The Journal of the Institute of Hospital Engineering April 1980

HOSPITAL ENGINEERING

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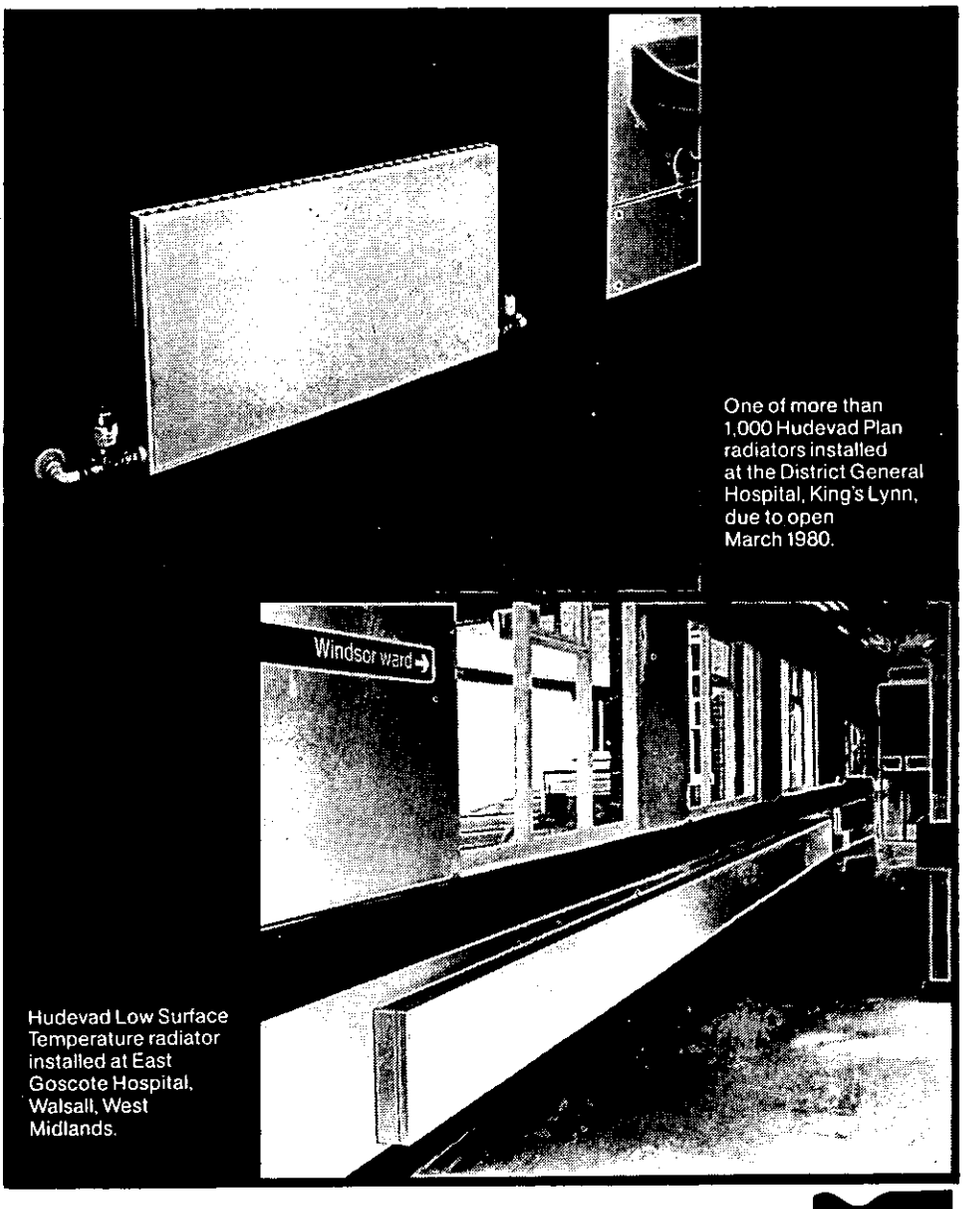

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HOSPITAL ENGINEERING

The Journal of the Institute of Hospital Engineering

Contents

April 1980

Volume 34 No. 3

Front cover: The Industrial Therapy Unit, Long Grove Hospital, Epsom. (See story on page 3 — Financial Times Award)

Neither the Institute nor the Publisher is able to take any responsibility for views expressed by contributors. Editorial views are not necessarily shared by the Institute

Institute News

CEI Committees

As a result of the election of the Institute of Hospital Engineering as an Affiliate of the Council of Engineering Institutions, the Institute has been invited to offer nominations for service on certain CEI Committees.

