

# HIGH RISE OPERATIONS, TWO-DIMENSION INITIAL APPROACH

**“A science and experience based operational  
model, low staffing response proposal”**

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## WHAT ABOUT SOUTH AMÉRICA?



Low Staffing



Knowledge  
standard



Grey area  
FPS



## Fire Department



available firefighters





**VA EL AGUA**







**VA EL AGUA**









# COMMON DISPATCH SETUP



# 2 Dimension Initial Approach



Modified  
RAT

Fire Attack



The background image is a photograph of a city street scene. A thick, dark plume of smoke is rising from a building on the left side of the frame. In the foreground on the right, a brick wall is visible. Other buildings are in the background, including a modern glass skyscraper. A large red rectangular banner is superimposed over the center of the image, containing the text 'SMOKE CONTROL IS IMPORTANT' in white capital letters.

SMOKE CONTROL IS  
IMPORTANT

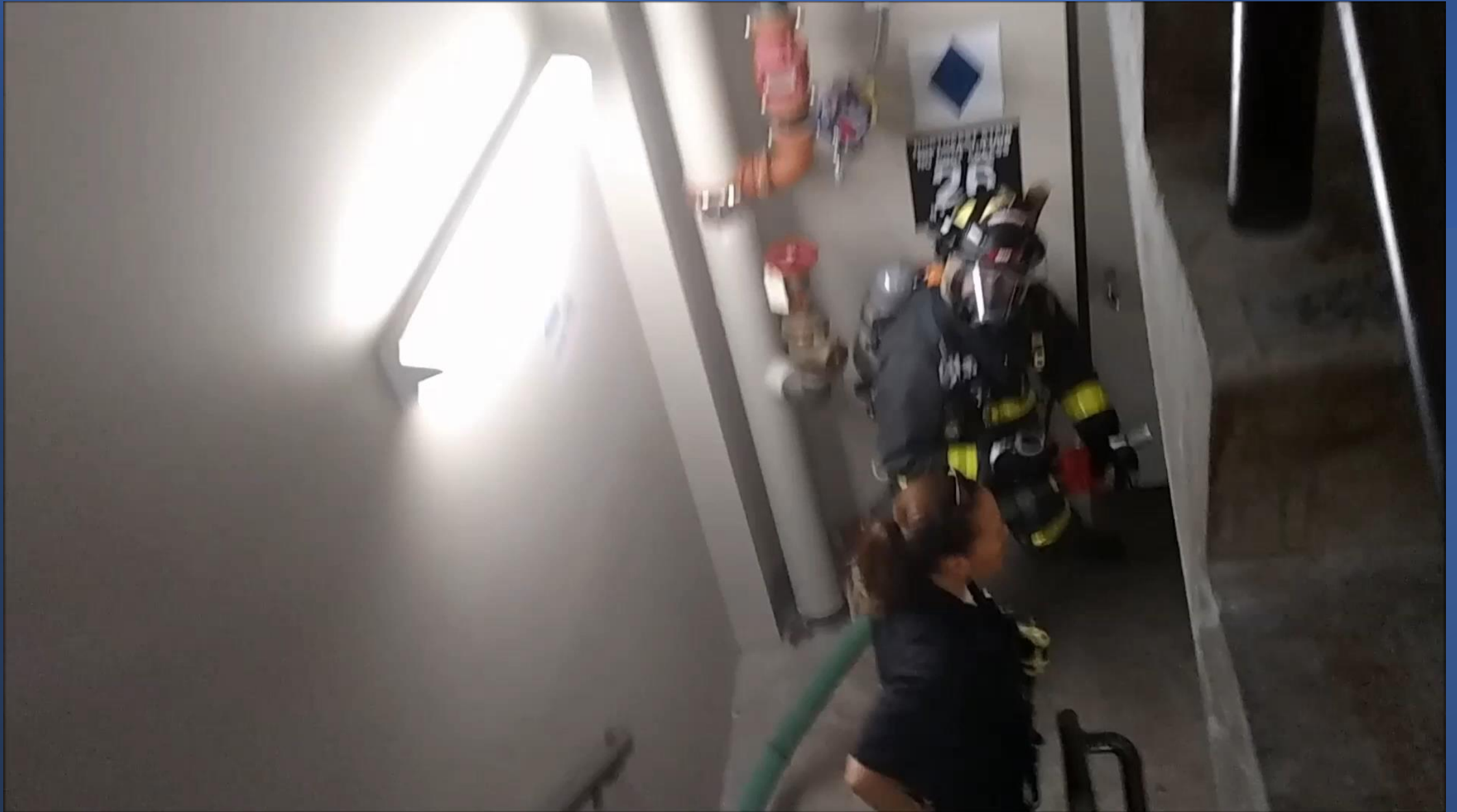
“...the door should be kept shut while the water is being brought, and the air excluded as much as possible, as the fire burns exactly in proportion to the quantity of air which it receives.”

