

# APPENDIX 1

Terms of Reference dated 10<sup>th</sup> July 2008



Government Secretariat  
Rúnaíocht an Rialtais

**INDEPENDENT EXAMINATION  
OF  
THE STARDUST VICTIMS COMMITTEE'S CASE  
FOR A REOPENED INQUIRY  
INTO THE STARDUST FIRE DISASTER**

**TERMS OF REFERENCE**

**July 10th, 2008**

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3. Following his assessment of the issues raised by the Stardust Victims Committee and related matters as set out above, Mr. Coffey shall, without undue delay, report to the Government and shall therein make a recommendation as to whether a new inquiry should be established and may make such other recommendations as he considers appropriate.



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Assistant Secretary to the Government

## APPENDIX 2

Notice published in the national and local newspapers dated 5<sup>th</sup> September 2008 seeking submissions from interested parties.

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tion has been h court in Eng- inquest into Mr r' quashed.

**John Delaney.**

**Mr Delaney's son, John Renehen, spotted his father on a missing persons' ad - five years after he thought he had cremated him.**

**It later transpired that Greater Manchester Police (GMP) had wrongly identified a dead body as Mr Delaney (71) because he had similar injuries and was wearing similar clothes.**

**Mr Delaney, it emerged, was not the dead man but had in fact been in a care home since 2000 where he**



**John Delaney: 'cremated' following identity mix-up**

**was placed after being found wandering dazed and confused in Oldham, near Manchester.**

**He had suffered total memory loss after receiving a blow to the head.**

**Mr Delaney had been unable to give any clues to his identity so he was given the name David Harrison and placed in a home.**

**situation now.**

**"At that time, only paper records of people reported missing existed," a spokesman said.**

**"Today GMP has systems in place to ensure mistakes of this nature are not made, and robust checks are made to establish the identity of people who cannot confirm who they are.**

**"GMP accepts mistakes were made and Mr Delaney's family has been through a traumatic ordeal."**

**STEPHEN O'FARRELL**

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Any person who wishes to make a submission relevant to the Terms of Reference to Mr. Coffey, should forward same in writing to reach the undersigned not later than the 10th October 2008.

Dated this 5th September 2008

Michael Heneghan,  
Solicitor,  
St. Stephen's Green House,  
Earlsfort Terrace,  
Dublin 2.  
Telephone: (01) 6625911  
Email: [independentexamination@gmail.com](mailto:independentexamination@gmail.com)

*Independent*  
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**05 SEP 2008**

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WADDAH ABD-RABBO, the editor-in-chief of the Syrian newspaper *Al-Watan*, had no doubt about the significance of French president Nicolas Sarkozy's two-day visit. "It means unconditional recognition of the policies and role of Syria, and the return of France to the region and international politics," he said. Sarkozy is the first Western leader to visit Damascus since the assassination of the former Lebanese prime minister Rafik

Hariri three and a half years ago. Syrians relish their rehabilitation. "Sarkozy's visit is good for us!" said a medical lab technician with whom I shared a taxi. "I think we'll have peace with Israel," he predicted. "But people have to get used to the idea first." Yesterday's summit established a new "quartet" of would-be Middle East peacemakers: Sarkozy, Syrian president Bashar al-Assad, Sheikh Hamad al-Thani of Qatar and Turkish prime

defined his human rights policy in a recent speech to French ambassadors: "We must broach difficult subjects, but in a way that leads to tangible, positive results and not to sterile confrontation." In Syria, this has led France to subcontract human rights to Sheikh Hamad. "It's easier to make a gesture among Arab brothers than when a crusader comes to preach at you a thousand years later," says an adviser to Sarkozy. "Two [of hundreds of Syrian

palace. Her colleagues crowded round us, nodding in agreement. They know Sarkozy loves Israel, hates Hezbollah. "He says Hezbollah are terrorists; we say they're the Resistance," one said. "It's not a problem." But can Franco-Syrian relations accommodate such blatant contradictions, all the way to a peace agreement between Syria and Israel? The fifth round of indirect, Turkish-sponsored Syrian-Israeli negotiations was due to begin in Istanbul on

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Times  
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05 SEP 2008

## Albanian artist's cork mosaic a record breaker

TIRANA - An Albanian artist has created the largest mosaic ever made from corks, which he arranged as an homage to life around the Mediterranean.