We are pleased to advise members that as a result of the ensuing elections one of the Institute's nominees, Mr B. A. Hermon, was elected to serve on the CEI Home Affairs Committee, as a representative of the Affiliate Institutions.

1980 Five Branch Meeting

The 1980 Five Branch Meeting of the IHE will be held in Lecture Theatre I at the John Radcliffe Hospital, Headington, Oxford on Saturday May 3, 1980.

Details of the days' events are as follows:

10.15 am Coffee
10.30 am Welcome by President of IHE
10.40 am "Sunspots and Satellites" by R. F. Turner Esq, and B. Barker Esq, ARD Culham Laboratories.
11.40 am "Radiation Hazards" by T. R. Munro Esq, Radiological Protection Advisor, Oxford AHA (Teaching)
"The Construction of X-Ray Departments" by Mrs Dixon-Brown, Department of Radiation Physics, Oxford AHA (Teaching)
12.30 pm Questions and Discussion
12.45 pm Lunch
2.00 pm "Prospects for Industrial Relations in the NHS" by Lord McCarthy, Nuffield College, Oxford
3.30 pm Questions and Discussion
4.00 pm Closing Address by President of IHE
4.15 pm Tea
4.45 pm Disperse.

Lunch has been arranged in the Staff Restaurant at the hospital and will include wine and coffee. Tickets for lunch will be made available on the day at a cost of £1.50 per person.

Location maps will be made available to all persons wishing to attend and who notify Mr C. Smith, Hon. Secretary, Midlands Branch, prior to the event. His address is: Blue Shutters, 120 Myson Road, Warwick.

North West Branch

On January 29 a branch meeting was held at St Mary's Hospital, Manchester when a talk and display was given on Static Switching in Nurse Call Systems. This was given by the President of the Institute Mr Laurence Turner and his colleague Mr Wooton. The talk was very interesting and concluded with a lively question time, the whole evening being enjoyed by a large number of members and guests.

On Thursday evening February 7, a joint meeting took place between the CIBS and the Branch at the School of Architecture, Manchester, when a paper was given by Mr Baker of the Electricity Council on the new CIBS lighting code P — Hospitals. This was a very well attended meeting on a most interesting subject, which was enjoyed by all who attended.

Southern Branch

Minutes of the 196th Meeting of the Southern Branch of the Institute of Hospital Engineering held on Tuesday, January 8, 1980, in the Committee Room, Centre Block, Southampton General Hospital.

Letter to Ordnance Survey confirming arrangements for visit on January 8, 1980.

There being no further business the Chairman confirmed the date and time of the next meeting which will be held on March 8, 1980 at 1500 hours at the Queen Alexandre Hospital, Portsmouth, Room No G381. Where the Technical Topic will be the Electrical Interference in Hospitals where the speaker will be Mr F. H. Baker, Principal Engineer, Department of Health and Social Security.

Would members note well: change of venue from previous published notification.

Northcroft Silver Medal

Council of the Institute is pleased to announce that the Northcroft Silver Medal for 1979 has been awarded for the Paper entitled "Guidance to Good Boilerhouse Practice and Management" by the late J. R. Fletcher which appeared in the May issue of the Journal.

Mrs Fletcher has most kindly agreed to accept presentation of the Medal from the President of the Institute during the Annual Conference.

Canadian Appointment

E. J. Parker BTech, PEng, FCIBS, FIHospE, recently joined the Ontario Ministry of Health as the Senior Consultant Mechanical Engineer to the Institutional Planning Branch.

John served his apprenticeship and was an Executive Engineer with Hadens Bristol before moving to Toronto in 1964 to join the ECE Group Consulting Engineers where he was Design Associate on a variety of Hospital projects.

Practices Merge

Following a close association during the last 15 years Percy A. Moore FIPlantE, MIllumES, MIHospE and Peter F. Leivers, a Heating and Ventilating Consulting Engineer, have decided, to merge their practices.

