



HOME OFFICE

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Our reference: FIR/86 15/182/1

Your reference:

14 January 1988

The Chief Executive of the County Council The Clerk to the Fire and Civil Defence Authority LIBRARY

FIRE SERVICE COLLEGE MORETON III MARSH

GLOS, GLSS BIH

Dear Sir or Madam

22JAN1988

FIRE SERVICE CIRCULAR No 1/1988

Fire Hazards Associated with the use of Cellular Foam in Sports and Recreational Facilities

An additional copy is included for the information of the Chief Fire Officer.

Yours sincerely

R R G WATTS

The Fire Service College

00160810



FIRE HAZARDS ASSOCIATED WITH THE USE OF CELLULAR FOAM IN SPORTS AND RECREATIONAL FACILITIES

The purpose of this circular is to alert fire authorities to the potential fire hazards arising from the use of cellular foam in sports and other recreational facilities and to give advice on the use and safe storage of such foam.

- Cellular foam is now extensively used in gymnasia, sports halls and other recreational facilities in the form of various types of floor coverings, mats and foam-filled pits. It is also becoming increasingly popular in providing a soft play environment for children, particularly the handicapped. The fire safety hazards of cellular foam are well known but its use in sports and other recreational premises can give rise to particular dangers. Some of these problems were highlighted by the fire at the Maysfield Leisure Centre in Belfast in 1984 which resulted in the death of six people. Accordingly, the Fire Service Inspectorate, in consultation with the Sports Council and the Fire Research Station, has prepared guidance notes on the use and storage of cellular foam materials in sports and recreational facilities for the information of fire authorities. guidance, which covers foam-filled pits, mats and soft play equipment in new and existing buildings and suggests what advice should be given to management, is attached at Annex A to this circular.
- Fire authorities are invited to take account of this guidance in providing advice on fire safety in new and existing buildings where foam-filled sports or recreational equipment is used. So far as foam-filled pits and gymnastic mats are concerned, fire authority involvement seems most likely to arise in the context of premises subject to licensing legislation, since the surveys carried out following the Popplewell Inquiry indicated that many sports centres are already subject to such legislation because they have boxing or wrestling matches or other public entertainments or alcohol is sold on the premises. Fire authorities will be aware that the Fire Safety and Safety of Places of Sport Act 1987 extends the system of entertainments licensing to certain premises used for sports entertainments to which the public are invited as spectators. A Home Office Circular giving guidance on the effect of these provisions will be issued to the appropriate authorities when the provisions are brought into force, some time in 1988.
- 4. Cellular foam-filled equipment may also be found in other types of premises which are not subject to licensing requirements, but where the fire authority is nevertheless requested to give advice from time to time. These include health care premises, premises used for residential and day care in the statutory and voluntary personal social services and educational establishments. In this context, fire authorities will wish to note that the Department of Health and Social Security have already drawn to the attention of health authorities the possible

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fire hazard of soft play equipment, through their Safety 'Information Bulletin No 32 issued in January 1987. This bulletin was copied to social services authorities and certain voluntary organisations in July 1987. Since foam filled mats and pits may also be found in some personal social services establishments, the Department of Health and Social Security are considering the issue of further advice to that sector.