Albanian artist Saimir Strati glued 229,764 corks of various shapes and colours over a plastic banner measuring 12.94 metres by 7.1 metres to show "Romeo with a crown of grapes playing the guitar while dancing with the sea and the sun".

He worked 14 hours a day for 28 days and completed his project yesterday.

"It gives me a personal pleasure to declare that Mr Saimir Strati has set today the new Guinness world record for the largest cork mosaic," Guinness adjudicator Carlos Martinez said.

Albanians have been following Strati's third world-record attempt much more closely than his previous two record-breaking pieces of art, a portrait with nails of Leonardo Da Vinci and a galloping horse made with toothpicks.

"I love mosaics. they are a dying genre. I follow the same technique used 3,000 years ago," said Strati.

"A mosaic requires you to work for a long time and keep the emotion alive. I also wanted to appeal to Mediterranean countries not to create mosaics based on computer pixels, but as our forefathers did. The Mediterranean is the home of the mosaic."

His 25-year-old mosaic collection features one created with fragments of egg shells and a portrait of Elvis Presley, made with compact discs.

The artist carried out his latest work in a local hotel, where he apparently appealed to visitors: "Drink, because I need the corks." - (Reuters)

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His 25-year-old mosaic collection features one created with fragments of egg shells and a portrait of Elvis Presley, made with compact discs.

the housing market.

That collapse and a consumer who has been spending very little since last April lie at the core of our current difficulties, according to economists.

Chief economist with Davy Stockbrokers, Rossa White, says the Government has to create conditions to get buyers back into the housing market and to make it easier for borrowers to access funding.

The Government must consider the following

Mr McQuaid said the Government has to identify priority projects within the National Development Plan and bring forward their starting dates.

Dermot O'Leary, Goodbody Stockbrokers, said action on housing is a must and the Government must have the courage to initiate a public sector pay freeze.

He regards that as "a pre-requisite to bringing about cost savings, given that pay accounts for 36% of current spending".

long-term investment to restore confidence in the market.

Property deals could stall between now and October 14, as buyers will wait to see if any stamp duty changes are made or other incentives to stimulate the market are introduced.

"We'll be sitting on our hands and contracts will be sitting on solicitors' desks until after October 14," said one estate agent as the market remains slumped.

However, any changes

■ Three-bed semi-detached house.

**Nationally**  
July 08 €286,918  
compared with €298,520 in July 07

Data: ESRI index

which may be introduced should be backdated to allow the market to continue to operate, said Mr Cooke.

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05 SEP 2008

Examiner

# Millions may be lost in rent tax

by Seán McCárthaigh

MILLIONS of euro could be lost to the exchequer because landlords are not paying tax on rental income.

The Dáil Public Accounts Committee (PAC) blamed a lack of information sharing between state agencies for the potential non-payment of tax.

In its report, the committee found that arrangements between agencies to share information on payments to support the private rental market were "inadequate".

Such a lack of co-ordination made it difficult for the Revenue Commissioners to verify if landlords were paying their due tax.

It highlighted how €197 million paid in rent supplements by the Department of Social and Family Affairs in 2005, out of a total of €368m, could not be matched by Revenue.

A separate examination by the the Comptroller & Auditor General in 2006 described efforts by the authorities to verify that landlords were properly declaring rental income for tax as "haphazard and ineffective".

Among the PAC's recommendations is for a change in legislation to allow Revenue have full access to the Private Residential Tenancies Board database which all landlords are obliged to register. Currently, it can only obtain such data on a "case by case" basis.



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## APPENDIX 3

Written submissions of the Stardust Victims Committee – “Nothing But the Truth”

Part A - The Principal submission document dated July 2006

Part B - The booklet of documents referred to in the principal submission

Part C - The supplementary submission document dated May 2007



THE STARDUST FIRE DISASTER

February 14th, 1981

**"NOTHING BUT THE TRUTH"**

THE CASE FOR A NEW PUBLIC INQUIRY

A MEMORANDUM

SUBMITTED BY GREG O'NEILL SOLICITOR

ON BEHALF OF

THE STARDUST VICTIMS' JUSTICE CAMPAIGN

JULY 2006

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**GREG O' NEILL SOLICITORS**  
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Mary's Abbey  
Dublin 7

## PREFACE

This memorandum is submitted on behalf of the bereaved families and those maimed and injured in the Stardust Disaster.

