

# Rosepark Care Home Fire

31<sup>st</sup> January 2004

David Mallin  
Lothian and Borders  
Fire and Rescue Service

# Casualties

34 residents

14 fatalities

10 dead at scene

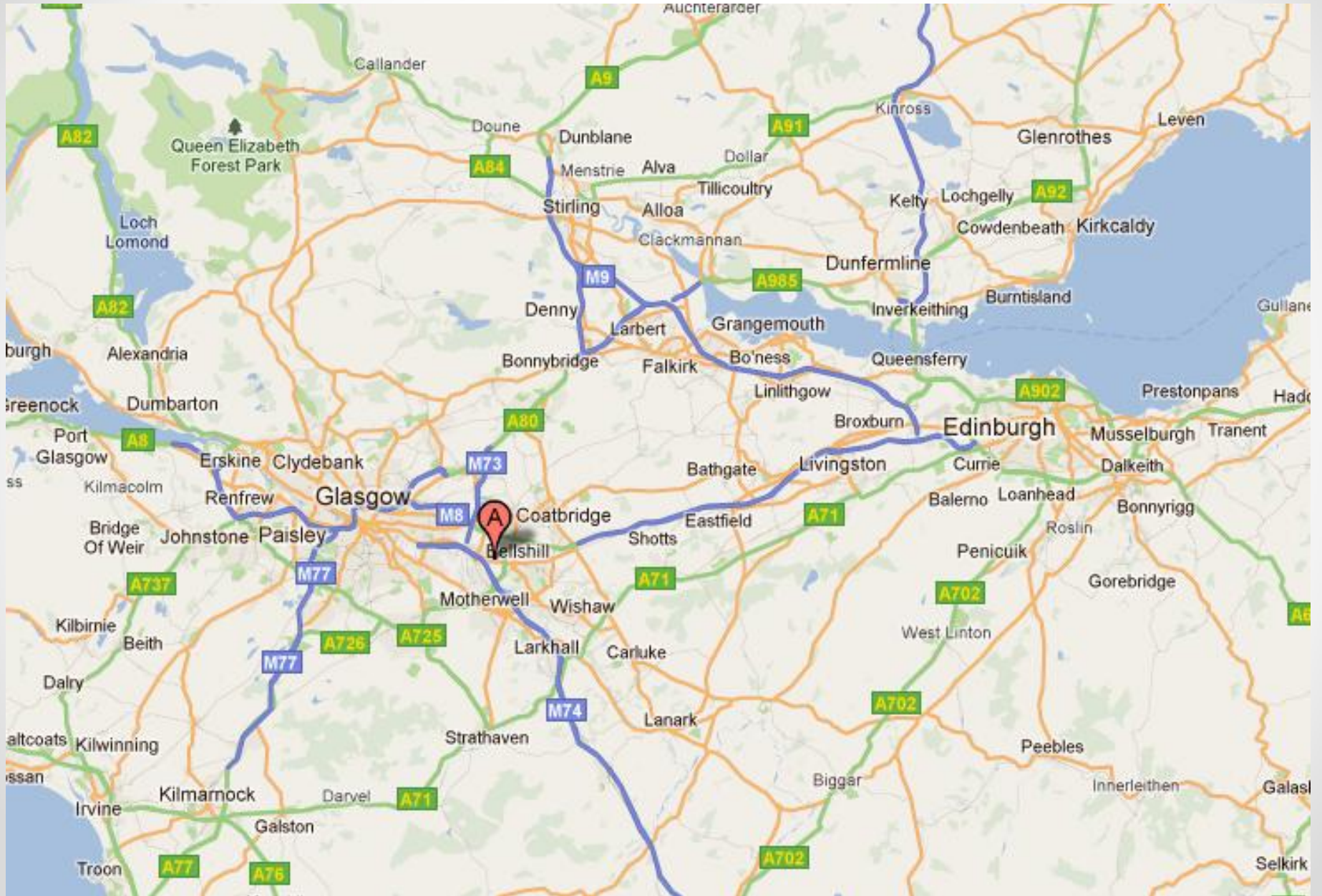
All fatalities on ground floor  
Smoke Inhalation main CoD

*The purpose of the conclusions drawn is to assist those legitimately interested in the circumstances of the death to look to the future in order that they, armed with hindsight, the evidence led at the Inquiry, and the Determination of the Inquiry, may be persuaded to take steps to prevent any recurrence of such a death in the future.*

