Growing Up:
High Rise Planning, Policy and Procedure.

LFF Gerard Mann 19/5/22

Who Am I?

- 10 years service as a career firefighter working in Victorian regional centres, Melbourne and CBD
- Structural fire instructor, including CFBT
- Interested in high rise, after moving from the suburbs to the city and catching some complex fires
- Aerial appliance trainer
- Worked in planning policy and operational guidance developing procedures for structural and high rise firefighting.
- **NOT AN EXPERT, RATHER AN ENGAGED STUDENT**

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Victorian Fire Services

- 3 Agencies, FRV, CFA and FFMV

- FRV and CFA respond to Urban, Isolated Urban and Bush Fires

- Australians in general are prepared and aware of the risks, and dangers around bushfires

- Urban environment sees little civilian death and injury due to building codes and community engagement

Fire Rescue Victoria (FRV)

- **Brought into service 1/7/20**
- **Brought together all career firefighters in Victoria**
- **Services Victoria's larger regional centres and metro Melbourne**
- **Needed policy updates due to merger**

Melbourne and Victoria

- Australia's second largest city
- Vertical city
- Two tallest buildings in the southern hemisphere
- Rapid expansion of the built environment in the last 20 years
- Building codes have changed frequently and rapidly in the last 20 years

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So Why High Rise

Identifying Key risks.

- Johnston Report, conducted by Deakin University identified Melbourne's building defects

- Two major flammable cladding high rise fires

- Grenfell in 2017

- Rapid construction in Melbourne and Regional Centres

Environment

Start at the Beginning

What is the 'High Rise' environment .

- Define what "High Rise" is to your service

  - This dictates what you need to cover

  - What separates them from other fires

- FRV identifies a high rise as four stories or higher, relying on the building fire systems to aid in firefighting

Explore the Environment
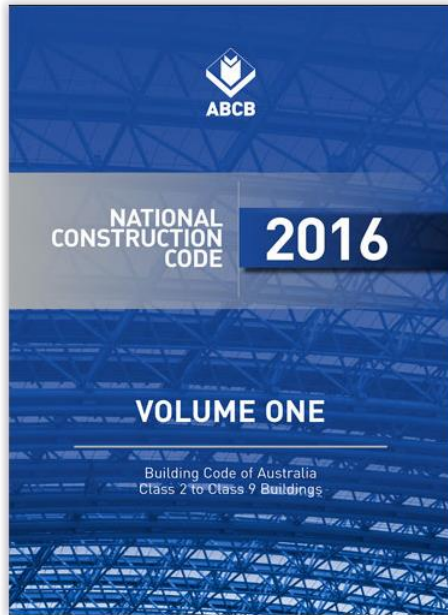
- Codes and Standards – National, State, Local

- Exceptions and exemptions, i.e. dispensations that can occur in the built environment

- Utilise internal specialist departments, don't 'silo'.

- Utilise fire engineers.

- Sprinkler Fitters and Fire Services companies to understand systems

Explore the Environment

- Occupancy and building types/classes

- Active and Passive Fire Systems

- Air and Smoke Handling Systems

- Lifts

- University studies on building codes compliance and Faults

- Compile this information to gain an appreciation.

Fire

Response is dictated by Fire.

Fire is dictated by environment.

Understand the Behaviour

Response is dictated by Fire, Fire is dictated by its environment.

- Apart from what we know; EFB's Compartment Curves etc

- Travelling fires

- Wind driven fires

- Stack and piston effects

- Wind effects on external facades

- Flammable cladding

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Current Practice

Conduct an **HONEST** evaluation of current policies

How do we 'currently' stack up

Conduct an **HONEST** evaluation of current policies

- Where does current practice stack up?

- Where does it need to improve?

How do we 'currently' stack up

Conduct an **HONEST** evaluation of current policies

- Be honest by focusing on assisting your people; What can/will help your people responding to this incident

- You understand the complexities and difficulties of this environment, does current policy/practice give them the information they need to make quick yet informed decisions.

  •Aim at your lowest possible IC rank Put yourself in their shoes. Is the current practice suitable for this level?

What can we learn from others….

Get by with a little help….

- Nationally and Internationally.
- Important to learn lessons from others, Look for others who have been on the journey,
- Reach out to them!
- DFB was a massive influence having been down the journey

Evaluate and Compare

Compare what others do to your environment

- Understand why they do what they do. There must be a reason

- Important to overlay others practice over your specific environment and likely fire conditions

Organizational Restrictions

Understand your Own Situation.

- Not all of us are LFB or FDNY
- What restraints and restrictions do we have in response, preparedness, staffing, budget
- What is a realistic timeframe of response to major risks/buildings etc
- What work arounds can you make to be able to deliver world's best practice?

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Time to Write
Plan
Do
Check
Adjust

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Write it

Operational Method Statement

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High Rise – Strategies and Tactics

Purpose
This Operational Method Statement provides guidance for the mitigation of fires involving high rise structures.

Scope
This Operational Method Statement applies to all FRV Operational Personnel.

Actions

1. **Site appliance and conduct initial Size Up**
   1.1. Site first arriving appliance in an appropriate position near the main entrance or known Fire Control Room (FCR) location, and establish Incident Control Point (ICP).
   1.2. Consider early assignment of an appliance to the boosting point for the building.

- Minimal absolutes

- Evidence based practice

- Write it for most scenarios. Something will always fall outside the procedure.

- Make it scalable

- Make it succinct

- Make it easy to read and follow

- Account for logistics

Test it

Continually run through scenarios and get feedback

- Important to overlay other internal people's practices and experiences over your specific environment and likely fire conditions

- Use tabletops, practicals, and discussions to test all possible problems and scenarios

- Lean on international experiences to set scenarios

Review it

Continually run through scenarios and get feedback

- Conduct a thorough review

- Utilise the expertise of people outside your organisation

- Try to break the procedure

Publish and Distribute

Roll out the Doctrine

- "Reading Time"

- Train people in the similarities and differences from previous versions

- Train realistic, timed scenarios

- Review operations, be prepared for updates

Provide the 'Backend'

Help Your People

Knowledge is key

- Help your people understand the environment so that they can make educated split deviance decisions from the doctrine due to changing and out of the box scenarios

- Create training resources, contact points and support for doctrine roll out and review

Its about the responders. Help them help the communities we serve

Thankyou