We are not reinventing the wheel...



JAMES BRAIDWOOD.





# Modified RAT equipment

TOOLS	ASSIGNMENT
TIC + Smoke blocker	FF 1
Halligan/Axe combo + CAN	FF 2
?	FF3 ?



# Modified RAT – Objectives

Up and Fast by stairwell

Find fire

Stabilize situation by

→ Air management/smoke control

→ CAN

Plus, Forcible entry if it's need it and continuous radio feedback about staircase stability with IC

# Stairwell protection is a key operational objective

- Prevent smoke invasion
- Monitor environment status
- Secure “free smoke condition” for evacuation
- To control the area, supported on PPV
- Continuous information feedback to the IC
- To evaluated the “5 floor above zone”







No control

hose line width

smoke stopper





# Fire Attack - objectives

- Check standpipe connections for leakage or malfunction
- To establish fire attack from **‘The Closest [useable] rising main outlet’**
- To establish the initial fire attack strategy (from engine, from standpipe or Vertical deployment)
- First Bridgehead establishment

# Attack Team

- 3 minimum, 4 ideal

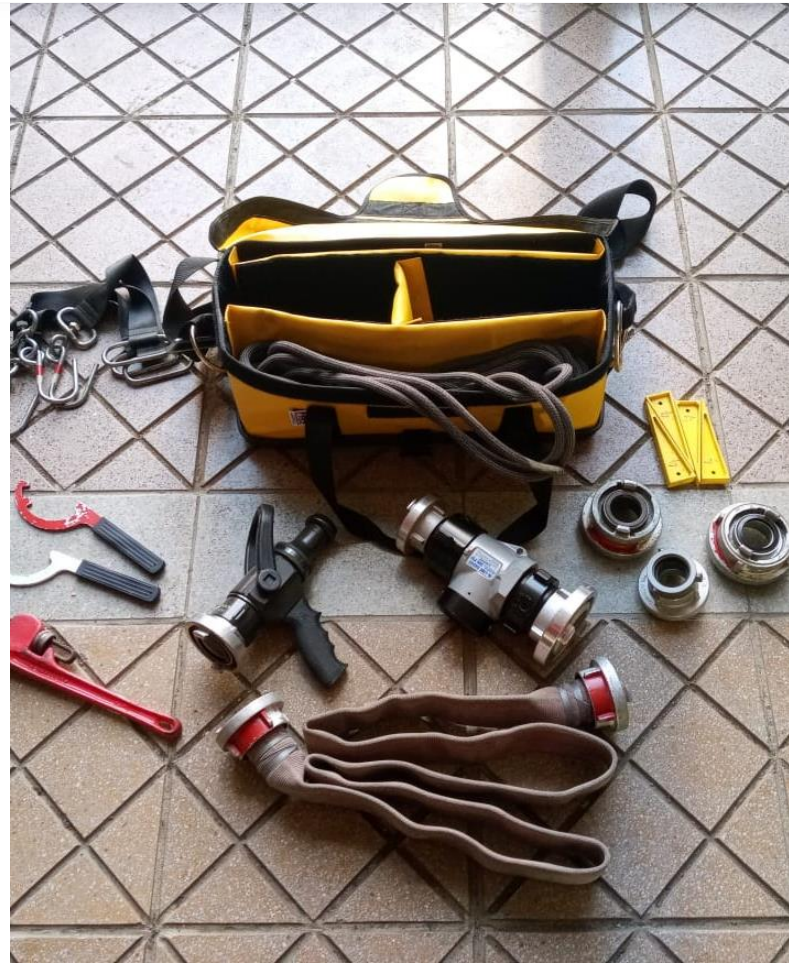
EQUIPMENT	ASSIGNMENT
Hose pack + smooth bore	FF 1
Hose pack+ gated wye	FF 2
High Rise Kit	FF 3



