

Smoke warning event, Airbus A330, 16 April 2012

AAIB Investigation



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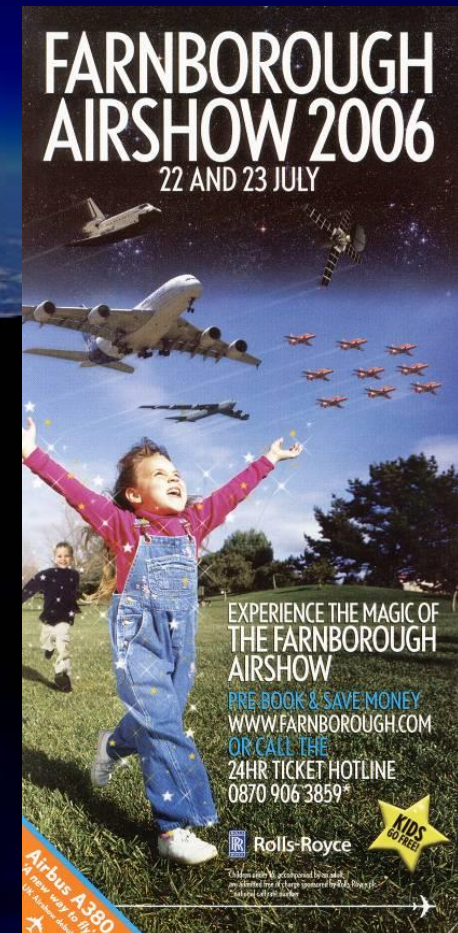
Alan Thorne (Evac)





AAIB

Farnborough
Hampshire
United Kingdom



Boeing 777, G-YMMM, London Heathrow 17 Jan 2007



B787, ET-AOP, London Heathrow – 12 July 2013
External Surface (LH)
Upper fuselage