- 5. The Department of Education and Science is proposing to issue guidance in the 6th edition of Building Bulletin No 7 currently under consideration which will include references to cellular foam hazards. Fire authorities are asked to take this aspect into account when providing advice on fire safety in schools, including those in the independent sector which are subject to registration under Part III of the Education Act 1944.
- 6. The possible overlap of responsibilities between fire authorities and health and safety enforcing authorities and the need for liaison should also be borne in mind when considering the fire safety aspects.
- 7. This circular cannot, of course, take into account all the fire safety requirements which may be necessary because of the circumstances that prevail in particular premises. It is intended to be used as an aid in evaluating the fire precautions that will be required where cellular foam products are in use. It should be recognised that when assessing the effects of a fully developed fire in cellular foam, i.e. rate of heat release smoke production etc. expert advice may need to be sought.
- 8. Where fire authorities are unable to secure improvements in standards of fire safety which are necessary because of the use of foam-filled equipment, particularly in premises which are not subject to specific legislative controls, and they consider that there is an excessive risk to persons in case of fire, they will no doubt have regard to their powers under section 10 of the Fire Precautions Act 1971.
- 9. It is hoped that fire authorities will take account of this circular in the normal course of their fire prevention activities, and it should not therefore give rise to significant additional cost or manpower implications for fire authorities. They may, however, wish to give priority to premises which have foam-filled pits, because of the particular hazard which such facilities present. For this purpose, fire authorities may find it helpful to have information about existing pits which has been provided by the Sports Council and is attached at Annex B.
- 10. The Sports Council are producing a video on the dangers of cellular foam in sports centres, "Getting the feel for foam". It is expected to run for about 20 minutes and should be available by February 1988. The Fire Department intend to obtain 5 copies for loan to fire brigades. These may be borrowed on request from Mr P Moore, G2 Division, Room 919, Queen Anne's Gate, tel. no. 01 213 3451. Copies may also be purchased from the Sports Council's Publication Department, 16 Upper Woburn Place, London WC1H OQP, tel. no. 01 388 1277, price about f10.

11. Additional copies of this circular and the guidance are enclosed for chief fire officers. Copies are also being sent, for information, to metropolitan and non-metropolitan district and borough councils who are the licensing authorities and also own many of the sports premises in which cellular foam is likely to be used.

FIR/86 15/182/1

Home Office contact: D Macnamara (01 213-7338).

FIRE HAZARDS ASSOCIATED WITH THE USE OF CELLULAR FOAM IN SPORTS AND RECREATIONAL FACILITIES

INTRODUCTION

Cellular foam is extensively used in gymnasia, sports halls and other recreational facilities in the form of various types of floor coverings, mats and foam-filled pits used for gymnastic training. It may be flame retarded (ie able to resist a predetermined ignition source) or untreated in which case it can be easily ignited by a small ignition source (eg smokers' materials). Various amounts of these polymeric materials may also be found in trampolines, dividing nets, floor surfaces etc, but while these add to the fire loading, generally speaking they are not easily ignited and do not initially present a high fire risk.

- 2. Cellular foam-filled pits with their contents of raw, uncovered and generally untreated foam present an extremely high fire risk because of the ease with which the foam can be ignited, the rapidity with which the fire would develop and the large quantities of heat, smoke and toxic gases which would be generated. A recent fire test carried out at the Fire Research Station at Cardington, Bedfordshire, on behalf of the Sports Council, involving an above ground pit of dimensions 3m x 3m x 1.7m constructed of steel and filled with cellular foam, was ignited by a single match giving an estimated smoke production sufficient to fill a hall of about 8,000 cubic metres with smoke to a visibility of lm in about 3 minutes.
- 3. Cellular foam gymnastic and judo mats and athletics landing areas present a particular risk when stacked in piles or when kept together with similar materials, especially when the raw cellular foam interior of the mats is exposed. Various kinds of cellular foam sports mats are in use, ranging from those with a low density, generally referred to as "crash mats", to those having a high density, used for judo and other combat sports. The low density cellular foams present the highest risks because of the ease with which the materials can be ignited.
- 4. The following paragraphs indicate the risks associated with the use, storage and location within a building of cellular foam materials and the safety standards considered advisable.

EXISTING BUILDINGS Cellular foam-filled pits

5. The size and location of a cellular foam-filled pit will depend upon the type of activity that it is designed to facilitate, the limitations imposed by the building in which it is situated and the numbers of persons using it. Foam-filled pits can range from the adaptation of an existing swimming pool in which the pool area is modified by the use of blocks of raw cellular foam with the surrounding areas protected by a similar material, to purpose-built pits in existing gymnasia which may be

either below the floor level or above it.