It is concerned with a review of newly discovered facts and new evidence relating to the cause and rapid development of the devastating fire in the Stardust Ballroom.

For many years the families and injured have questioned the explanations given by the Tribunal of Inquiry which was established to investigate the circumstances of the fire.

This memorandum contends that their scepticism on these issues is more than well founded.

There is now compelling evidence that the Tribunal of Inquiry was seriously misdirected on matters of fundamental importance and was deprived of the opportunity to consider vital evidence not disclosed to it or to the expert witnesses advising the Tribunal or to the parties represented at its hearings.

Furthermore, scientific and technical information now available does provide strong evidence for the proposition advanced that the Stardust Fire Disaster was in all probability not caused by arson, nor was it initiated in the west alcove.

New expert opinion evidence now presented maintains that there was not a sufficient fuel load in the area of the west alcove. This evidence points with considerable weight to the probability that the fire was initiated in the Lamp Room next door to the Store room which was open to the roof space and that the considerable fuel load in the store room provided the basis for the rapid development of the fire which engulfed the Stardust within minutes.

The Stardust Nightclub had been converted from a factory into an entertainment complex and was the largest venue of its type in Dublin in the early 1980s. The Stardust was capable of holding up to 1400 patrons. It was situated in Artane, a suburb of North Dublin.

In the early hours of the morning of Saturday February 14th, 1981, approximately 840 people aged generally between the ages of 18 and 30 years of age were enjoying a night out on what was Valentines Day Eve. The entertainment featured a disco dancing competition which was just finishing around 1.40am when patrons first noticed a fire. The fire spread rapidly through the roof space in the building and within a short few minutes the entire building was engulfed in flames. In the space of one hour fire gutted the entire Stardust complex.

Forty eight people died as a result of the fire. Of these, forty four died immediately. Four victims died during a period of between four to twenty five days after the fire, from respiratory complications resulting from the injuries suffered by them during the fire.

Two hundred and fourteen persons suffered injuries as a result of the fire. Of these, one hundred and twenty eight required in-patient treatment and, of those, thirteen had significant respiratory complications, of whom nine required intensive treatment.

Eleven had seriously disfiguring or disabling burns which are permanent in their effect.

A number of the persons who escaped from the fire suffered from psychiatric problems caused by the experience and, in particular, from guilt feelings associated with their survival when so many suffered death or serious injury.

## THE DEAD

Those who lost their lives in the Stardust fire disaster.

Michael Barrett,  
Richard Bennett,  
Carol Bissett,  
James Buckley,  
Paula Byrne,  
Caroline Carey,  
John Colgan,  
Jacqueline Croker,  
Liam Dunne,  
Michael Farrell,  
David Flood,  
Thelma Frazer,  
Michael French,  
Josephine Glen,  
Michael Griffiths,  
Robert Hillick,  
Brian Hobbs,  
Eugene Hogan,  
Murtagh Kavanagh,  
Martina Keegan,  
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Robert Kelly,  
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Mary Kenny,  
Margaret Kiernan,  
Sandra Lawless,  
Francis Lawlor,  
Maureen Lawlor,  
Paula Lewis,  
Eamon Loughman,  
George McDermott,  
Marcella McDermott,  
William McDermott,  
Julie McDonnell,  
Teresa McDonnell,  
Gerard McGrath,  
Caroline McHugh,  
Donna Mahon,  
Helena Mangan,  
James Millar,  
Susan Morgan,  
David Morton,  
Kathleen Muldoon,  
George O'Connor,  
Brendan O'Meara,  
John Stout,  
Margaret Thornton,  
Paul Wade.

## TRIBUNAL OF INQUIRY

The following day the Government announced that a public inquiry would be established into the disaster and this would take the form of a Tribunal established under the provisions of the Tribunal of Inquiry (Evidence) Act, 1921 and 1979.