# Rosepark Care Home



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Distance= 0.7 miles

Blue Light Journey time= 109 seconds

# Rosepark Care Home



# Rosepark Postal Address

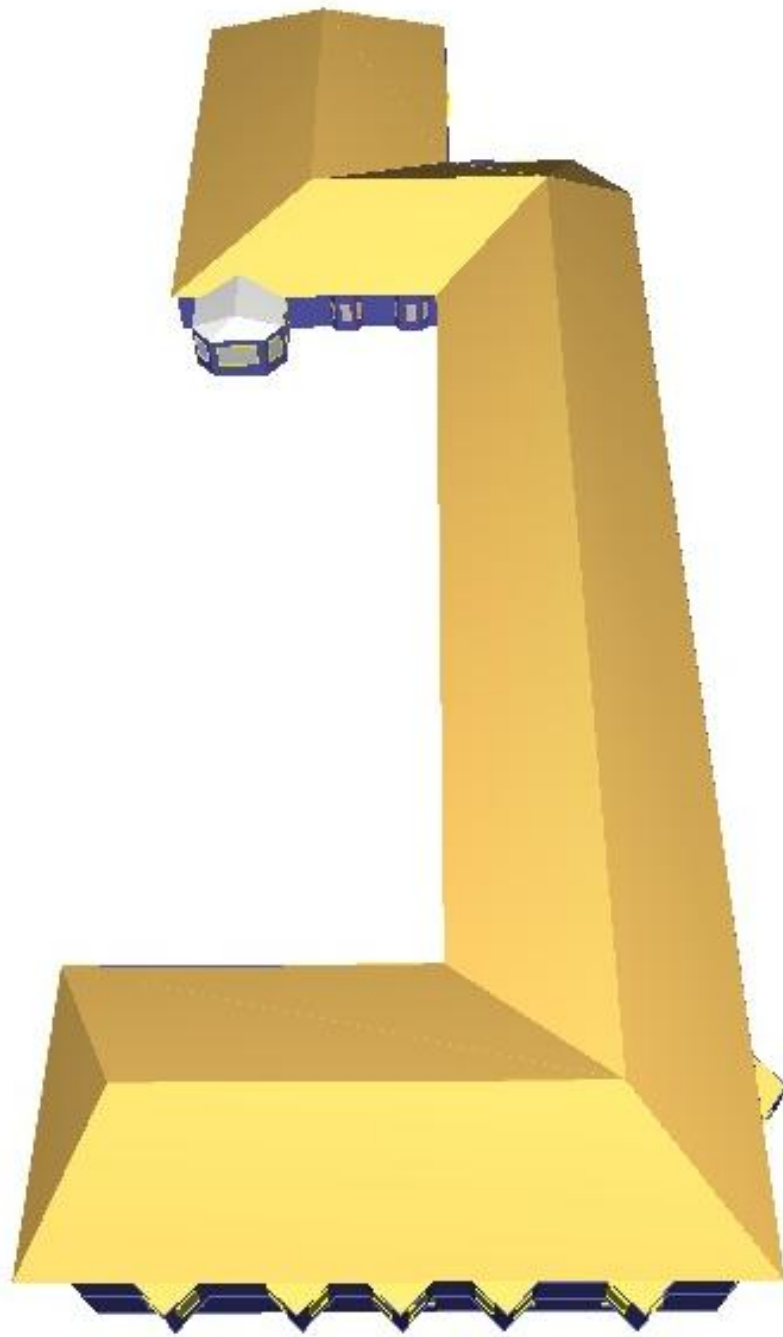


# Rosepark Access Point



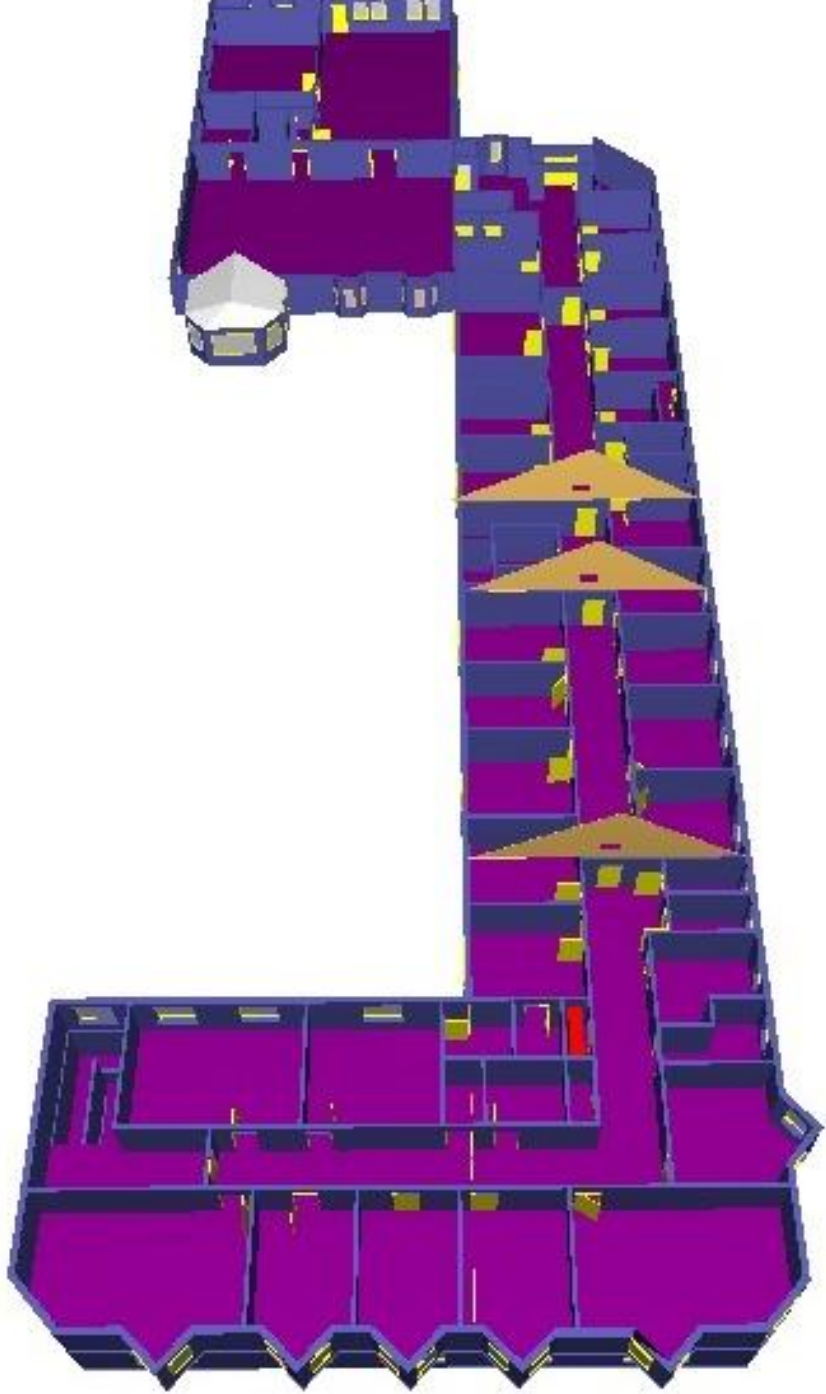
# Sequence of Events

- 04.25 – Fire starts in storage cupboard
- 04.28 – Fire alarm sounds
- 04.37 – First call to FRS - *[10 fatalities before 04.39]*
- 04.42 – First appliance arrives
- 04.50 – Persons reported
- 04.55 – MP3
- 05.06 – MP4
- 05.25 – MP6 (fire extinguished)
- *1<sup>st</sup> February – 2 fatalities*
- *2<sup>nd</sup> February – 2 fatalities*