- 6. Sizes of pits may vary but the risk remains high. Ideally the size of a pit should be restricted to the smallest area necessary to achieve satisfactory and safe usage. In determining the risk that will be presented to those using the facilities and to other persons who may be in the building should a fire occur, the type of material used to fill the pit should be taken into account. At present, cellular foam materials used to fill pits may be untreated or flame retarded (but see paragraph 7). Pits above ground level present the greatest danger. Unless the pit is completely sealed and is of fire resisting construction there is a possibility of an outflow of flammable liquid produced by the effects of heat on the cellular foam.
- 7. Initial tests carried out on flame retarded cellular foam material have indicated that magnesium carbonate (chalk used to improve a gymnast's grip on apparatus, bars etc) falling on the foam material may reduce the flame retardant characteristics of the foam and render it susceptible to ignition from smaller ignition sources.
- 8. When pits are in use, the risk of accidental ignition will be reduced if proper controls are exercised. No smoking or naked lights, and no heat sources likely to ignite the foam material, should be permitted in the area.
- 9. A serious risk is presented when the pit is not in use but adjoining areas are used by members of the public. Access to the room or hall in which the pit is located should be strictly controlled to prevent unauthorised access or the possibility of malicious ignition. Ideally the pit should be covered when not in use. It is recognised however that this is not always practicable with large pits and those over which apparatus are permanently fixed.
- 10. If a balcony overlooks a hall/gymnasium in which there is a cellular foam-filled pit and the balcony forms part of an escape route from any other part of the building, the balcony will need to be enclosed to afford protection to the escape route. If the balcony is not part of the escape route from any other part of the premises, some protection may be necessary to ensure a satisfactory evacuation to a protected area at either end of the balcony.
- 11. If a foam-filled pit is situated in a hall or gymnasium in which there is tiered seating or is in a room adjacent to the hall or gymnasium, special consideration needs to be given to provisions that ensure that spectators using the tiered seating can leave safely and are protected from the effects of a fire involving the cellular foam. In assessing the measures to be taken the fire growth potential in the risk area needs to be calculated. Ideally steps should be taken to remove the risk entirely or to ensure its complete separation from the spectator area.
- 12. A sports hall or gymnasium in which there is a foam-filled pit should not connect directly to any corridor which forms part

of the main means of escape route from any other part of the premises.

- 13. Where physical separation cannot be achieved, consideration may be given to the provision of fixed firefighting installations in the form of water sprays etc capable of controlling a fire in this type of risk.
- 14. Effective warning to all occupants of the building in case of fire should be installed in accordance with BS 5839 Part 1 (Fire detection and alarm systems) and should, where practicable, include automatic fire detectors to cover risk areas.
- 15. Mechanical systems of air circulation and ventilation in premises should incorporate adequate safeguards to ensure that smoke is not circulated around the building. Reference should be made to CP 413 (Ducts for building services) and BS 5720 (Code of Practice for mechanical ventilation and air conditioning in buildings) where appropriate.

Foam Mats

- 16. Mats used in sports and recreational facilities vary according to the use to which they are put and range from low density 16kg per cubic metre (safety/crash mats) to high density 224 kg per cubic metre (judo mats). These mats are covered with a variety of materials, eg nylon, carpet, PVC coated fabrics, cotton, nylon woven fabrics, flame retarded/PVC fabrics and latex, flame retarded canvas and plain canvas.
- 17. The ease of ignition will depend upon:
 - (i) the type of cover (whether flame retarded or not);
 - (ii) the density of the infill (the lower the density of the infill the easier it may be to ignite);
 - (iii) the properties of the foam used; and
 - (iv) the method of mat construction.
- 18. When the mats are in normal use ie laid flat they do not usually present a serious fire hazard, although over a period of time the covers often deteriorate through use, exposing the raw cellular material. At this point the mats may present an increased risk as the cellular material may easily be ignited by the application of a single match. It is therefore important that mats should be repaired or replaced as quickly as possible.
- 19. Stored mats do, however, present a hazard and it is important that they are stored so that a fire occurring in them will not jeopardise means of escape from the premises. The following precautions should be observed:
 - (i) Mats should be stored flat to present the least amount of surface area over which flame could travel vertically.