### Terms of Reference.

The Order appointing this Tribunal was made on the 20th February, 1981, by the Minister for the Environment. After reciting the terms of the resolutions passed by the two houses of the Oireachtas, the Order provided as follows:—

"

1. A Tribunal is hereby appointed—

(A) to inquire into the following definite matters of urgent public importance:

- 1) the immediate and other causes of, and the circumstances leading to, the fire at the Stardust Club, Artane, Dublin on the 14th February, 1981,
- 2) the circumstances of and leading to the loss of life and personal injury at the Stardust Club on the 14th February, 1981,
- 3) the measures and their adequacy, taken on and before the 14th February, 1981, to prevent, detect and to minimise and otherwise to deal with fire at the Stardust Club,
- 4) the means and systems of emergency escape from the Stardust Club, and their adequacy on the 14th February, 1981,
- 5) the measures (including the application of the Draft Building Regulations published on the 29th November, 1976), and their adequacy, taken on and

before the 14th February, 1981, at the Stardust Club to prevent and to minimise and otherwise to deal with any other circumstances that may have contributed to the loss of life and personal injury aforesaid or might have led to or contributed to the loss of life or personal injury,

- 6) the adequacy of the legislation, statutory regulations and bye-laws relevant to fire prevention and safety, so far as material to the granting of planning and bye-law permission for, and the conduct, running, supervision, and official inspection and control of, the Stardust Club, and the adequacy of the application, observance and enforcement of such legislation, statutory regulations and bye-laws in relation to the Stardust Club;

and

- (B) to make such recommendations as the Tribunal, having regard to its findings, thinks proper in respect of the statutory and other provisions in relation to fire, fire prevention and means and systems of emergency escape from fire, their adequacy and enforcement and any other matters that the Tribunal considers relevant.

#### The Tribunal.

The Tribunal of Inquiry was chaired by Mr. Justice Ronan Keane and was assisted in its inquiries and deliberations by a team of Assessors:-

- Professor David Rasbash, BSc. PhD. Department of Fire Safety Engineering, University of Edinburgh,
- Mr Gunnar Haurum, Chief Inspector of Fire Services Denmark,
- Mr Pierce Pigott, BE, MSc,C.Eng., F.I.E.I., Head of Construction Division, An Foras Forbatha, Dublin.



The parties represented at the Tribunal by teams of Counsel and solicitors, were:

1. The Attorney General;
2. Dublin Corporation;
3. The next of kin of the deceased and persons injured in the disaster; and
4. The owners of the Stardust Building.

Three hundred and sixty three witnesses gave evidence. The Tribunal considered over sixteen hundred statements and received and considered a significant number of technical and other reports. It also heard evidence from a number of expert witnesses called by parties to the tribunal. Witnesses were examined by Counsel for the Tribunal and for the parties and questioned by the Assessors.

In addition to two preliminary hearings in March 1981, the hearing of oral evidence began on the 6<sup>th</sup> April 1981 and continued until 26<sup>th</sup> November 1981. In all the Tribunal sat for 122 days. It reported in June 1982.

## CONCLUSIONS AS TO THE CAUSE OF THE FIRE

In Chapter 9 of its Report the Tribunal of Inquiry under the heading "THE FIRE" set out its conclusions.

9.1 Forty eight people died as a result of the fire and one hundred and twenty eight suffered injuries sufficiently serious to require their being detained in hospital.

9.2 The fire began in banked seating, upholstered in polyurethane foam with a PVC covering, in a corner of an alcove of the ballroom which was curtained off on the night of the fire.

9.3 The fire was first detected in the form of an increase in heat in the area of the alcove shortly before 01.33. The fire was next detected in the form of a smell of smoke, followed shortly afterwards by the first visual observation of a fire.

9.4 The fire when first seen—at approximately 01.41—appeared to be confined to one seat in the back row of the alcove nearest the Main Bar. It was also seen, however, in its early stages on a number of seats, although visible to some of the onlookers on one seat only. Whether present or not on more than one seat when first seen, it spread with great rapidity to other seats.