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FIRE & RESCUE





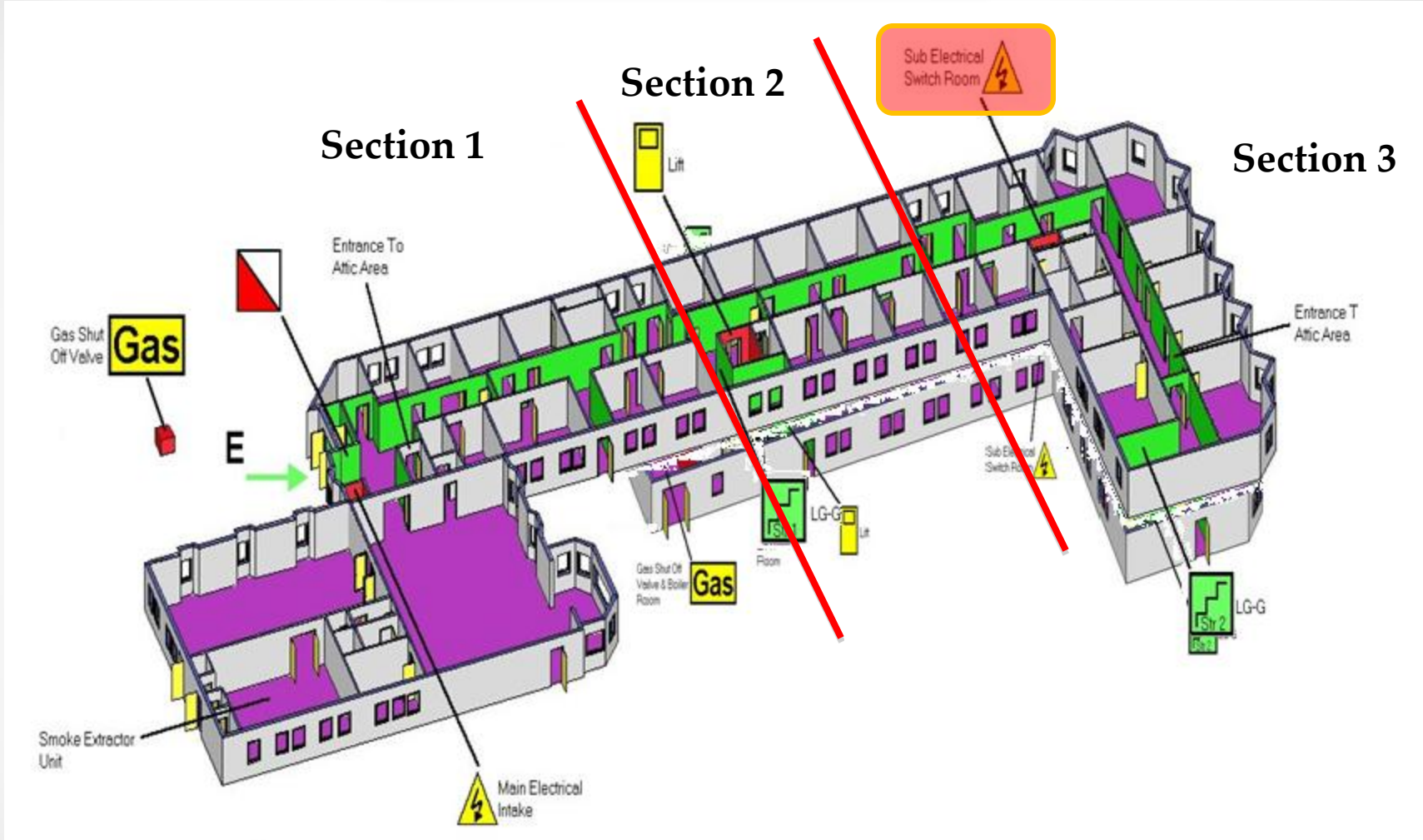




# Building Design and Fire Precautions

- Cavity barriers in roof void- breached
- Lack of sub-division within compartments
- Fire dampers in ducting - never installed
- Self closers on all bedroom doors - disabled
- Bedroom doors - wedged open
- Fire alarm system - Defective zoning.

# Rosepark Layout



# Rosepark Layout







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# Fire Modelling

- Data taken from
  - FAI, Witness Statements, Experimentation
- Electrical Cupboard Containing Combustibles
- Severe fire of short duration
- Smoke spread problem.

Full-scale reconstruction  
carried out by BRE  
July 2006

# Spread of Smoke

- Every person with rooms off the corridor of origin died
- Those with doors open died within a few minutes
- Those with doors closed died later in hospital
- Smoke spread beyond corridor fire doors
- Egg-box doors FR of around 7 mins.



# The Determination

1. Reasonable precautions
2. The defects in systems of working
3. Other factors

# Reasonable Precautions

1. Cable protection
2. Inspection and testing of electrical installation
3. Protection of the means of escape
4. Prompt and effective action by staff
5. Early involvement of the fire service
6. Suitable and sufficient risk assessment
7. Early and sufficient resourcing of the incident

# Defects in Systems of Work

1. Maintenance of electrical installation
2. Fire training and drills
3. The management of fire safety
4. The management of the construction process
5. The working of Lanarkshire Health Board

# Other Factors

1. Enforcement of the FP Regulations
2. The Care Commission's interaction with RCH
3. CC & SFRS relative roles with respect to the Fire Regulations
4. Completion Certificate – Building Control & Architects
5. Checking documentation
6. Assuring the competence of Fire Risk Assessors