- (ii) They should be stored separately from any other easily ignited materials.
- (iii) Storage should be tidy with access being maintained both to the store and within it.
 - (iv) There should be no source of heat likely to ignite material within the store.
 - (v) Luminaires within the store should be of the protected type (eg bulkhead or enclosed).
 - (vi) The store should not form part of a general circulation area.
- 20. Where a gymnasium or sports hall has access to a corridor either by a door or other opening forming an escape route from the hall or any other part of the building, in addition to those precautions already mentioned, the mats should be kept in a separate store that can be secured against unauthorised use or interference.
- 21. The store should not have direct access from the corridor and should be separated from it by imperforate and fire resisting construction of 1 hour duration in accordance with BS 476 Part 8, (Fire tests on building materials and structures).
- 22. Automatic smoke detection should be provided within the store linked to the main fire alarm system in the building. Ideally stores should be ventilated to the open air to the maximum area practicable, with ventilators operating by smoke detectors.
- 23. Where small numbers of mats are to be used the provision of a purpose built store may not be warranted, if the risk of vandalism is low and an outbreak of fire would present no risk to other occupants of the building. Mats may be stored in containers of robust construction made from non-combustible materials.

NEW BUILDINGS

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Foam-filled pits and mats

- 24. The fire safety measures recommended for existing buildings apply. However, the following advice is intended to ensure that adequate means of escape are provided at the design stage in buildings where the risk of fire affecting cellular foam materials may be present. This includes premises which, apart from providing facilities for sports or gymnastic activities, also provide spectator accommodation and are intended to be used for other activities involving large numbers of persons, eg discos and other social events.
- 25. Halls and gymnasia containing cellular foam should not form parts of the escape routes nor have direct access to corridors that form means of escape routes from other parts of the

building.

- 26. Travel distance from other parts of the building to a protected route or final exit should be as short as possible. Actual distances and time (see paragraph 2) will depend on an assessment of all the factors that apply to a building at the feasibility stage of the planning. The following criteria should be considered:
- (a) the dimensions, number of floor and compartmentation of the building; and
- (b) the intended use of the building:
 - (i) the numbers of spectators that could be accommodated in each area;
 - (ii) the types of people using the facilities, eg young, disabled persons etc;
 - (iii) the amount of cellular foam and types of materials that will be used and the way in which they will be stored;
 - (iv) the presence of cellular foam-filled pits, their location, construction and size. The type of foam used and the ability to enclose and cover the pits when not in use;
 - (v) the possible need for a fixed firefighting installation, water spray etc;
 - (vi) the possible need for the provision of automatic fire detection linked to a fire alarm system for the building; and
 - (vii) where the quantities of mats are sufficient to warrant it, the provision of a store (see paragraphs 21 and 22).

IGNITION RESISTANCE CRITERIA FOR EQUIPMENT

- 27. At present most equipment and foam-filled pits found in sports facility premises contain infills of untreated foam. The advice given in this document has taken this into account (see recommendations for existing buildings). The use of a flame retarded foam able to withstand a given ignition source will reduce the chances of accidental ignition by small sources. The involvement of large amounts of cellular foam in a fire will however still present a serious life risk to the users of the building.
- 28. To reduce the risk of accidental/malicious ignition, new equipment containing cellular foam should not be accepted unless it withstands ignition source 0 of BS 5852 Part 1 and ignition source 5 of BS 5852 Part 2 (method of test for the ignitability of upholstered composites for seating by flaming sources) when tested in the approved manner in accordance with the Sports

Council Fire Test for Mats (SCFM 87).

