



## Bunrannoch Hotel Fire



**IFIC Forensics Case Study**

**May 2000**

**■ Technical Excellence : Rapid Response**

A solid red horizontal bar spanning the width of the slide, positioned above the main title.

**Draft Preliminary Report into the  
Cause of Fire  
Bunrannoch Hotel, Kinloch Rannoch**

**Saturday May 27, 2000.**

A large, light gray watermark of the IFIC logo, consisting of three squares and the text 'IFIC', is positioned behind the text.

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## Background

From large industrial fires to those found in commercial property, IFIC is adept at applying its proven investigative skills across a wide range of incidents. Working with the Tayside Fire Brigade and other parties, IFIC investigated and provided a preliminary report on the causes of a fire which damaged the Bunrannoch Hotel in May 2000.

The Loss Adjuster was Mr G Gibson of Crawford & Co, Glasgow. Dr J F Lygate, FIC's Principal Consultant, visited the Bunrannoch Hotel which had not traded since March 2000. He heard that, in the early hours of May 27, the alarm was raised and the Tayside Fire Brigade contacted at 0138.

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## Background Cont...

Following extensive investigation, IFIC found the fire's point of origin in bedroom nine - but the source of ignition could not be determined. The switch controlling the electricity supply to a sauna heater was found to be "on", and an industrial tumble dryer in the laundry room was used until about 15 minutes before the owner's departure.

IFIC learnt that the bedrooms are heated by electric convector heaters, there was a bells only fire alarm – and the property had no fire detection system. It as equipped with a CCTV system which was believed to have been operating at the time of the fire. IFIC was told there was a oil-fired boiler and tank, which were no longer used, and cooking was by propane gas supplied from a tank.

## The Fire

- The Fire IFIC discovered that, at first floor level, the fire developed in bedroom nine, venting out the open door into the corridor.
- It appeared that the fire had penetrated the ceiling void and spread between the joists into the roof void.
- The fire also appeared to have penetrated the floor above bedroom nine and developed within the sauna.
- The fire spread to the roof voids and spread within them, resulting in the collapse of the roof.

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# Damage

- The roof over the original building was destroyed by fire.
- The master bedroom collapsed into the dining room with the structure below damaged by water.
- The roof over the stair to the guest wing and the stair between the first and second floor was destroyed by fire, while the partition over the first floor landing was unsupported and in imminent danger of collapse.
- The fire spread along the roof void on the northwest elevation, causing considerable damage.
- Bedrooms eight and nine on the first floor were severely damaged, while bedrooms on the ground floor were damaged by water.

# Seats of Fire

IFIC noted three areas of intense burning:

- Bedroom nine on the first floor of the guest
- wing, the sauna room and in the laundry
- room on the first floor landing.

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## Cause of the Fire

**Deliberate Ignition:** The premises were found to be secure and there was no evidence that entry had been forced prior to the attendance of the Fire Brigade. IFIC observed that the spirits and alcohol in the public and cocktail bars appeared undisturbed.

The cigarette and gaming machine in the public bar were untouched. Given that Firefighter J Black attacked bedroom nine first, it is reasonable to conclude that the damage here occurred prior to the attendance of the Fire Brigade.

The damage observed in bedroom nine was not inconsistent with the fire starting about midnight and burning for 1 hour 50 minutes prior to the attendance of the Fire Brigade.

## Cause of the Fire Cont...

**Inadvertent Ignition by Smoker's Materials:** The owner informed IFIC that none of her family were smokers. She said it was unlikely that any of her children smoked.

**Electrical Defect:** IFIC examined the cut-outs at the cable head which we found intact, while the 100 amp semi-enclosed fuses on the main switch were noted to be ruptured.

**Ignition by the Sauna Heater:** The main switch controlling the supply to the sauna heater was found in the "on" position. It is possible, but unlikely, that the switch was moved to that position by physical disturbance during the fire.

## Other Observations

**The Laundry Room:** An area of intense burning was noted in the laundry room. The industrial tumble dryer, which the owner said she was using almost to her departure, appeared to be severely damaged. IFIC could not rule out the possibility that the fire started in the laundry room albeit its spread to bedroom nine would be surprising.



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## Conclusions & Recommendations

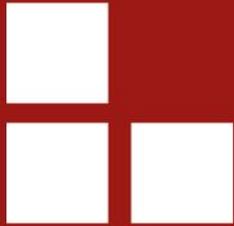
- A point of origin was located in bedroom nine from which the fire spread into the roof via the ceiling void and into the sauna above. Several areas of severe burning were observed and IFIC could not explain the damage within the laundry room by reason of spread from bedroom nine. It is possible the fire in the laundry room was the result of a second point of origin.
- IFIC could not exclude the possibility that the fire was the result of the deliberate act of the insured and the damage patterns in bedroom nine were not inconsistent with ignition around midnight on Friday May 26, 2000.

The opinion of Lord Brodie in the Outer House Court of Session

*'It appeared to me that all those who had investigated the fire and who gave evidence, Mr Smith, Mr Grant, Station Officer Hannigan and Dr Lygate, were qualified by reason of relevant study and experience and an informed investigation of the scene to provide an opinion as to the area of origin of the fire and its source of ignition, and therefore might be described as expert witnesses. Dr Lygate is more the scientist or engineer. He is academically and professionally well qualified. He was a particularly careful witness. He was precise in the way he answered questions. He provided detailed reasons for his opinions under reference to the findings of the fire investigation.'*



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