# High Rise Kit

## Our problem-solving magic bag

- 2<sup>nd</sup> Smooth bore
- Storz key
- 1 Stilson key
- Door wedges
- Rope
- Connection adapter 52-70mm (2"-3")
- Connection adapter 60-70mm (2.5"-3")
- Storz – NH connection adapter
- Hose hooks
- In line pressure gauge

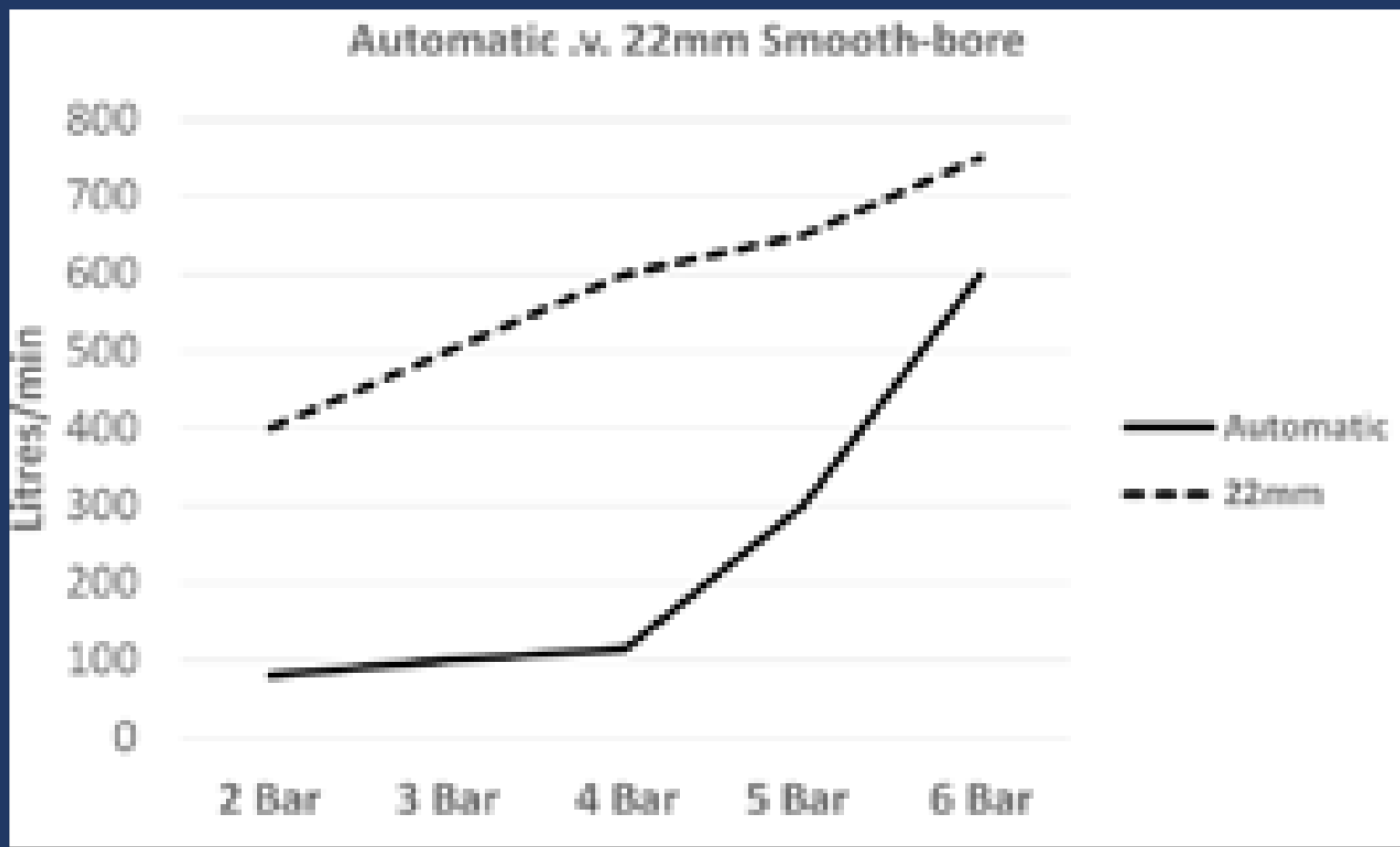








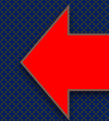
# Why choosing smooth bore nozzles?