- 29. To take account of the points made in paragraph 18 regarding damaged equipment where the cellular foam is exposed, the ignition resistance criteria specified in paragraph 28 above should be applied to the infills. It is acknowledged that as most foams used as infills cannot at present meet these criteria, a short period will be needed to allow manufacturers to produce cellular foams that will meet ignition sources 0 and 5. It is suggested that infills should be expected to meet these ignition sources twelve months from the introduction of this guidance. Where the infill is of a sandwich construction then the foam should meet ignition source 5 to a depth of 100mm from any surface.
- 30. The foam used in foam filled pits should withstand the ignition resistance criteria quoted for gymnasium mat infills. At present no suitable foam exists that has the necessary physical characteristics and is capable of complying with the ignition resistance criteria. There is no method of test for the contents of pits and the various shapes and thicknesses of foams used would make this difficult. Research on the way that pits are filled (whether large blocks with offcuts on top or uniform cubes throughout) is being carried out by the Sports Council. It is hoped that a suitable foam will be produced that will meet all the required criteria. Until that time the risk outlined in respect of foam filled pits should be assessed carefully.
- 31. Where the practice is to provide floor covering for an area, rather than individual mats the test should be a 'surface only including the substrate' using ignition sources 0 and 5 of BS 5852 Parts 1 and 2. The method of test will be the Sports Council Fire Test for Mats (SCFM 87).

SOFT PLAY EQUIPMENT

- 32. Cellular foam has become popular in providing a totally soft play environment for children, especially handicapped children. The benefits of this kind of use are many, but as with other cellular foam products, the potential hazards from fire must not be overlooked.
- 33. The play shapes of this material are sometimes covered with flame retarded PVC material but may not be covered at all. When covered, the hazards would be similar to gymnastic mats and the precautions mentioned in paragraphs 16-23 above should be observed. When uncovered and non-flame retarded the material presents a similar risk to that of foam-filled pits and the fire precautions for foam-filled pits should be applied.
- 34. Because of the common hazard presented by these shapes and gymnasium equipment containing cellular foam, the ignition criteria should be the same. The varied shapes encountered in soft play items means that, at present, there is no approved method of test. Accordingly, tests would have to be of an ad hoc nature, but samples should withstand ignition sources 0 and 5 of BS 5852 Parts 1 and 2.

- 35. Soft play areas may be found in buildings which are put to a variety of uses, eg schools, hospitals, shopping precincts and community centres and when considering the precautions to be taken, the risk of malicious ignition, as well as the effect of a fire in this material on the escape routes within the building, must be borne in mind.
- 36. The people using these facilities may have mobility problems and the play areas allow a wide range of children to play and romp without harm to themselves. Typical users are mentally handicapped and physically handicapped children. When assessing the adequacy of means of escape routes due regard must be paid to the range of users.

ADVICE TO MANAGEMENT

- 37. Adequate procedures should be formulated to ensure a safe evacuation of the premises in the case of fire or other emergency:
- (a) Efficient arrangements should be made for calling the fire brigade and for ensuring that a member of staff having knowledge of:
 - (i) the premises;
 - (ii) the use of the fire warning system;
 - (iii) the evacuation arrangements; and
 - (iv) the location of the incident

is available to liaise with the fire brigade on its arrival.

- (b) A senior member of staff should be responsible for fire precautions on the premises, and for the training of staff in the emergency procedures to be adopted.
- (c) Staff should be allocated to specific duties, as follows:
 - (i) <u>Evacuation</u>. Members of staff should be allocated to specific areas and should be responsible for ensuring that in the event of an emergency their area is evacuated.
 - (ii) First-aid firefighting. Some members of staff should be trained in the use of the first-aid firefighting equipment provided. Wherever possible these staff should not have other duties in a fire emergency but no duties should conflict with the overriding necessity to evacuate the premises. A plan should be formulated so that, when safe to do so, a fire is dealt with in its early stages. Staff should not attempt to extinguish a spreading fire involving cellular foam and where a fire involves this material the priority is prompt evacuation.
 - (iii) Other essential duties. The staff responsible for maintenance and building services should be made responsible for any specific tasks that may be required, eg the

closing down of services that have been detailed in a prearranged plan.