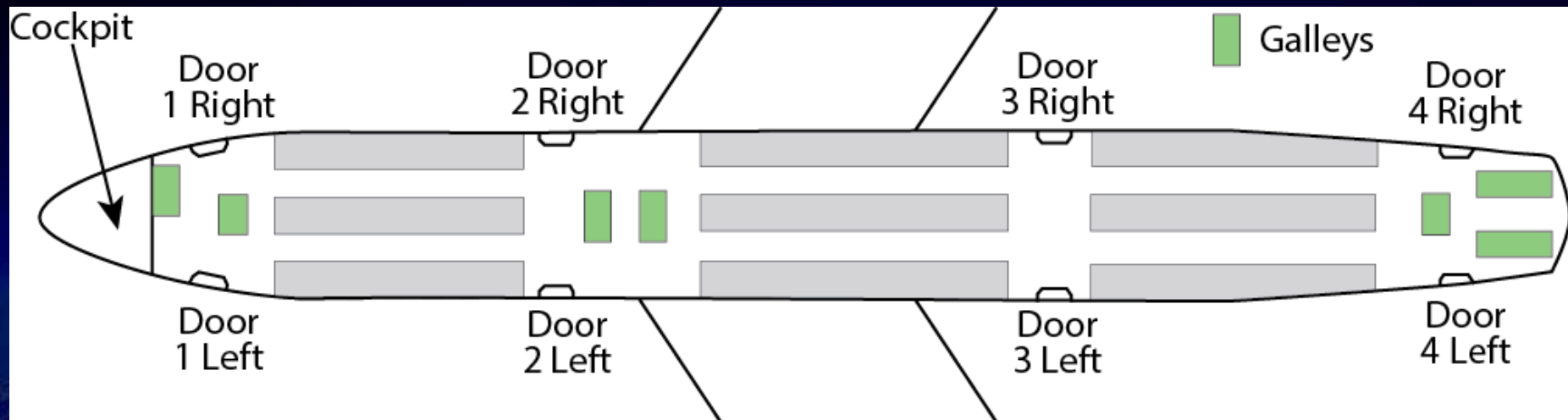
B787, ET-AOP
ELT – LiMnO₂ battery



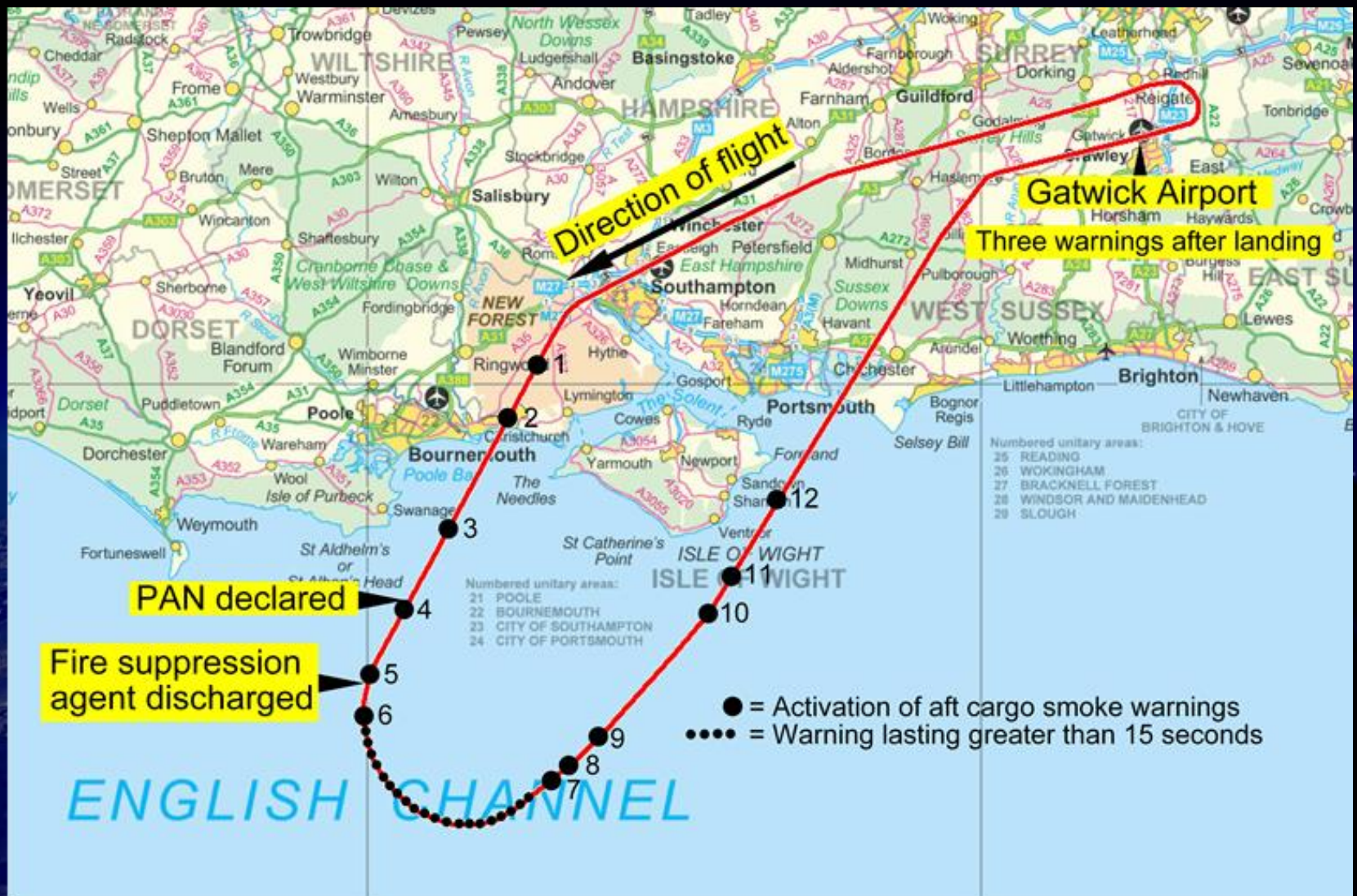


A330-343, 16 April 2012
London Gatwick - Orlando
3 + 10 crew, 304 pax
Aft: 4 pallets peppers