9.5 As the fire spread, the roller blind isolating the alcove from the rest of the ballroom was lifted by one or more doormen; and three doormen, a barman and at least one patron entered the alcove with portable fire extinguishers and attempted to extinguish the fire. These attempts were entirely ineffectual.

9.6 While the attempts at extinguishing the fire were still going on, and within a period of two minutes at the most from the blind having been raised the "false" or suspended ceiling which covered the alcove, as well as other areas of the ballroom, began to collapse, flames began to shoot at ceiling level into the rest of the ballroom, and clouds of thick black smoke began to fill the alcove and spread into the rest of the

ballroom. At this point, those fighting the fire abandoned their attempts and left the alcove.

9.7 At approximately this stage in the development of the fire, the disc jockey announced "We have a slight problem, don't panic. Walk to the nearest exits".

9.8 Almost immediately before the announcement by the disc jockey, a number of the patrons had begun to leave the ballroom in a state of what some of the witnesses described as "panic". Others however, remained in the ballroom watching the fire, dancing, or, in the case of approximately six people, asleep in another alcove.

9.9 Almost immediately after the disc jockey's announcement, the "panic" increased sharply. The Main Entrance (Exit 2) became jammed for a minute or more with a large crowd of people backing up in the ballroom. Conditions of congestion also developed at other exits but were less acute. At this stage, approximately four minutes after the fire had been first seen virtually the entire alcove and all its contents were on fire.

9.10 At this point, the lights in the building failed and this also increased the "panic". A number of patrons who were endeavouring to escape found themselves trapped in the toilet.

9.11 The first alarm of the fire by a member of the staff was given in the main foyer at 01.42. A barman rang the fire brigade at 01.43.

9.12 Within the period of five minutes after the failure of the lights, virtually all the contents of the ballroom went on fire. At the beginning of this period, the flames and smoke which had entered the roof void above the suspended ceiling broke through the roof of the building. By the time the first fire brigade appliance arrived (at 01.51) the fire had begun to diminish

9.13 The first phase of the Major Accident Plan was activated at 02.06 and the second phase at 02.12. The second phase was "stood down" at 02.54, at which point the fire was virtually completely extinguished

9.14 The fire was probably caused deliberately, the most likely mechanism being the slashing of some of the seats with a knife and the application of a lighted match or cigarette lighter to the exposed foam, or the ignition of newspapers on or under the seats. One of the seats so ignited was in the back tier.

9.15 The rapid spread of the fire was caused by three principal factors:

- I. the presence of a tier of combustible seats, at least one of which was ignited, against a wall completely lined with carpet tiles having a relatively high surface spread of flame rating and heat evolution;
- II. the presence of large quantities of combustible seating in the alcove; and
- III. the presence of a low suspended ceiling in the alcove which increased the radiation downwards, thus assisting the spread of the fire to the rest of the alcove.

9.16 The floor carpeting in the alcove played a secondary role in the growth of the fire, but did at some critical point assist the spread of the fire from one seat to another.

9.17 The collapse of the ceiling in the early stages of the fire probably slowed down the flow of smoke and combustion products throughout the ballroom to a significant extent and probably resulted in a substantial mitigation in the number of casualties

9.18 The venting of the fire through the roof probably slowed down the fire spread and may have accounted for the survival of a number of people in the ballroom.

9.19 The raising of the blind did not have any significant effect on the spread of the fire.

9.20 There were no hose-reels in the building and the use of portable extinguishers was entirely ineffective.

9.21 The combustion of the furnishings in the alcove produced quantities of carbon monoxide sufficient to cause or contribute to many of the deaths. The combustion of the PVC covering produced quantities of hydrogen

chloride sufficient to cause high levels of irritancy. The combustion of the polyurethane foam produced quantities of hydrogen cyanide, but it was unlikely that the quantities were sufficient to contribute substantially to the total lethal effect of the combustion gases.

9.22 None of the victims suffered significant crush injuries resulting from trampling, "panic" or exit accidents.

## FINDING THE CAUSE AND SEAT OF THE FIRE

The Tribunal of Inquiry reviewed its examination of the evidence as to the cause of the fire in Chapter six of the Report.