- (d) To ensure that the arrangements made are comprehensive and adequate, there should be:
 - (i) planned training of all staff in evacuation procedures;
 - (ii) regular involvement of the fire brigade in routine visits and the giving of advice as necessary; and
 - (iii) arrangements for dealing with events involving large numbers of the public.
- (e) Regular inspections of the building should be undertaken to ensure that passive and active fire precautions arrangements are maintained in good working order and escape routes are kept clear at all times.
- (f) Good standards of house-keeping should be maintained throughout the premises at all times.
- (g) A drawing showing the layout of the building or part of the building should be available at the reception areas.

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FOAM FILLED GYMNASTICS PITS

NORTHERN

Mr B Newton Name of Centre SedgeField Gymnastics Club Contact Gaiety Theatre Address As Centre Address Church Lane Ferryhill County Durham Name of Centre South Tyneside Gymnastics Contact June Groom Centre Temple Memorial Park As Centre Address Address John Reid Road South Shields Tyne and Wear Name of Centre Cleveland Gymnastics Centre Contact Mr L Readhead 6 Sandling Court Address Prissick Base Address Morton Road Dene Park Middlesborough Marton Cleveland NORTH WEST Name of Centre Park Road Centre for Sport Mr B Stocks Contact Address Steble Street Address As Centre Liverpool 8 Name of Centre Gorton Gymnastic Centre Contact Colin Leigh Central Manchester Address. Hyde Road Address Belle Vue Institute οſ Manchester Gymnastics, as Centre Name of Centre Salford Gymnastic Centre Contact Mrs C Mayo Address Devonshire Street Address N.Salford G.C. Salford 7 as centre Name of Centre Darwen Gymnastics Club Contact Darwen Lancashire YORKSHIRE AND HUMBERSIDE Mr M Sime Contact Name of Centre Steel City Gym.Club 18 Westwood Road Broadfield Road Address Address Nethergreen Heeley Sheffield

Sheffield

YORKSHIRE AND HUMBERSIDE (contd.)

| Name of Centre | Ashlea Girls Gym Club | Contact | Mrs M Harrison |
|----------------|---|---------|--|
| Address | 5 Idsworth Road Firvale Sheffield 5 | Address | 5 Hilltop Drive Oughtbridge Sheffield S30 3AX |
| Name of Centre | Sheffield School of Gymnastics | Contact | Mr R R Armswood |
| Address | Church of St Thomas Holywell Road Brightside Sheffield | Address | 68 Flockton Rd Sheffield S13 9QW |

| Name of Centre | Huddersfield Gym Club | Contact | Secretary |
|----------------|---|---------|---|
| Address | Paddock Youth Centre Beech Street Huddersfield | Address | Huddersfield Gymnastics Club As centre |
| Name of Centre | Greenhead Gym Club | Contact | Miss C Bowker |
| Address | St Thomas Church Bradley Huddersfield | Address | Flat D 113 Trinity Street Huddersfield 0484 541473 |
| Name of Centre | Leeds Athletic Institute | Contact | Mr M Talbot |
| Address | Jack Lane Leeds LS10 1AN | Address | City of Leeds Gymnastics Club As Centre |
| Name of Centre | Calderdale School of PE | Contact | Mr K Whitaker |
| Address | Wellesley Park High Road Well, Halifax HX2 OBA | Address | CSPE Gymnastics Musgrave Block As centre |
| Name of Centre | York City Gym Club | Contact | Mr S Wild |
| Address | The Gymnastics Centre Heworth Croft Heworth York | Address | 78 Bramble Dene Woodthorpe York |
| Name of Centre | Woodford Gym Club | Contact | The Manager |
| Address | Woodford Leisure Centre East Park Holderness Road | Address | Woodford Leisure Centre |