# The Premises

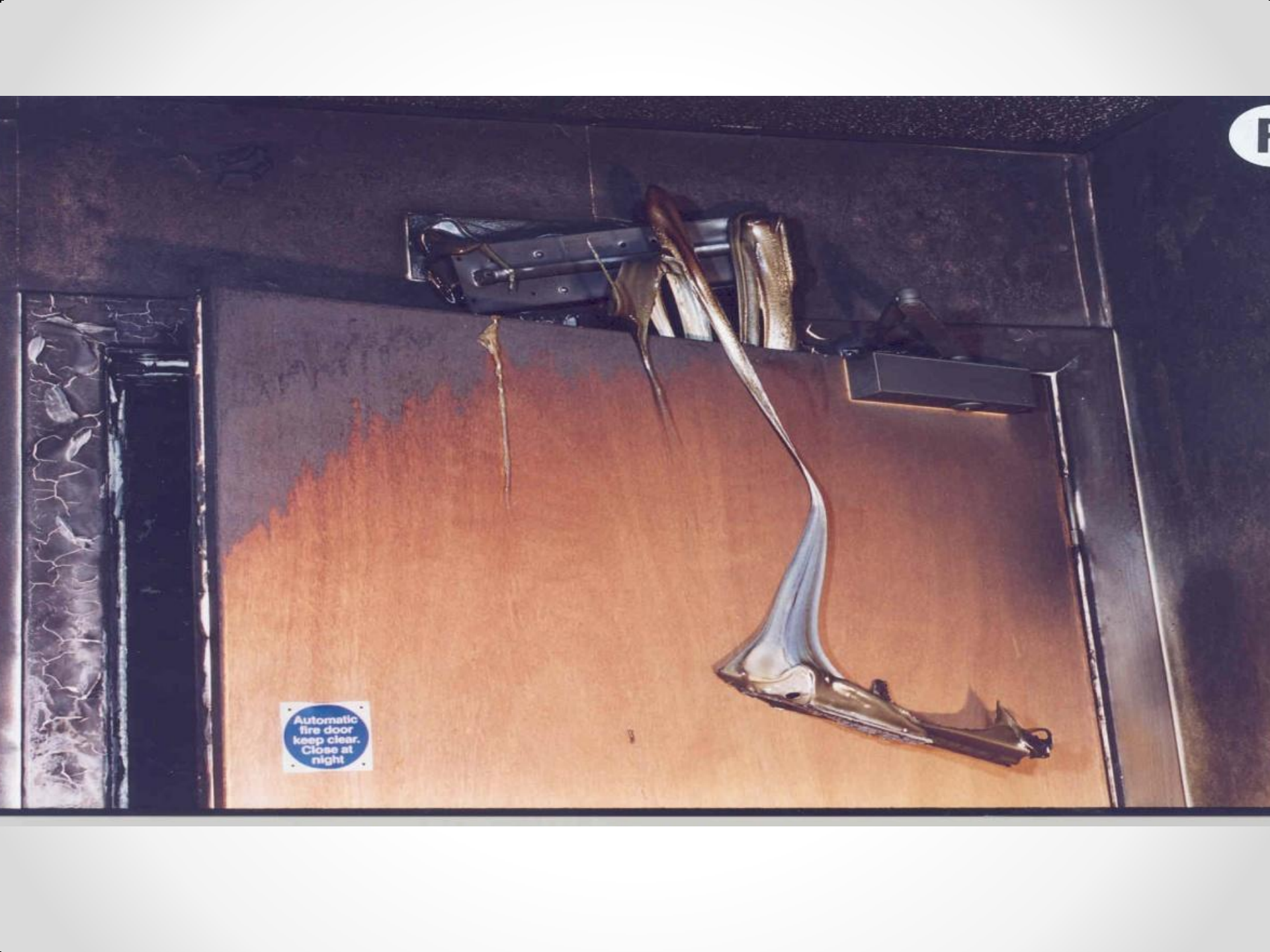
- Distribution board to have been inspected and tested
- Cupboard doors to have been locked shut
- Bedroom doors to have been closed
- Bedroom doors to have been fitted with smoke seals
- To have minimised the storage of combustible materials

# Reasonable Precautions



# Premises RP

- To subdivide the corridor to assist evacuation, or
  - Have fewer residents
  - Locate high-dependency residents elsewhere
  - Fit a sprinkler system
  - Employ additional staff
- The installation of fire dampers



