass



LODD alert:

Companies operate for over 24 hours at a large partially collapsed commercial building fire.

Four firefighters enter to look for hot spots.

Several floors and a remaining wall collapse killing two firefighters and injuring two others.

Structural Carcass



- **If the building will never be occupied again or for a long period of time, firefighters do not belong inside**
- **Discipline a key**
 - **Maintain collapse zones**
 - **Equipment retrieval / pick-up**
 - **Occupant re-entry**
 - **Vibrations**
 - **Traffic / scene control**



NEVER
get
EMOTIONAL
with a building

Risk Management



- **Boston Globe:**
 - **52 fires that killed 80 FF's from 1997 to 2004**
 - **In only 14 of the 52 was there a suspicion of a trapped occupant.**
 - **No civilians fatalities reported in any of the 80 LODD's**

Strategy Modification



- **Cues to consider:**
 - **Discovery / presence of lightweight construction – check involvement!!**
 - **Failure to locate seat of fire in timely manner**
 - **Evidence of smoke conditions worsening even though water is being applied**
 - **Forcible entry**
 - **Ventilation difficulty**
 - **Water supply problems**
 - **Finding something nasty that shouldn't be there**

Strategy Modification



- **Cues to consider:**
- **Indicators of flashover / structural compromise**
- **Operations that “eat up” personnel (tough rescue)**
- **Fires in attached buildings w/ any of above concerns**
- **Fireground experience or gut feelings**

More critical during offensive ops because personnel are inside building

Strategic Transition



- **Proactive Preparation**
 - **Strategic Transition Coordinator**
- **Additional Alarms (& Tactical Reserve)**
- **Additional Water Supplies**
 - **Not same H2O used for interior ops**
 - **Manifolds**
- **Set up Master Streams**

Strategic Transition



- **Expand your Organization**
 - **Keep proper span of control**
 - **Division Commanders**
 - **Additional RIC's and Safety Officers**
- **Sound the Evacuation**
 - **Radio dedicated tones /
Announcement / Air Horns**
 - **Be specific in evac parameters**

Strategic Transition

- **Conduct a PAR**
 - **No big streams till everyone confirmed out**
 - **Update command boards**
- **Establish Collapse Zones**
 - **Consider trees, poles, wires**
 - **Guard against Collapse Zone Creep**
- **Withdrawing Companies to Rehab***
- **Announce Strategic Change**
 - **Check readiness with Div. Cmdrs.**

Post-incident Evaluations

- **Lessons learned**
- **Safety Officer input**
- **After Action Reports**
- **Post incident analysis**
- **Cycle to training plan**

North Hudson Regional Fire & Rescue After Action Report

Date: _____ Platoon: _____ Battalion: _____ Company: _____ Officer: _____

Address: _____

Construction: _____ Occupancy: _____

Size-up on arrival, Location of Fire etc.: _____

1st Alarm Arrival Sequence: 1st E _____ 2nd E _____ 3rd E _____ 4th E _____ 1st L _____ 2nd L _____

Initial Action: Fire Attack Water Supply Back-Up Line Exposure Line Outside Stream Ops

Circle all that

Apply

Force Entry Locate Fire Primary Search Rescue Ground Ladders Aerial Ladder Ops

Other Action * Ventilation: Horizontal Vertical Mechanical _____

Explain equipment used and location

Explain Actions in Detail:

Concerns? / Problems? _____

Lessons Learned: _____

Draw Diagram on Other Side



North Hudson Regional Fire & Rescue *Deputy Lessons Learned*

Date Of Incident: 01/15/14 *Incident Number:* 483

Address Of Incident: 130-40th st. UC

Time Of Incident: 03:46 *# Of Stories:* 3 *Construction Type:* Wood Frame

Occupancy: Residential *Type of Roof:* Flat *Number Of Alarms:* 2

Describe Lessons Learned Below

- First and foremost, in old law tenement, it is critical to get line to first floor cellar door for protection of open interior stairs. Be prepared for surprises -- there was no cellar door at the top of the cellar stairs. Products of combustion will have free reign to choke off the building
- Expect that in these old buildings, there will be illegal apartments in the cellar. There were 3 illegal SRO-type occupancies in cellar
- Be careful on fire escapes -- this one was in disrepair
- Night fire (0346) and life hazard = additional alarms to cover all areas and provide tactical reserve
- Wood frame exposures three feet away on both sides. Cellar windows exposed them -- be prepared to get lines to protect exterior combustible walls and get lines inside as well. Not needed here -- fire knocked down quickly -- still have to be ready to do this ASAP
-





Date: 6/16/14 Incident #3651 (1st Platoon)

Address: 515-34th Street

Time: 0335 hours

Construction: 2 Story Wood-Frame (Flat Roof)

Occupancy: Residential

Alarms: 3 alarms

- *When in doubt, send them out. Maintain a tactical reserve and ensure to rotate crew during overhaul to maintain overall scene/ firefighter safety.*
- *Fire on 1st floor with several rescues made.*
- *Maintain communications with interior crews and advancing hose-lines to ensure safe and effective horizontal ventilation.*
- *Maintain crew integrity at all times during all phases of fire operations.*
- *There is no such thing as a routine fire.*
- *Engine Officers must communicate initial actions to ensure a smooth transaction into your fire operation.*
- *Ensure all crew members (mutual and overtime) are up to speed with company operations and assigned positions.*
- *Look to Vent-Enter-Search from second floor when the opportunity presents itself.*



Thank you

**Be safe
out there**