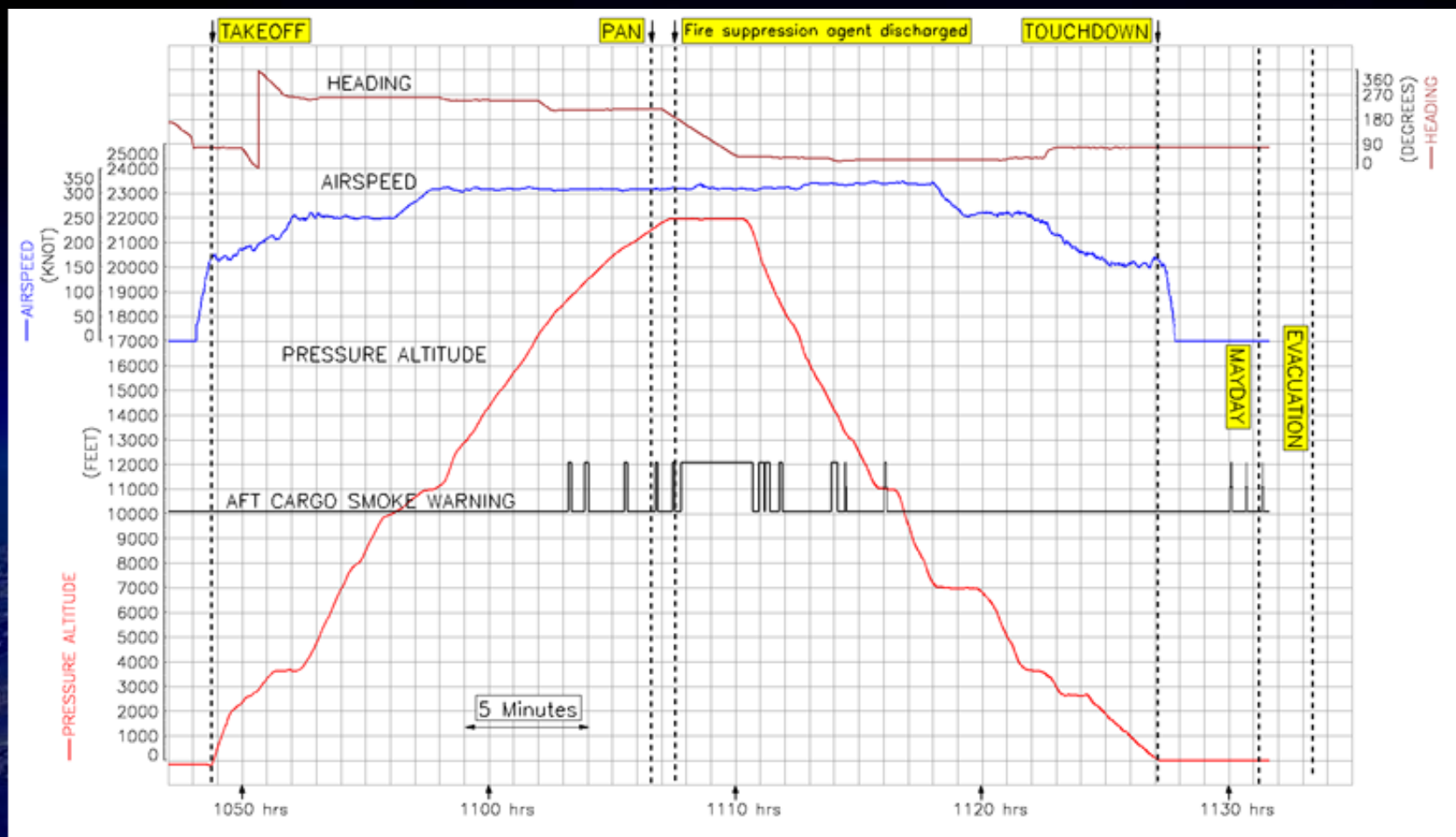




Cabin layout – doors and galleys



Flight track – Aft cargo smoke warnings – 39 mins



Flight time history – Aft cargo smoke warnings
12 warnings in flight, 3 on ground