# A PLAN – FROM STANDPIPE

Maintaining stairwell stability

Take advantage of gravity and clear stairwell areas → Dry deployment





# Standpipe connection

- 2" Storz outlet
- 380 GPM at 70 PSI

Comité de Especialidades de la Cámara  
Chilena de la Construcción (2017)





**THE FIRE IS SHOOTING AT US!**



# VERTICAL DEPLOYMENT

2<sup>nd</sup> option

Requires building evaluation

2 ways

→ Top to bottom deployment

→ Hoisting

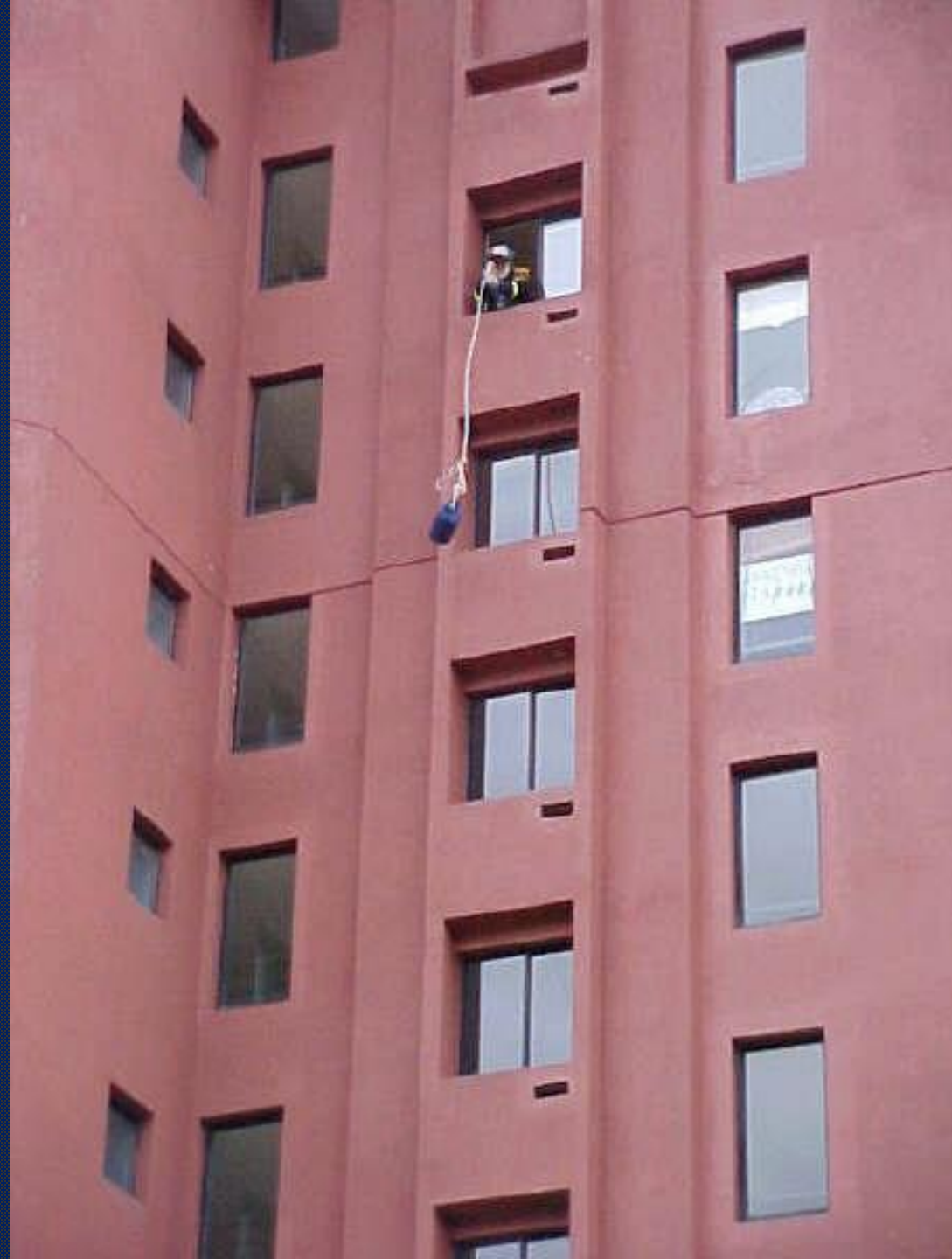


# WHY?



P.BURNER088PP









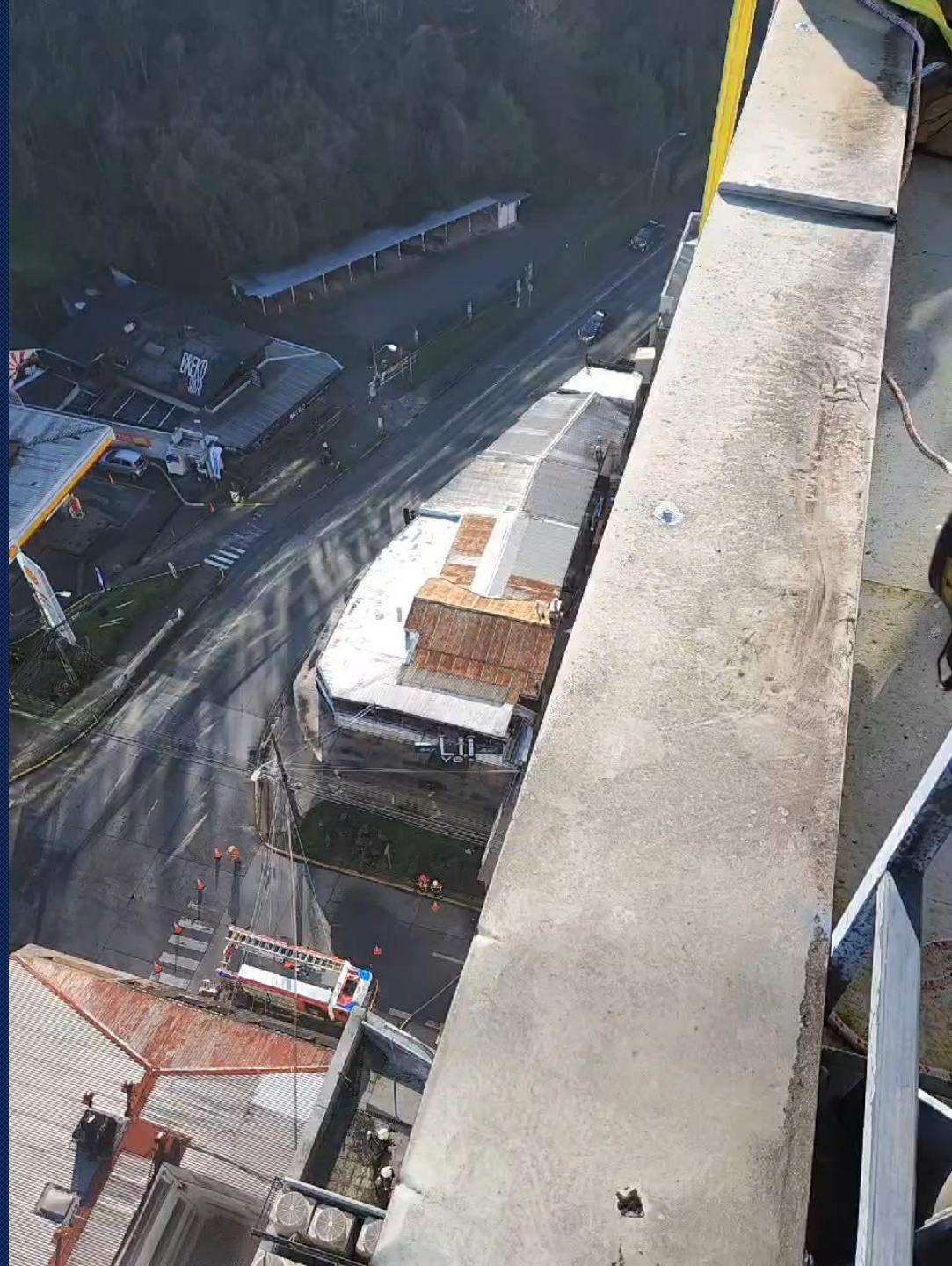




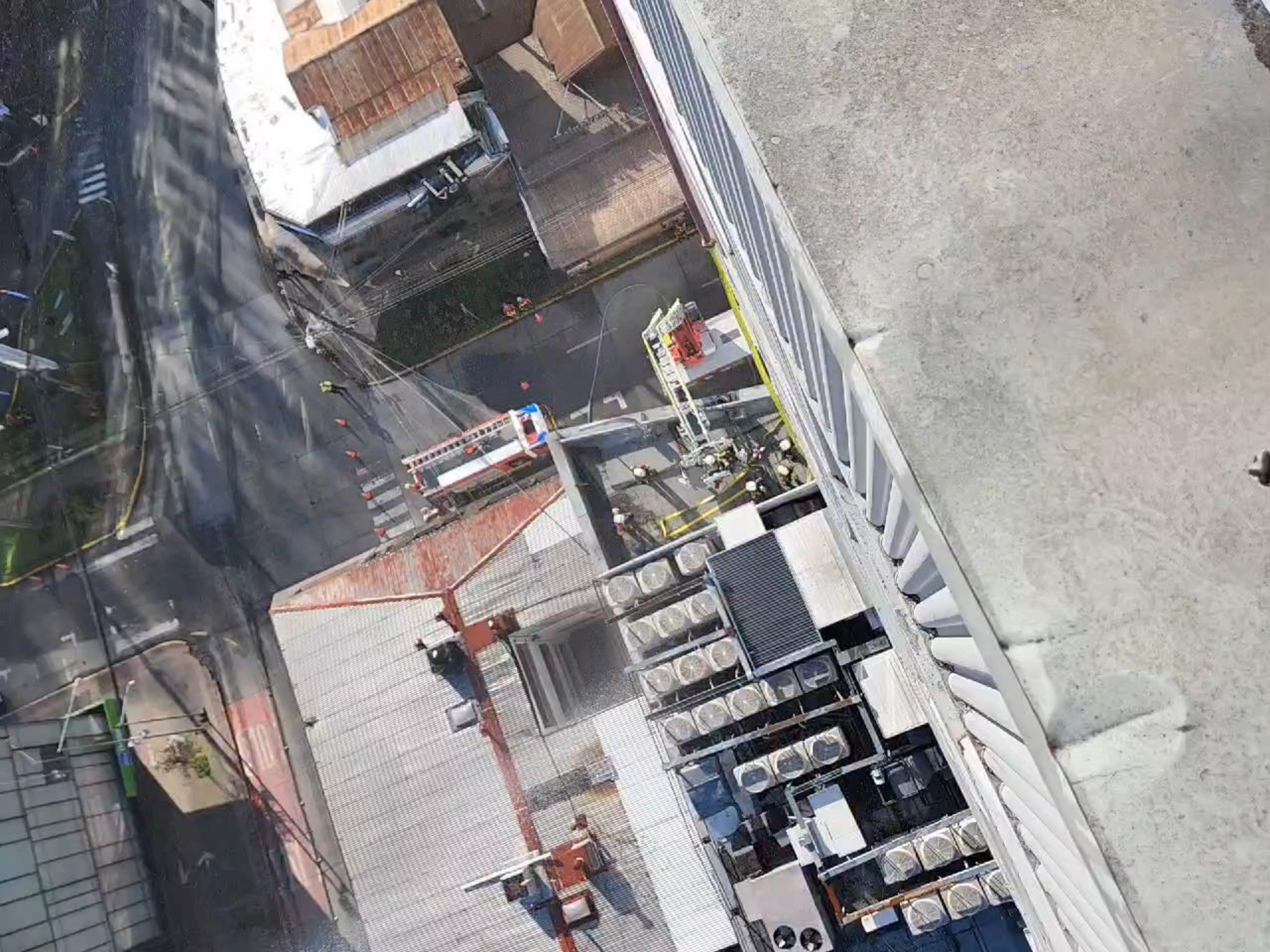
TRAINING VIDEO  
4<sup>TH</sup> ENGINE CO.  
CONCEPCIÓN,  
CHILE