Their existing staff will be retained and the new practice will be called: P. F. Leivers, (in association with Percy A. Moore), Mechanical & Electrical Services Consulting Engineers, 198 Mansfield Road, Nottingham NG1 3HX Telephone: Nottingham

(0602) 603548/9.

The combined practice will operate from the above address from April 14, 1980 and all commitments on present projects will be met.

R. W. Gregory and Partners

R. W. Gregory and Partners announce that Mr I. D. Bennie became an Associate to the practice on January 1, 1980.

Boiler Instrumentation and Management for Energy Conservation Seminar

A one-day seminar on the subject will be held at Gatwick Park Hotel, Gatwick Airport, Surrey on Wednesday May 14, 1980. Further details from: Mr C. G. Hague, FInstMC, Organising Chairman, c/o Kent Process Control Ltd, 27B Bell Street, Reigate, Surrey. Tel: 073 72 49195.

Technical Management Course

A one week course entitled "Technical Management" is to be held by The Polytechnic, Huddersfield, from May 15-22, 1980. Further details: Ian Barclay, Senior Lecturer, Department of Management Studies, The Polytechnic, Queensgate, Huddersfield HD1 3DH. Tel: 0484 22288.

Mr M. A. Brownrigg

We are very sorry to hear of the sudden death of Michael Brownrigg, Partner in the firm of M. A. Brownrigg Partnership, Consulting Engineers in Bridgend. Mr Brownrigg suffered a heart attack on March 8 whilst on holiday in Tenerife.

He has been a member of the Institute for a considerable amount of time and will be much missed, especially by his colleagues in the Welsh branch.

The British Hospitals and Medical Exhibition

This years' British Hospitals and Medical Exhibition will be held at Olympia, London from Monday June 2 to Friday June 6.

The exhibition features 'what's new' in hospital and medical equipment, supplies, materials and services for the 1980s. It is sponsored by the Institute of Health Service Administrators and is supported by the DHSS and all the main trade, professional and employee organisations in the field.

Eleven separate conferences and seminars will take place at Olympia during the week of the show under the auspices of such bodies as the Royal College of Nursing, Association of Health Service Supplies Officers, National Association of Voluntary Help Organisers and the Association of Sterile Supply Administrators.

The exhibition will be open from 9.30 am to 6.00 pm daily and pre-registration tickets, including conference details, are available from the organisers: Fairs and Exhibitions Limited, 21 Park Square East, London NW1 4LH. Telephone: 01-935 8200.

HOSPITAL ENERGY CONSERVATION YEAR 1980

The second of the series of four-day symposia, being held this year, will be at the Institute of Mechanical Engineers on June 11.

On this occasion the day will be devoted to insulation both of actual buildings and all engineering services.

Copies of the usual leaflet will be going out to all Health Authorities during April, and a copy of the entire programme will be printed in the May issue of the journal.

With this issue is enclosed:

A Copy of the Publicity Poster The Competition Rules and Entry Form

Please display the poster if possible, and pass the form to a colleague.

Financial Times Industrial Architecture Award 1979

The Annual Financial Times Industrial Architecture Award went to the St Fergus-North Sea Gas terminal, designed by the Architects Design Group.

Five other entries commended by the assessors included the Industrial Therapy Unit, Long Grove Hospital, Epsom, which was designed by: Harding + Associates.

The award is open to architects and engineers who are concerned with the design of industrial works. The aim of the award is to encourage a better standard of industrial environment.

The Industrial Therapy Unit, Long Grove Hospital, Epsom takes small contracts from local firms which are carried out by handicapped people in what the Financial Times describes as 'the fresh atmosphere of this very sensitively designed "workshop".'

The FT went on to say: 'The building is well sited in relation to existing buildings, the movement of goods, and people is well considered. The structure is unselfconsciously elegant and the services very satisfactorily organised. Altogether a neat, orderly and entirely civilised building with considerable charm.'

Designers: Harding + Associates; Structural Engineers: Alan Marshall & Partners; Services Engineer: Regional Engineer, South West Thames Regional Health Authority; Quantity Surveyor: Regional Engineer, South West Thames Regional Health Authority; Builder: Chapman Lowry & Puttick.

