



NSW FIRE BRIGADES

NSWFB Stratified Approach to Safety Officer Training



Task Level - FF



Tactical Level - SC / SfO



Strategic Level – IC / IMT



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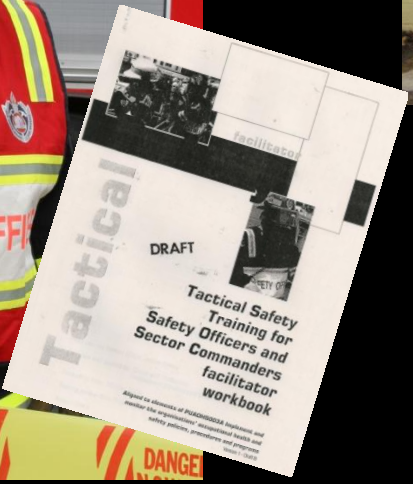
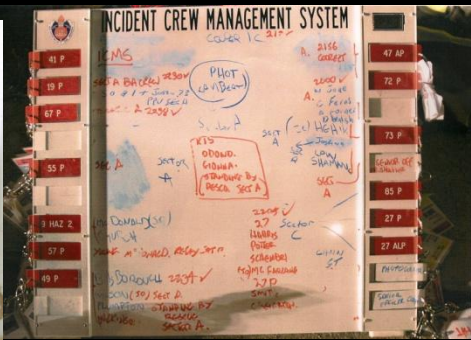
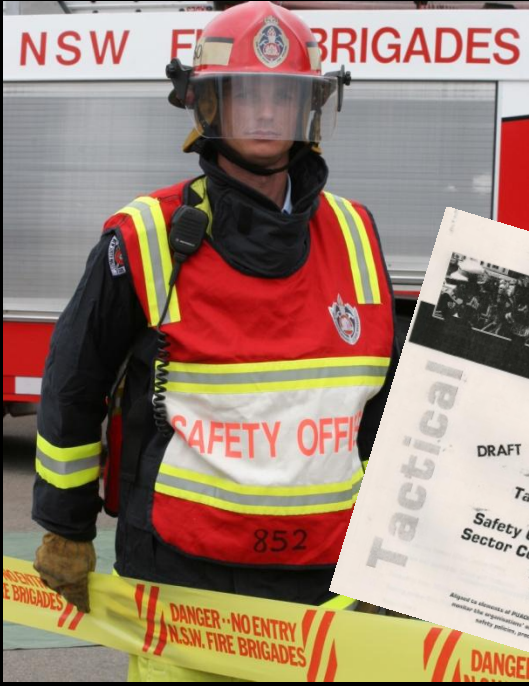
Task Level





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Tactical Level





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Strategic Level





Potential Dictates



Physical Operating Position & JTA

Lead / Command / Control
Gather / Evaluate Information
Plan & Execute a Response
Communicate
Form Teams & Delegate Work
Organise & Deploy Resources
Review Info & Change Plans
Handover

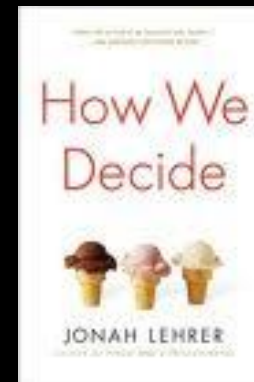




Lead / Command / Control
Gather / Evaluate Information
Plan & Execute a Response
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Information search within the context of the JTA