Hull HU8 8JU

EAST MIDLANDS

Alfreton Leisure Centre Contact Alan Somerville ' Name of Centre Amber Valley Church Street Address Address G.C. Alfreton As Centre Derby DE5 7BD Hucknall Leisure Centre Contact Chris Smith Name of Centre Linby Road Address County Gym Squad Address c/o as Centre Hucknall Nottingham NG15 7TX Hinckley Gymnastics Club Name of Centre Contact Trevor Low Roston Drive Address Main Street Address Bruntingthorpe Hinckley Leicestershire LE17 5QF WEST MIDLANDS Name of Centre The P E Centre Contact J Weinstock Addrese As centre Address Newcastle Street Burslem Stoke-on-Trent ST63 3QJ Lilleshall Hall National Derek Tremayne Name of Centre Contact Director Sports Centre 0952 603003 Address Newport Address Shropshire Birmingham Athletic Inst. Contact Barry Benn Name of Centre Metchley Gymnastic Centre Address As centre Address Highgate c/o BAI Birmingham B12 9DL Name of Centre University of Warwick Sports Contact Wendy West Sports Facilities Centre Superintendent As Centre Address Address Gibbet Hill Road Coventry CV4 7AL M Ridgeway Name of Centre Rugby Gymnastics Club Contact 34 Rugby Road Address 91 Lower Hillmorton Road Address Dunchurch Rugby Rugby CV22 6PN

| EASTERN | | | |
|----------------|---|---------|--|
| Name of Centre | Huntingdon Olympic Gymnastics Club | Contact | Terry Sharpington |
| Address | Claytons Way Huntingdon Cambs | Address | 4 Sycamore Drive Huntingdon Cambs |
| | | | |
| | | | |
| Name of Centre | Harlow Sports Centre | Contact | John Wright, Manager |
| Address | Hammarskjold Road Harlow Essex | Address | Harlow Sports Centre Harlow |
| Name of Centre | Loughton Gym Club | Contact | Terry Collier |
| Address | Epping Gymnastics Centre North Weald Aerodrome North Weald Epping Essex | Address | Epping Forest District Council Council Offices 323 High Street Epping,Essex CM16 4BZ |

GREATER LONDON AND SOUTH EAST

01 592 7706

| Name of Centre | Hendon Sports Centre | Contact | Mr T Smithers |
|----------------|---|----------|------------------------------|
| Address | Algernon Road Hendon | Address | As Centre |
| | London NW4 3TA | | |
| Name of Centre | Lewisham Leisure Centre | Contact | S. Flynn |
| Address | The Lewisham Centre | Address | Ladywell/Lewisham |
| | Lewisham London SE13 7EP | • | Gymnastics Club As Centre |
| Name of Centre | Kelmscott Leisure Centre | Contract | J Wood, Manager |
| Address | Markhouse Road Walthamstow London E17 | Address | As Centre |
| Name of Centre | Wood Lane Sports Centre | Contact | Mr G Bradbury |
| Address | Wood Lane | Address | Wood Lane G.C |
| | Dagenham Essex | | As Centre |