Evacuation – left side



Evacuation – right side – 30 seconds in



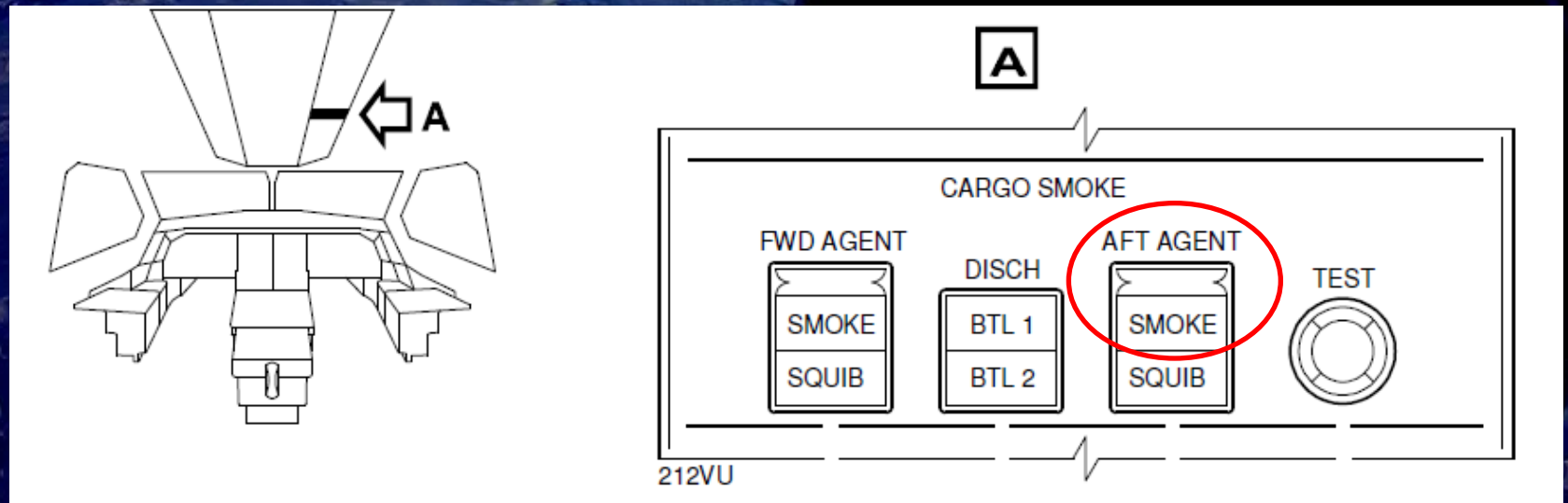
Evacuation – right side – R3 door
Hand baggage, firemen