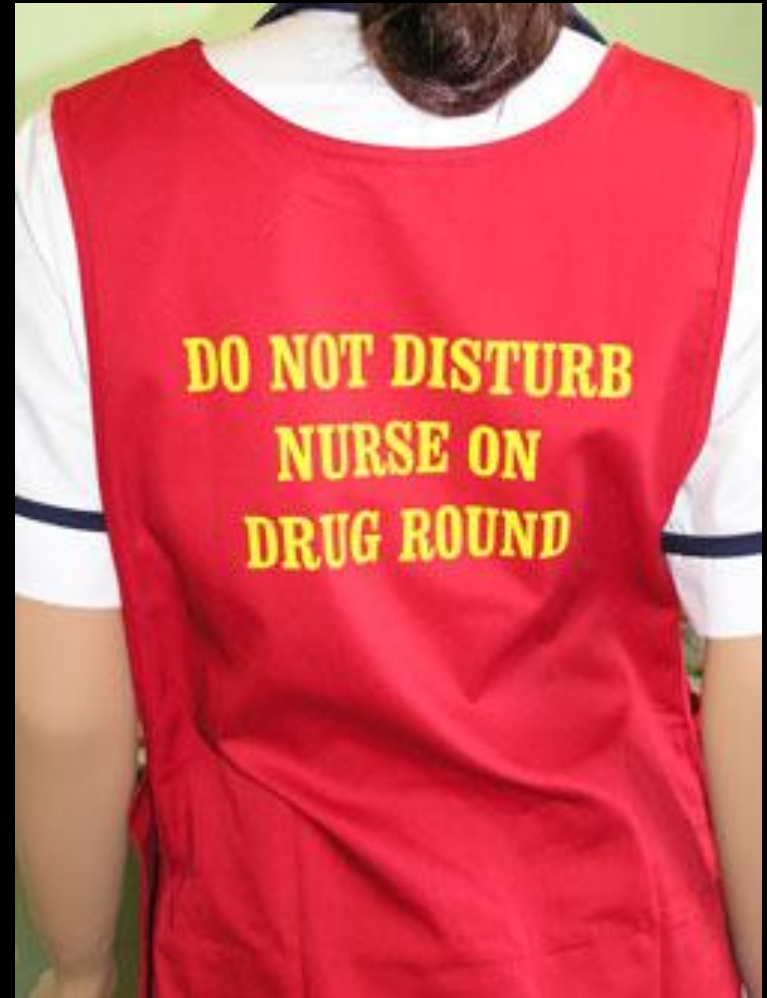
C.R.M.



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CRM what exactly is it ?

Fundamentally, it is about managing error





CRM Tenants

- ➡ We cannot eliminate error
- ➡ In certain environments, minor errors can be catastrophic
- ➡ At best we should aim to avoid, trap & mitigate the consequences of the inevitable errors
- ➡ We need to understand operator cognitive limits and take these into account when designing work



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**United Airlines 173.
28/12/78**



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Examples

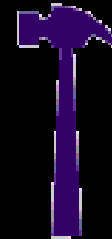
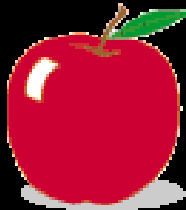
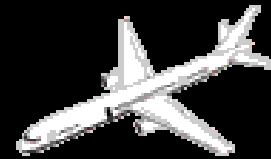
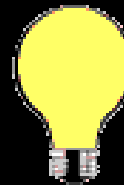
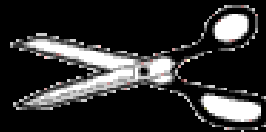
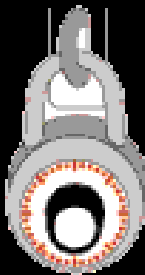
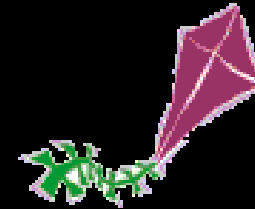
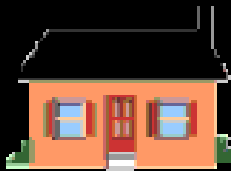
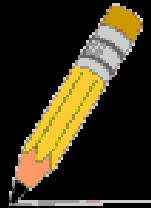


Example 1





Example 1





Example 2

ORANGE

BLUE

RED

RED

GREEN

BROWN

YELLOW

PINK

BLUE

RED



Example 2

ORANGE

BLUE

RED

RED

GREEN

BROWN

YELLOW

PINK

BLUE

RED



Example 3





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United Airlines 232. 19/7/89





Conclusion



= **Error Manager**

SPECIFIC FUNCTION IS TO

Recognise, Avoid,
Trap & Mitigate Errors

CONTEXT

Lead / Command / Control
Gather / Evaluate Information
Plan & Execute a Response
Communicate
Form Teams & Delegate Work
Organise & Deploy Resources
Review and Change Plans
Handover