Evidence as to *cause* was examined in the first place. It will become apparent from an examination of material which was not considered by the Tribunal that overmuch emphasis was placed by the Tribunal and its research into the *cause* of ignition of the outbreak rather than the *consequence* of the ignition and the *fuel load* that supported the growth and rapid development of the fire.

The Tribunal set about its task setting as its priority the ascertainment of the initial cause of the fire.

In this work the Tribunal was assisted by the provision of several technical reports. Those relevant to the issues in this memorandum were furnished by:

- D/Garda Seamus Quinn – Ballistics Section– Garda Technical Bureau.
- Michael Norton – Forensic Scientist – State Forensic Science Laboratory.
- George Nice – Head – Fire Research Station Borehamwood, England.
- H.L.Malhotra and Peter Hinkley – Heads respectively of Buildings & Structures and Materials Components & Structure Divisions, Fire Research Station. [afterwards referred to as Malhotra and Hinkley]
- William Wooley,– Head– Combustion Products Section, Fire Research Station
- David Tucker – Fire Consultant –Dr Keith Gugan & Associates,
- Arthur Green and Frederick Porges – Consultants – Cremer & Warner Ltd.
- Gerald Eastham – Fire Consultant – Fire Check Consultants
- Robert Watt – Fire Consultant – Dr. J.H. Burgoyne & Partners
- Anthony Tennyson– Electrical Expert – Tennyson Associates

In addition authors of these Reports provided expert testimony to the Tribunal.

Maps and charts of the Stardust were supplied by the Garda Mapping Section and the Dublin City Fire Brigade.

Photographs of the exterior and interior of the Stardust building in the aftermath of the fire disaster were furnished by An Garda Siochana and by a number of expert witnesses.

A photographic record of the Fire tests which were carried out in efforts to replicate the fire as part of the forensic inquiry to ascertain a probable cause for the fire were also made and furnished to the Tribunal.

Of these experimental fire tests, carried out at specialist fire research establishments all both large scale and small were carried out between March and July 1981.

The principal tests were conducted at:

- Yarsley Research Centre, on 25th March 1981
- Fire Insurers' Research and Testing Organisation (FIRTO) at Borehamwood, on 26th March 1981
- Fire Research Station (FRS) Borehamwood on 1st June, 1981
- FRS at Cardington on 18th June and finally at Cardington on 30th July 1981.

The large scale tests carried out at the Fire Research Station followed the receipt by the Tribunal of a Preliminary Report from Malhotra and Hinkley after their visit to the Stardust site on 24/25 February 1981. Messrs Malhotra and Hinkley were retained to carry out a preliminary examination of the scene of the fire disaster.

At this early stage of the inquiries the possibility of the fire having been deliberately set was considered together with other causes.

Malhotra and Hinkley had been briefed that the first sighting of a fire in the Stardust on the night of the disaster was on some seats on fire in the West Alcove.

It appears that Malhotra and Hinkley were aware only of one possible fire load in the Stardust on the night of the disaster, and that was the seating.

Therefore, the options of an electrical cause close to the seating, an accidental cause through dropped cigarettes or a deliberate setting of fire in the seating were perceived as the likely if not the only real potential causes for the initiation of the fire.

The following excerpt from Malhotra and Hinkley's preliminary report indicates that the only fuel load identified by the experts at the time was the seating (which obviously was not a spontaneously combustible fuel load).

**" FIRE INITIATION**

*"The Garda is investigating the cause of the fire, no attempt was made to establish the precise cause during the visit. Possible causes are an electrical fault in the area, in nearby wall a 3-pin plug socket had been provided, it consisted of a recessed metal fitting with a flush finish surrounded by the carpeting material. Was there an electrical appliance connected to it? The lighting consisted of 100/150 watt reflector bulbs with long stems connected through holes (1 ) in the ceiling panels to connections behind the ceiling in electrical conduit. Was there a light in the corner where the fire is supposed to have started? The probability of an -electrically initiated fire is not very high.*

*"Another cause could have been accidental dropping of a lighted match or a cigarette on a seat in the corner. Were there people behind the screen at an earlier time prior to the discovery? Would the seat have become ignited from such a source?*