Automatic  
fire door  
keep clear.  
Close at  
night



- Subdivision of corridors

# Action by Staff

- The information available at the alarm panel
- Adequate training and drills
- Instruction on the new fire alarm panel
- An immediate 999 call/signal to the FRS
- Laminated 999 sheet at matron's office



ZONE 7	
ZONE 6	ATTIC
ZONE 5 LOWER GROUND	ROOMS FROM CORNER TO STAIRWELL
ZONE 4 LOWER GROUND	ROOMS FROM LIFT SHAFT TO CORNER
ZONE 3 GROUND	ROOMS FROM CORNER TO STAIRWELL
ZONE 2 GROUND	ROOMS FROM LIFT SHAFT TO CORNER.
ZONE 1 GROUND	KITCHEN/BOILER/ENTRANCE LOUNGE/DINER + ROOMS UP TO LIFT SHAFT.
ZONE	ZONE LOCATION
CHARGER ON INDICATOR SHOULD SHOW CONTINUOUSLY	<p>IF AMBER FAULT INDICATOR SHOWS OR BUZZER SOUNDS CONSULT ELECTRICIAN</p> <p>Keep text within this line.</p>

# Revised Procedures

- Distribution boards in separate locked cupboards
- Storage cupboards kept locked
- Swing-free devices fitted to all bedrooms
- Doors closed at 11.30

# Revised Procedures

- Staff Training
- Immediate 999 call to FRS
- Trained fire wardens
- 3-day induction for staff
- Monthly fire drills
- Annual FE training

# Revised Procedures

- New addressable AFD system
- Simplified zoning
- Connected to monitoring service
- Quarterly inspection of electrical installations
- Annual audit by Strathclyde FRS
- Regular visits by response FF's

# RP - Strathclyde FRS

- Turnout slip with access address
- Classification of Rosepark as “special risk”
- Attending appliances to have attended the entrance point in Rosepark Avenue
- To have examined the fire alarm to verify information
- To have considered main residents as unaccounted for

# RP - Strathclyde FRS

- To have confirmed whether bedroom doors were open or closed
- Oic to have MP 6 at 04.50hrs when “persons reported” message was sent

# Enhanced Operations Intelligence



# Other Factors

- Suitable and sufficient risk assessment
- Management of FS was seriously defective
- System of maintenance for electrical installation
- Fire safety training was defective
- Competence of Fire Risk Assessors
- Formal relationship between SCSWIS and FRS
- Risk Assessor - one-day FRA course at Gullane

# Other Issues for Enforcing Officers

- Sub-compartment size, layout and lateral evacuation
- Integrity of sub-compartments
- Competence of risk assessment
- Staffing and viability of evacuation plan
- Fire doors – closers and smoke seals
- Fire alarm zones – compartments and clarity

# Scottish Government Actions

- SBSA – Reasonable Enquiry
- Revision of CH Guidance Document
- Electrical Installations Maintenance
- Ventilation system maintenance
- Risk Assessor Competence
- Relationship between regulators FRS, SCSWIS & HSE
- Reviewed MOU – greater emphasis on care homes
- Consider improvements to RA documents

# Colin Todd

## Recommendations

- I&T of electrical installations
- Addressable AFD
- Zone plans
- Staffing numbers
- Sprinkler systems
- Protected corridors
- Self-closing devices
- ARC connections
- Staff alarms

# Colin Todd

## Recommendations

- Third party certification
- Staff training
- Routine inspection
- Plans for FRS use
- Principle of care
- Call challenging
- Familiarisation visits
- Competence of risk assessors
- Information on fire strategy

# A Competent Risk Assessment

A competent risk assessor experienced in fire safety, addressing the position at Rosepark, would have recommended:

- Sub-division of corridor 4 within a short period of months
- Installation of self-closers on bedroom doors as a matter of urgency
- Keeping the doors to cupboard A2 locked as a matter of urgency
- Removal of the aerosols from cupboard A2 as a matter of urgency
- Upgrading the bedroom doors to fire resisting self-closing doors fitted with smoke seals and the cupboard doors to be fire-resisting doors within twelve months
- That the Fire Brigade should be called on the operation of the alarm

# A Competent Risk Assessment

Such a risk assessor should also:

- Have emphasized the need for clearance between the contents of cupboard A2 and the distribution board
- Have identified, at least as an issue for inquiry, the requirement for fire dampers
- Recommended periodic inspection and testing of the fixed electrical installation in accordance with BS 7671

Questions?