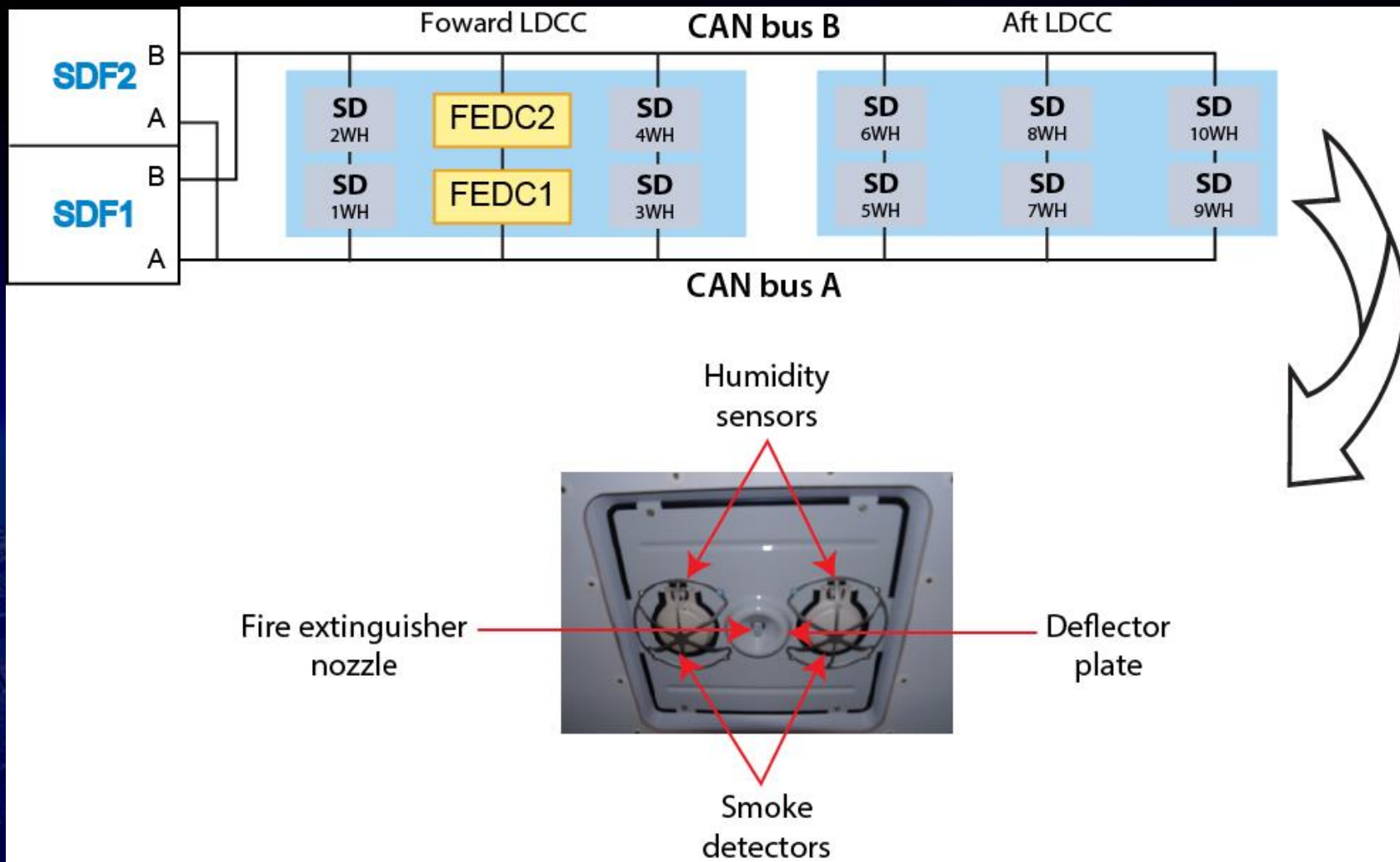


Evacuation – R4 door – ‘Pretzel’

Cockpit overhead panel – ‘Cargo smoke’

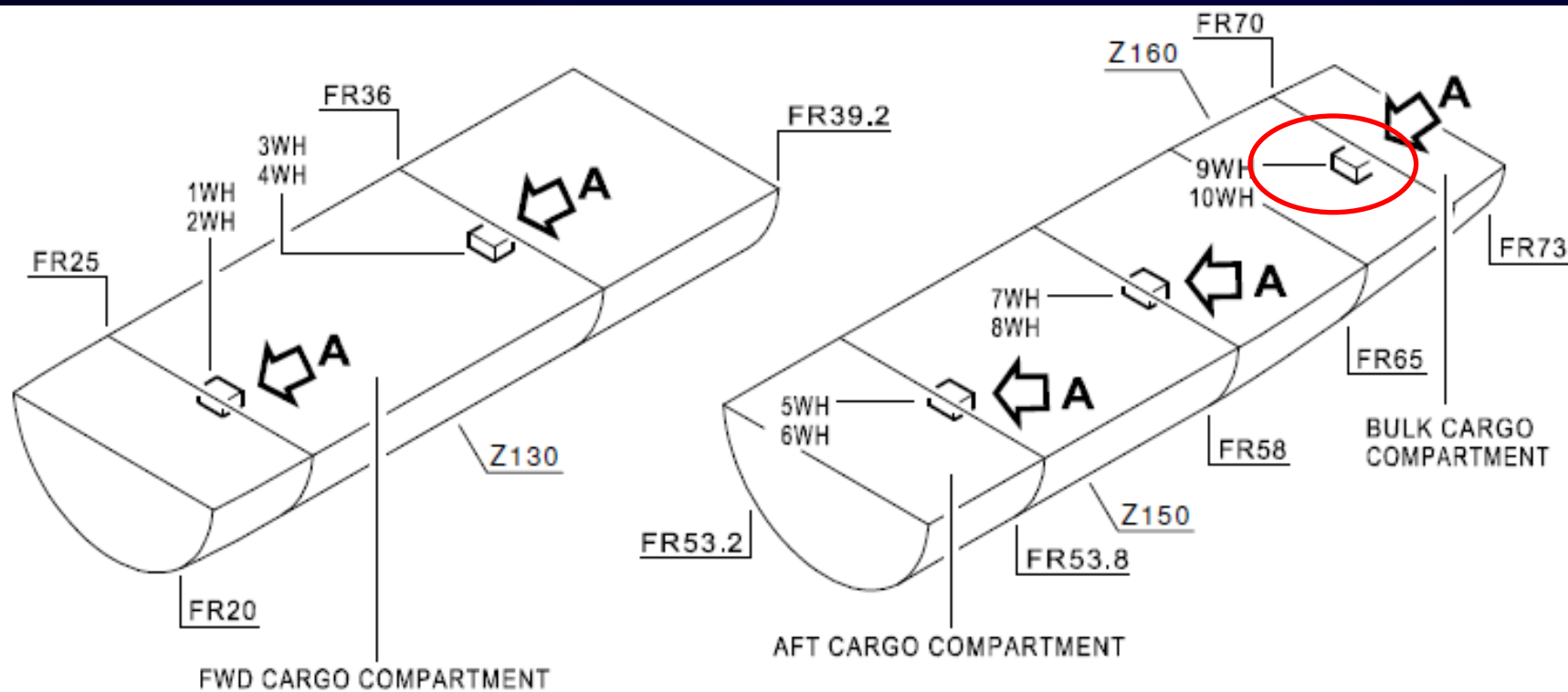
E / WD: FAILURE TITLE conditions	AURAL WARNING	MASTER LIGHT	SD PAGE CALLED	LOCAL WARNING	FLT PHASE INHIB
FWD (AFT/BULK) CARGO SMOKE Smoke detected in the corresponding cargo	CRC	MASTER WARN		SMOKE It on CARGO SMOKE panel	4, 5, 7, 8