*"The fire could "have been deliberately started and this assumption requires the presence of a known agency and a suitable heat source. With the type of material involved this would have presented no great difficulty. The technical data which are needed to assist this part of the problem are, the possibility of ignition of a seat from a cigarette or a lighted match, the minimum igniting*



*source needed to cause persistent flaming with undamaged and damaged covering material”*

In the Summary of their Report the Fire Research Station Consultants stated:

*“1. The cause of the fire is not known, its initiation and early pattern are uncertain*

*2. The fire passed through two distinct stages. Stage I of 8 to 9 minute's duration from the time of discovery consisted of its confinement in the enclosed seating area on the west side.*

*3. Experimental data are needed on the behaviour of materials and the seating composite to establish quantitatively the rate of burning, heat evolution and smoke production from the seats. A mock-up test rig needs to be built-up to establish experimentally the possible conditions inside the enclosed area.*

*4. Stage II occurred after the curtaining of the enclosed area was raised. In 3 or 4 minutes fire spread virtually to the whole of the disco area and other seats, reached its peak severity and created hazardous conditions for the 800 or so people present.*

*5. The rapid fire spread was a function of the large seating expanse with the type of seating present, low ceiling height, and thermal insulation provided by the ceiling, and the contribution of the carpet tiles on the walls.*

*6. The escape provisions were adequate but some doubts exist on some of the design features, the reliability of the emergency lighting system, the absence of any warning system and the barring of windows of toilets and other rooms.*

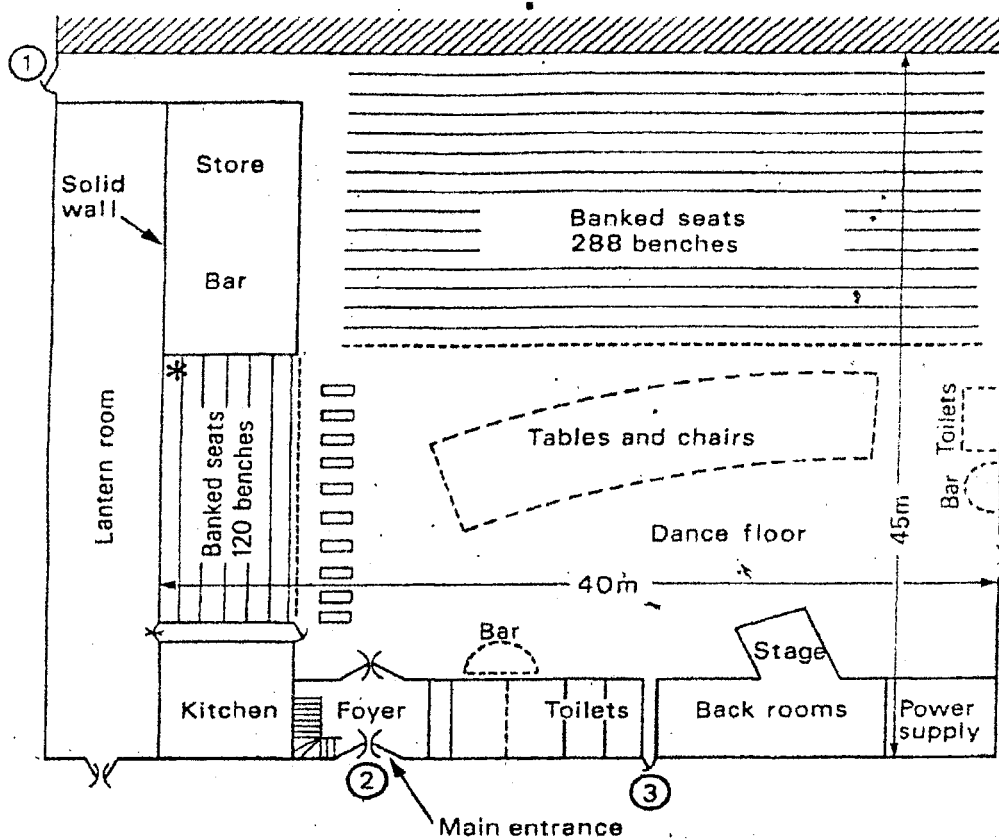
*7. FRS is able to undertake experimental work indicated in this report and if this is contemplated samples of identical materials to those in the disco would be needed.”*

#### THE FLOOR PLANS

Annexed to the Preliminary Report from Malhotra and Hinkley (FRS) was a floor plan [shown on page 15] of the Stardust Disco showing “the assumed seat of the fire”.