SEE YOU AT THE

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MAY 7th-9th 1980

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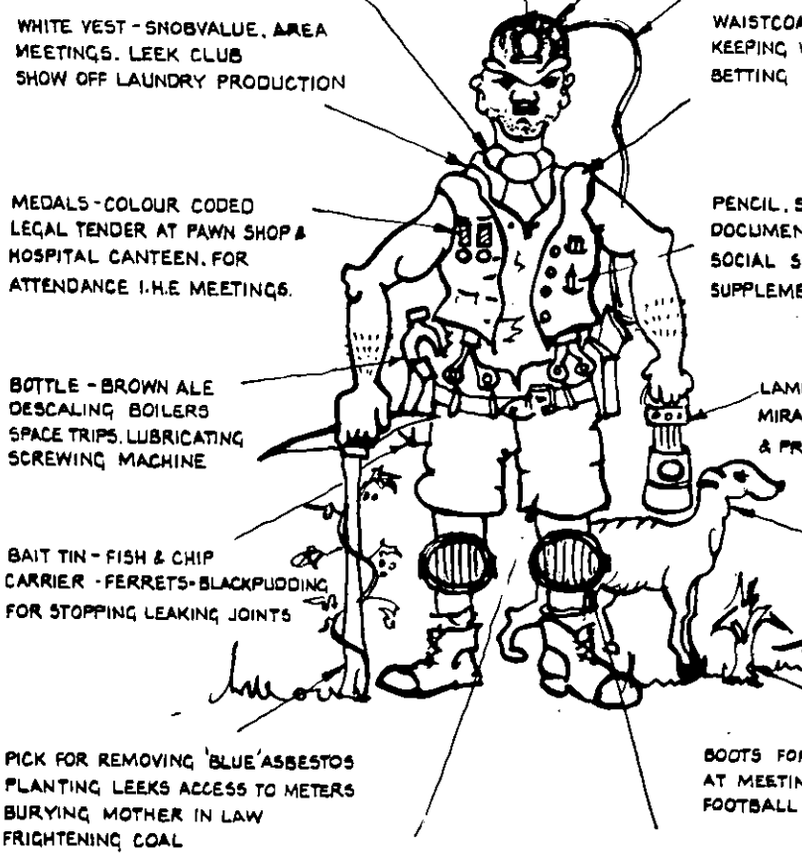


MUFFLER - AUTOMATIC TEMPERATURE CONTROL - KEEPING HOLD OF WHIPPET - NIGHT CALLOUTS.

STANDBY FOR STANDBY GENERATOR FAILURE

TIN HAT - BLACK - FOR SITE MEETING RWO MEETINGS PAYING RENT = FUNERALS.

CABLE - TO SHOW YOU KNOW ALL THERE IS ABOUT ELECTRONICS & COMPUTERS

WHITE VEST - SNOBVALUE, AREA MEETINGS. LEEK CLUB SHOW OFF LAUNDRY PRODUCTION

WAISTCOAT. ENERGY CONSERVATION KEEPING WORKS REQUISITIONS BETTING SLIPS & NP AGREEMENTS

MEDALS - COLOUR CODED LEGAL TENDER AT PAWN SHOP & HOSPITAL CANTEEN. FOR ATTENDANCE I.H.E MEETINGS.

PENCIL. SIGNING TENDER DOCUMENTS. SICK NOTES SOCIAL SECURITY BETTING SLIPS SUPPLEMENTARY COAL ALLOWANCE

BOTTLE - BROWN ALE DESCALING BOILERS SPACE TRIPS. LUBRICATING SCREWING MACHINE

LAMP - FOR RUBBING FOR MIRACLES. WHEN COSTING & PREPARING BUDGETS

BAIT TIN - FISH & CHIP CARRIER - FERRETS - BLACKPUDDING FOR STOPPING LEAKING JOINTS

WHIPPET - PIGEON. BEST FRIEND RATHER SLEEP WITH THAN THE WIFE. USED FOR COMMUNICATIONS ON PHONE FAILURE

LEEKS - PROVING BETTER THAN MAN NEXT DOOR

PICK FOR REMOVING 'BLUE' ASBESTOS PLANTING LEEKS ACCESS TO METERS BURYING MOTHER IN LAW FRIGHTENING COAL

BOOTS FOR MAKING A POINT AT MEETINGS DANCES & FOOTBALL MATCHES.