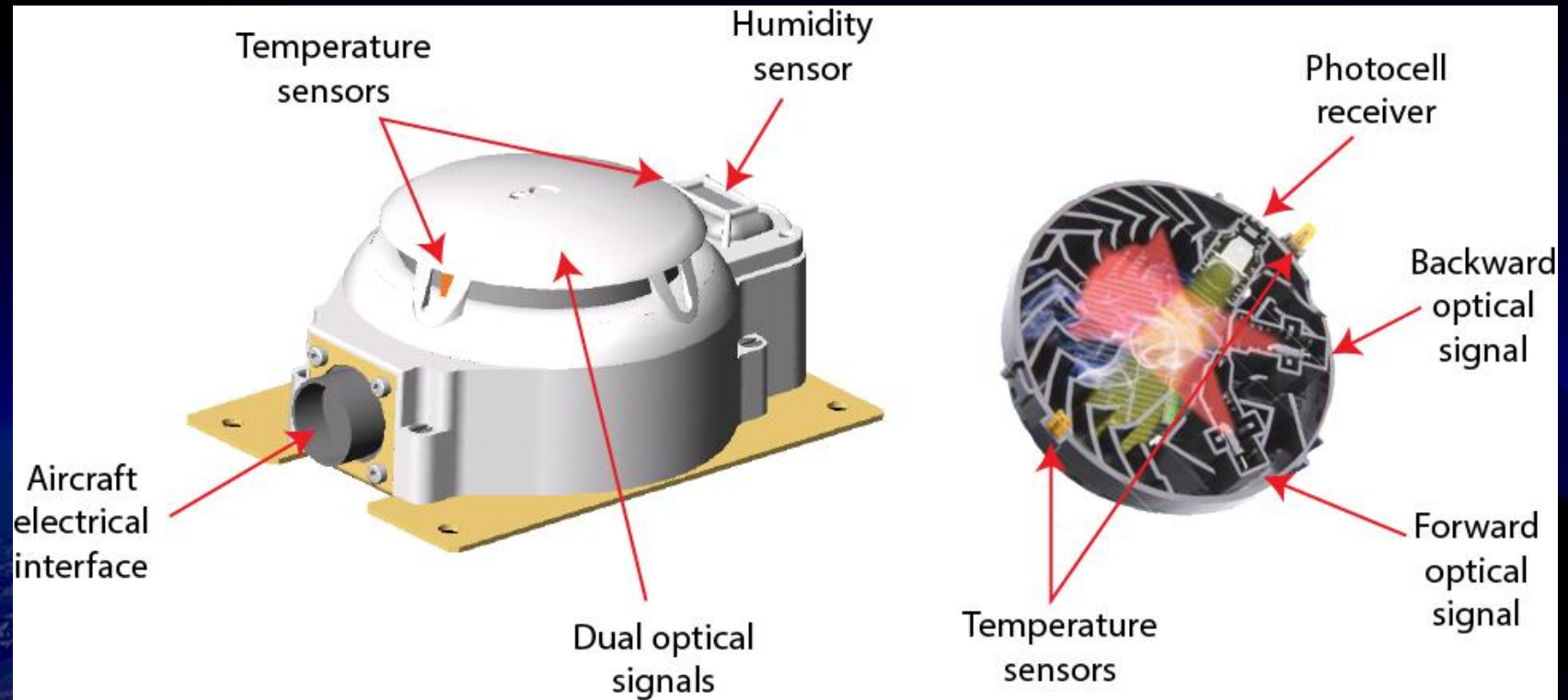




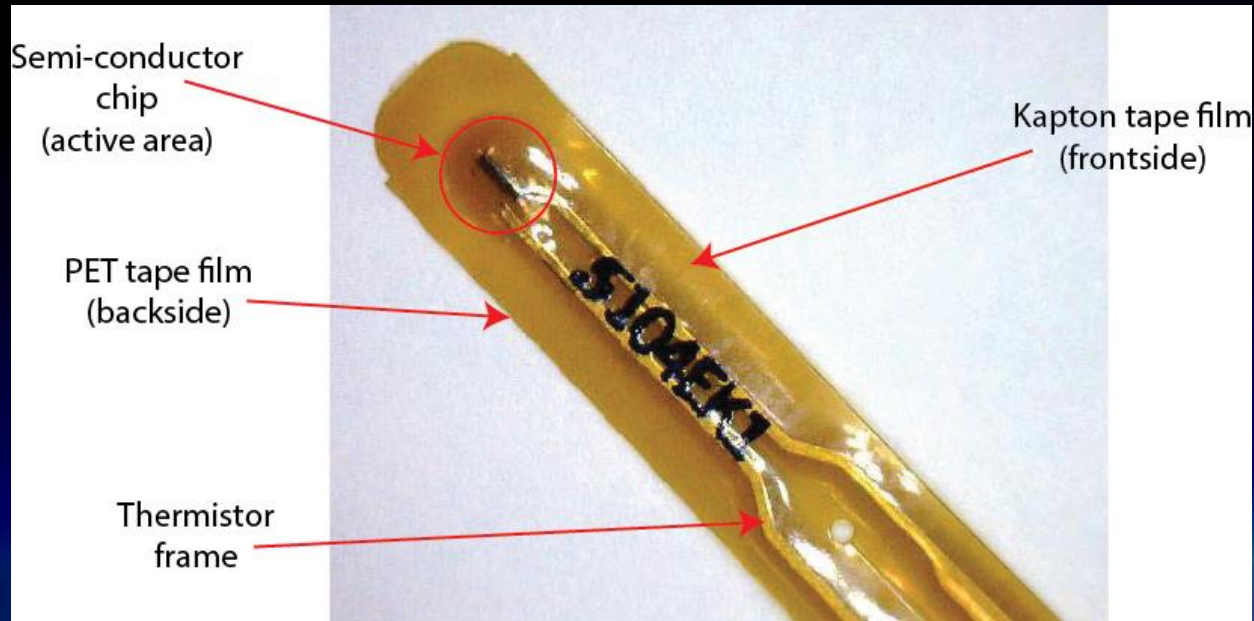
Smoke detector schematic & typical detector cavity