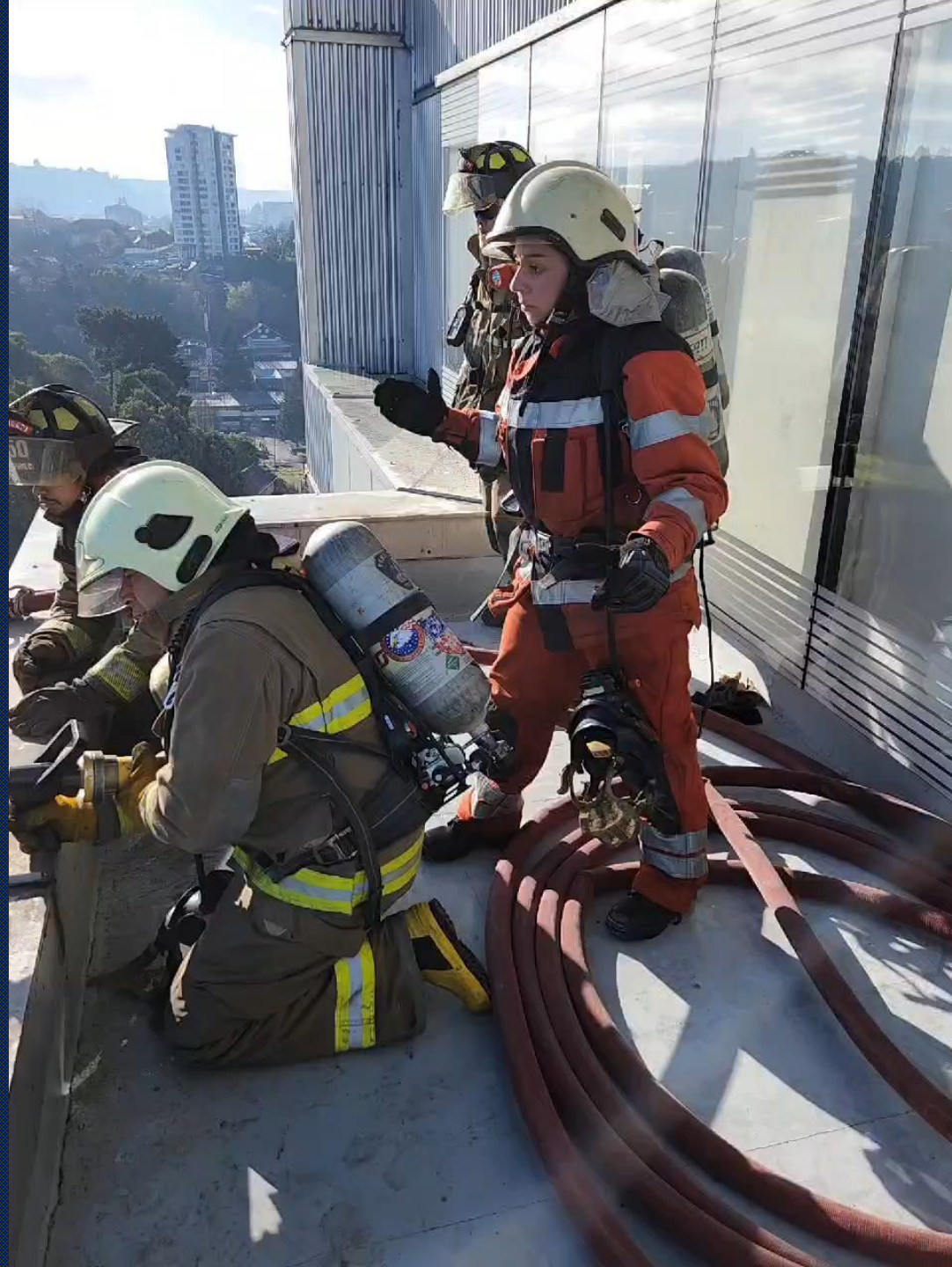


















# Take home message



Global Perspective, Local Actions



Smoke management is really



REALLY



REALLY IMPORTANT, smoke blocker is a must in every HR fire response, dealing with clean areas allows smoother tactics development



Putting out the fire makes things easier, do it in a fast and secure way



Knowing basic science and hydraulics considerations we can guarantee...



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**Facebook:**

<https://www.facebook.com/vaelagua>

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# Some references



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