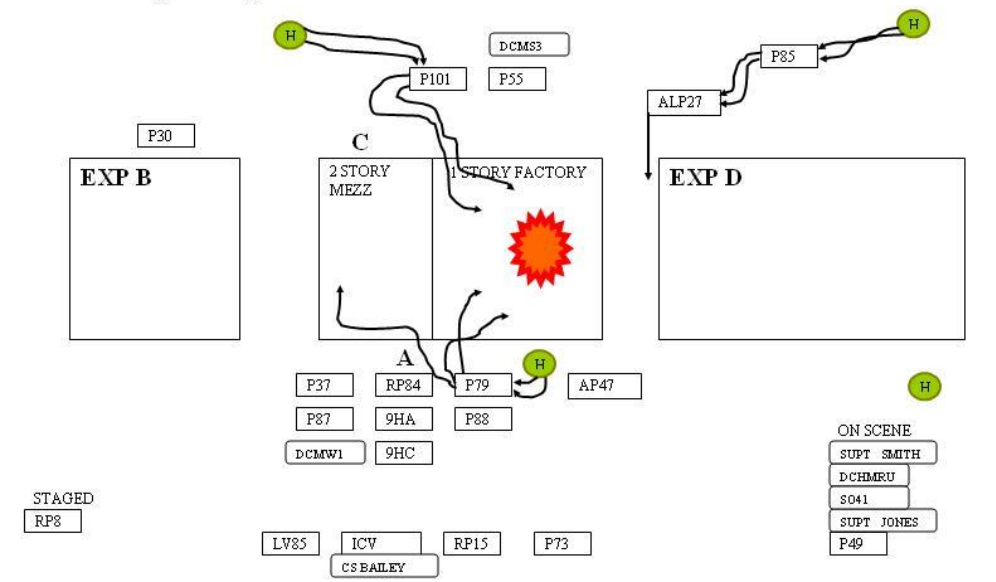




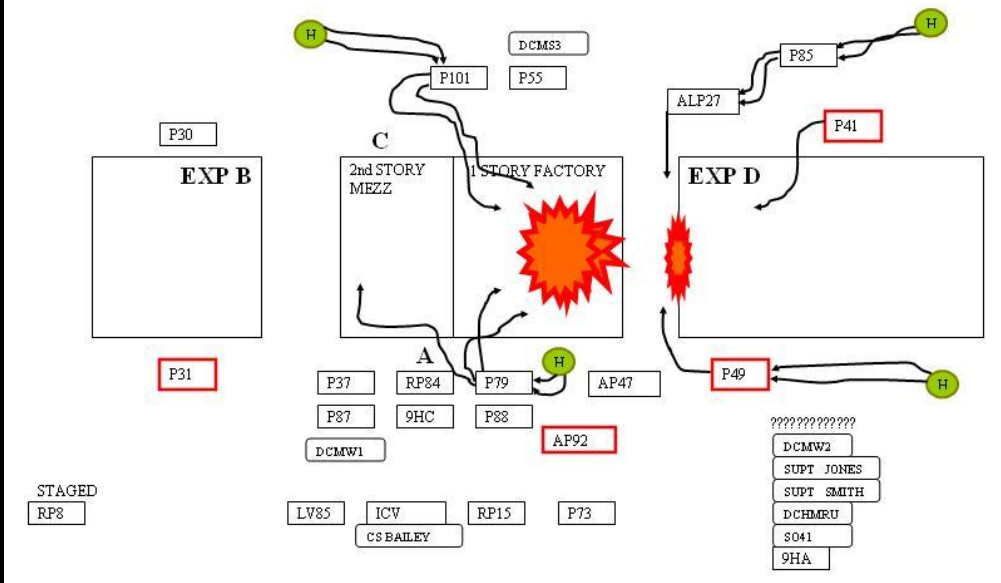
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Simulating Error

2.4 The IC's mud map of incident operations as shown on ICV whiteboard



1.4 The actual incident scene





- ➔ Crews / Persons unaccounted for
- ➔ Freelancing
- ➔ Procedural breaches
- ➔ Poor teamwork
- ➔ Mis-communications
- ➔ Cognitive overloading
- ➔ interpretation
- ➔ Sensemaking
- ➔ Prediction
- ➔ Sterility