The Plan which was with the Report furnished to the Chairman and the three Assessors also depicted the area of the Bar showing the Store behind it.

This was a plan of the floor level. It did not show any elevations, levels, or sections merely referring to 'banked seats' and benches.



\* Assumed seat of fire

① ②.....⑥ Fire escape doors

----- Curtains on roller blinds for isolation of banked seats

Figure 1 Plan of Star Dust disco

This Report was received and considered before the Tribunal began hearings of the oral testimony of witnesses. The evidence of persons inside the Stardust included eye-witness testimony of the first observation of a fire.

## EYE-WITNESS EVIDENCE

The initial report from Malhotra and Hinkley was probably given corroboration in the view of the Tribunal by the eye-witness evidence of early sighting of a fire in the West Alcove.

Indeed, the preponderant evidence of the fire's earliest observation was as flames burning on seating in the West Alcove, an area which had been curtained off on the night of the disaster.

The inference was drawn from the location where a fire was first observed that it was the location of the original seat of the fire.

Therefore, the initial sighting by eye witnesses of a fire in the West Alcove was treated as the sighting in the West Alcove of the fire in its initial stages.

In dealing with the issue of the first sighting of a fire on the fatal night the Tribunal at paragraphs 2.26 to 2.49 reviewed the eye-witness evidence.

At Paragraph 2.31 the Tribunal reported of the evidence of Ms. Linda Bishop as follows:-

*"Linda Bishop, a patron, was sitting at the first table in front of the blind next to the main bar. She said that at about 1.30am she began to feel warm, having felt the Stardust to be cold during the evening. She said to Sandra Hatton, a girl who was also sitting at the table, that she was beginning to feel warm and that someone had turned the central heating on. They then got up to dance and she looked at her digital watch and noticed that it was 1.33am. Sandra Hatton also remembered the central heating coming on "about half one". Some minutes later - Ms. Bishop thought approximately four to five minutes - both girls were dancing to a record called "Lorraine" when Ms. Hatton saw a fire in the west alcove and said to Ms. Bishop "look a fire".*

The evidence of those witnesses who attempted to extinguish the flames of the fire in the west alcove is also of particular importance. [see appendix 1]

As to the earliest observation of the fire The Tribunal concluded at Paragraph 2.167 as follows:-

*"The earliest indication to persons inside the Stardust of the fire appears to have been a feeling of heat on the part of some of the patrons sitting in front of the west alcove. No one gave evidence of having noticed this - or indeed any other sign of the fire - during the disco dancing competition, although some patrons were standing on the ledge in front of the West Alcove with their backs in physical contact with the blinds during the competition. As the competition probably ended not later than 1.30am Linda Bishop's evidence that she looked at her digital watch shortly after becoming aware of the heat and noted the time as being 1.33am may be taken as giving a reasonably accurate indication of when this feeling of heat first became apparent."*

At Paragraph 2.168 the Tribunal appears to have accepted that a smell of smoke was noticed in the North Alcove at the same time or earlier than the time that fire was observed in the West Alcove:-

*"The next indication of the fire was a smell of smoke or burning, which was particularly noticeable in front of the West Alcove and the Main Bar, but was also detected in the North Alcove. The first appearance of smoke in the area of the blind appears to have been at approximately the same time, although it was not observed by all those who noticed the smell of smoke or burning".*

It is submitted that the Tribunal erred insofar as it failed to reconcile this evidence which it appears to have accepted, of the early manifestation of a fire in two locations, with the hypothesis it adopted and concluded that arson was the cause of the fire.

It is also submitted that greater significance should have been attached to the evidence of Ms. Linda Bishop who stated that she could feel the increase in heat some eight minutes earlier coming from above her head about thirty-three feet away and even further onto the dance floor where she was at the time.