GREATER LONDON AND SOUTH EAST (cont'd)

| | · | | |
|----------------|--|----------|---|
| Name of Centre | Heathrow Gymnastics Club | Contact | Jean Amos |
| Address | Green Lane Hounslow Middlesex TW4 6HZ | Address | As Centre |
| Name of Centre | Camberley Gym Club | Contact | Mrs B Wright |
| Address | The Gymnastics Centre Mitcham Road Camberley Surrey | Address | Florence Villa Owlsmoor Road Owlsmoor Camberley,Surrey GU15 4SS |
| Name of Centre | Leatherhead Gym Centre | Contact | Mrs M Miler |
| Address | Fetcham Grove Guildford Road Leatherhead Surrey | Address | As centre |
| Name of Centre | Brighton School of Gymnastics | Contact | Mr A Chapman |
| Address | 60 Gladstone Place Brighton East Sussex BN2 3QD | Address | As centre |
| Name of Centre | Woking Gymnastics Club | Contact | Mrs M Saunders |
| Address | Kingfield Road Woking Surrey GU22 9AA | Address | As Centre |
| Name of Centre | Hillingdon School of Gymnastics | Contact | Mr M Swallow |
| Address | Victoria Road Hillingdon Middx | Address | 29 Hawkesworth Close Northwood Middx HA6 2FT |
| SOUTHERN | · | | |
| N | 1-3 | a | |

Name of Centre Aylesbury Gymnastics and Contact Mr B L Adams
Fitness Centre

Address Wynne-Jones Centre Address Lynx Gymnastic Unit 6, Walton Road Club Aylesbury As Centre

Bucks HP21 7RL

SOUTHERN (cont'd)

| SOUTHERN (cont'd) | | | | | |
|-------------------|--|---------|--|--|--|
| Name of Centre | Chesham Leisure Centre (under construction) | Contact | Henry Burkinyoung | | |
| Address | Tony Parker (Architect) Architects' Department County Hall Aylesbury Bucks | Address | 48 Dove Park Chorleywood Herts | | |
| Name of Centre | Dorian Centre | Contact | Alan Field | | |
| Address | Birdwood Court Sonning Common Reading RG4 9RF | | As centre | | |
| Name of Centre | The Deanery Centre | Contact | Mr M C Baxter | | |
| Address | Deanery School Marsh Lane Southampton | Address | Southampton Amateur Gymnastics Club c/o Deanery Centre | | |
| | Hampshire | | | | |
| Name of Centre | Rushmoor Gym Club | Contact | Mrs C Day | | |
| Address | Farnborough Recreation Centre Westmead Farnborough Hants | Address | 30B Coldharbour Lane Farnborough Hants GU14 9AJ | | |
| | | • | | | |
| SOUTH WEST | | | | | |
| Name of Centre | OLGA Club | Contact | Hannah Bills | | |
| Address | | Address | | | |
| Name of Centre | Exeter Gymnastics Club | Contact | Mr M Euridge | | |
| Address | Bull Meadow Park Bull Meadow Road Exeter EX2 4JF | Address | 11a Dinham Road Exeter EX4 4EE | | |
| Name of Centre | College of St Mark and St John | Contact | Mr D Leeworthy | | |
| Address | Sports Centre Derriford ,Plymouth | Address | Plymouth Swallows G.C. 138 Dunraven Drive Derriford Plymouth | | |
| Name of Centre | Chilton Trinity Gym Club | Contact | Mrs B Smith | | |
| Address | c/o Chilton Trinity School Chilton Street Bridgewater Somerset | Address | Timpertill Goathurst Bridgewater Somerset | | |

SOUTH WEST (cont'd)

Name of Centre Hawkeshyde Motel and Leisure Centre Contact Mr M.J. May

Address Harepath Hill Address Hawkeshyde G.C

Devon EX12 2TF As centre

Name of Centre Fromeside Gymnastic Club Contact Mr G Curtis

Address Winterbourne Address As centre
Bristol

WALES

Name of Centre Gymnastics Centre Contact Mr T Gray Address University College Address Department of Bangor Physical Educatio Gwynedd As centre Name of Centre City of Swansea Gymnastics Club Contact Mr C J O Jones Address Swansea Address 7 Dylan Road West Glamorgan Killay Swansea West Glamorgan Name of Centre Barry Gymnastics Club Contact Mr N White Address YMCA Address As centre Court Road Barry

South Glamorgan