Simulating Error



EXPOSURE AND HAVE NO FIRE OR VICTIMS. WE WILL REMAIN IN SECTOR 'B' AND CONTINUE TO MONITOR THIS EXPOSURE. OVER

IC TO SO 30, RECEIVED. OVER

BA CONTROL TO SO55, IF YOU HAVE EXITED THE BUILDING PLEASE COME AND PICK UP YOUR TALLY'S OVER

SO55 5HC 510

SO55 TO BA CONTROL, WE'RE OUT AND HEADING TO SECTOR 'A' OVER

RED FLAG ITEM 2

HAVING CREWS LEAVE THEIR SECTOR TO PICK UP / DROP OFF SCBA TALLIES STRETCHES THEIR SO'S ABILITY TO MONITOR THEIR WHEREABOUTS AND BECOMES A CHALLENGE TO ACCOUNTABILITY

IC ALP27 510

CONTROL TO ALP27, SITREP. OVER

FF ALP27 IC 510

SIR AT THIS TIME WE ARE STILL SETTING UP ON THE 'C'D' CORNER. 85 PUMP WILL BE SUPPLYING US WITH WATER AND WE WILL BE PROVIDING A PROTECTIVE CURTAIN TO EXPOSURE 'D'

IC ALP27 510

CONTROL TO ALP27, COPY. OVER

RED FLAG ITEM 3

THERE IS NO COMMANDER ASSIGNED TO SECTOR 'D'. A FF OPERATING AN APPLIANCE IS NOT IN A GOOD POSITION TO GIVE INFORMATION REGARDING THE WHOLE OF THE SECTOR. IT ALSO CREATES CONFUSION AS TO WHO P86 SHOULD BE REPORTING TO.

ICMS SC 'A' 601

ICMS MANAGER TO SECTOR 'A' COMMANDER. ICMS CHECK OVER

SC 'A' ICMS 601

SECTOR COMMANDER ALPHA TO ICMS, WE HAVE JUST PROVIDED IC WITH A SITREP. 2 LINES OF 70 AT WORK, 84 CREW CONDUCTING SAR OF MEZZANINE LEVEL

ICMS SC 'A' 601

SECTOR COMMANDER 'A' COPY THAT. OVER

RED FLAG ITEM 4

THE ICMS MANAGER HAS NOT BEEN PROVIDED WITH A ICMS CREW CHECK OR CONFIRMED:

1. WHAT CREWS SO FAR IS ACTUALLY IN CONTROL OF AND
2. IF THESE CREWS ARE ALL ACCOUNTED FOR

SYD COMMS IC 104

SYD COMMS TO IC LANCASTER CONTROL.

IC SYD COMMS 104

LANCASTER CONTROL TO SYD COMMS GO AHEAD. OVER

SYD COMMS IC 104

SYD COMMS TO LANCASTER CONTROL. SIR COULD YOU PLEASE CONTACT CHAPLAIN VIA MOBILE OVER

IC SYD COMMS 104

LANCASTER CONTROL TO SYD COMMS RECEIVED AND WILL DO. OVER

IC TSO 601

IC TO SAFETY, COULD YOU PROVIDE A SITREP OVER

TSO IC 601

SAFETY OFFICER TO IC. I HAVE COMPLETED A 360 OF THE BUILDING AND LIAISED WITH DCHMRU. ALL PPE IS BEING WORN CORRECTLY AND ALL CREWS ARE OPERATING SAFELY. OVER

IC TSO 601

IC TO SAETY, COULD YOU CONFIRM THAT POWER HAS BEEN ISOLATED FROM THE WHOLE STRUC TURE

TSO IC 601

SAFETY OFFICER TO IC. AT THIS STAGE WE THINK THAT IS AFFIRMATIVE. OVER

IC TSO 601

IC TO SAFETY, COPY THAT. OVER

RED FLAG ITEM 5

1. THE MESSAGE ABOVE DOES NOT SHOULD THEREFORE STILL BE
2. THIS MESSAGE ALSO INDICATED AND OPERATING OUTSIDE OF T

IC SYD COMMS 104

SYD BL

SYD COMMS IC 104

SYD COM

IC SYD 104

SYD





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How it looks



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Where we're up to





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Acknowledgments & Thanks



**NEMTOC,
Particularly, Annette Turner Duggan**



**NSWFB,
Particularly, Supt Paul Bailey**



Google Images



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