Smoke detector locations





Smoke detector – optical chamber

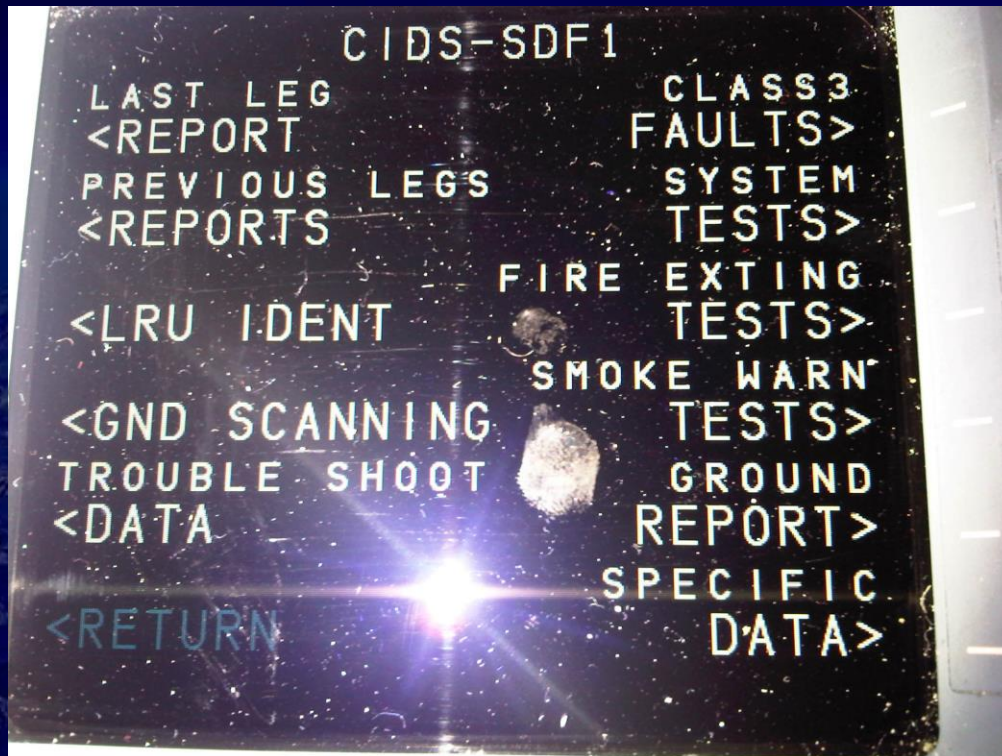


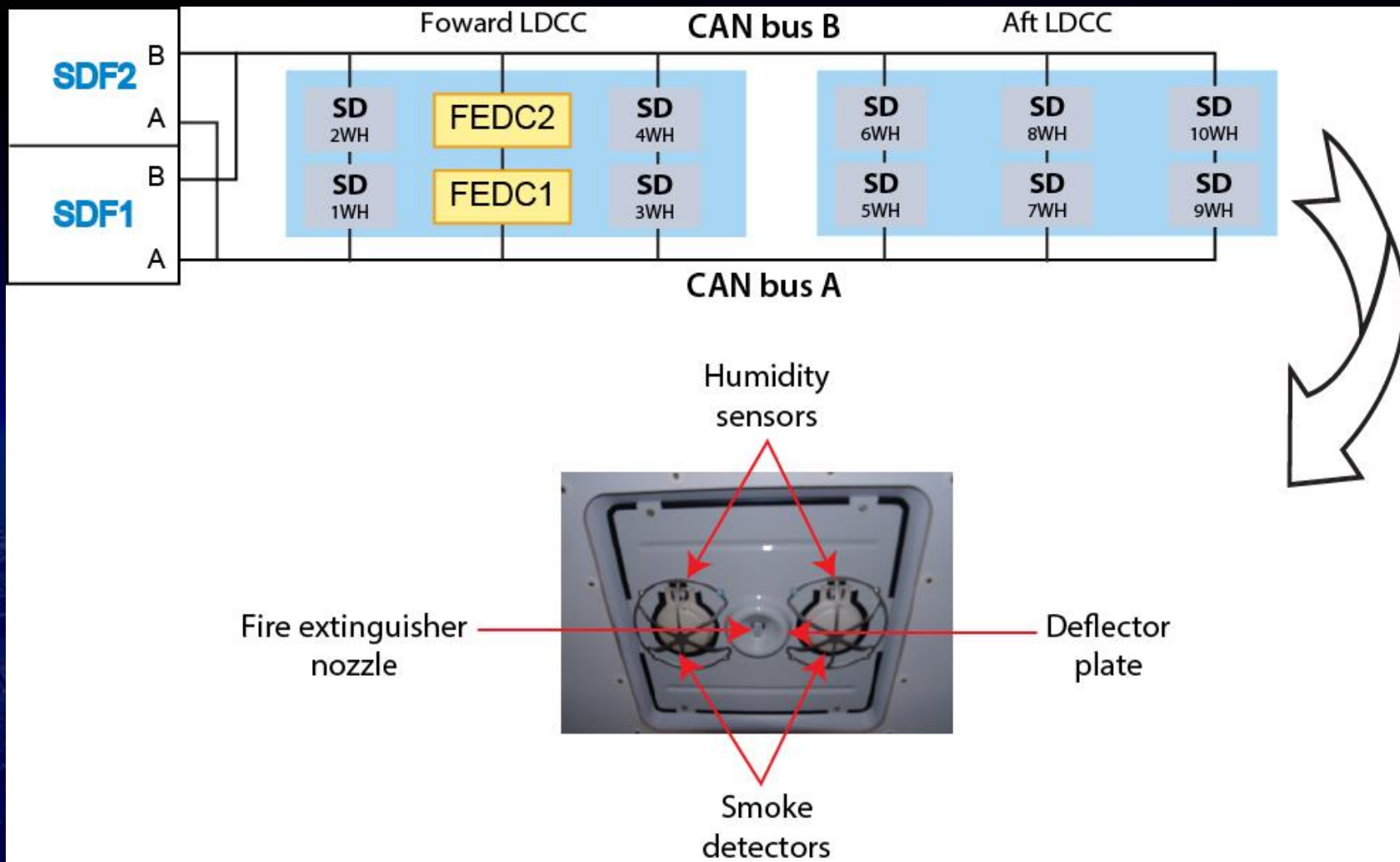
Smoke detector
2 thermistors
1 humidity detector



Capacitive
element

Investigation - BITE data download





Smoke detector schematic & typical detector cavity

AAIB - Safety Recommendations meeting
Evacuation – 2 Safety Recs
Smoke detector system - 3 Safety Recs
Extinguishing system – 2 Safety Recs



AAIB - Safety Recommendations meeting

Debate – inform flight crew of system status?



AAIB report

Publication target – January 2014



Notification of publication:–
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