SHORT TROUSERS VENTING WORKING PARTS SWIMMING HOLIDAY INN

KNEE PADS PRAYING FOR TENDER PRICES FINAL ACCOUNTS SAVING KNEES WHEN COMING HOME FROM C.I.U CLUB

ANY RESEMBLANCE TO NORTHERN HOSPITAL ENGINEERS IS PURELY COINCIDENTAL.

W.N.B. 1980

The March issue featured the first two papers given at the seminar held jointly by the Institute, and the Institute of Building. The remaining two papers are reprinted here, along with a description of the days' events written by the Chairman of the days' proceedings, H. J. Cruickshank CBE, CEng, FIMechE, FIOB who opened and closed the conference.

Patients First

The Economic Development and Care of the Health Service Estate

H. J. CRUICKSHANK CBE CEng FIMechE FIOB

The Conference, held on February 14, devoted a full day to the Health Service Estate in the light of the NHS consultative document, *Patients First*. This brief article is not intended to be a summary of the contributions made by the main speakers nor of all the subjects raised in the lively discussion which followed. It is rather an impression, my impression, of items of significant interest which arose as the 'air cleared'. The two Institutes had shrewdly selected only one aspect of Works Services, namely the care of the Estate, which has been variously valued at between £8.5–£10 billions.

Mr Gordon Brooke (Regional Works Officer Mersey RHA) made some very profound proposals for caring for the Estate over the foreseeable future much more adequately than hitherto. The proposals envisaged that the Secretary of State and the Department would decide overall policies for the development and care of the whole Estate for a span of years.

Change of Direction of Financial Allocation

Without doubt, his proposals are certainly radical and would require a change of direction in current methods of financial allocation, and thereafter control, by DHSS. But they would provide flexibility in the care and development of the Estate at District level, with decisions made in close consultation with the local community and with local patient needs the primary objective. The 'Trustee' role of the RHA would allow them to monitor events.

Mr T. Astorga, Director of Building in the Common Services Agency, Scotland, gave a detailed account of how that Agency operates and, in particular, the Building Division within the Agency. Members were given the opportunity to consider whether a Works Division could operate on a similar basis in England. Probably this could only be viable if two or more regions combined together to set up and use the services of a multi-region agency. One can foresee conflicts of priorities. The major weakness of the CSA Scotland arrangement appears to be that the Building Division had to 'opt out' of the responsibility for a unit known as 'Maintenance and Estate Management Services' because of lack of co-operation from Health Authorities. One was forced to wonder whether this should now be reconsidered in the light of the longer term policies contained in *Patients First*. Conference members did not pursue a discussion on agency principles with enthusiasm.

Talks by Mr R. Walker (Area Works Officer) and Mr P. D. Blackburn (District Works Officer) expressed in considerable detail their personal views on how Works Officers' duties and responsibilities might operate in the changes outlined in the consultative document. It was on these matters that the Conference discussions concentrated.

Restructuring the Works Function

One view from the floor expressed concern that, if we were not careful, Works Organisations might develop which increased the present structure instead of decreasing tiers of management and complex administrative procedures. There was a case for allowing 'an evolutionary process of restructuring the (present) works function to be pursued' with concentration on an improvement of present management arrangements. The current Chairman of the Association of Regional Works Officers stated that there have been some important gains to the NHS affecting works services since 1974 which should be consolidated and now built upon in any future change. Not the least of these was that Works Officers had been appointed to unify the disciplines of Engineering, Architecture, Building and Surveying, in a meaningful way. This must be allowed to continue in the interests of unity, economy, and therefore ultimately of patients. Important elements of waste in the NHS are the present costs of indecision and delay. It was also emphasised that alone amongst the five major disciplines working in the NHS management teams 'works' could, in the true sense of the word be 'managed', ie performance criteria set before the event (ie standards, costs, programme), monitored during the event, and then measured after the event. To maximise the advantages of these charcteristics there is an overwhelming case for 'works' being organised on the basis of executive line management responsibility and operational control. Once the 'client's brief' has been settled, whether for major or small works, the Works Officers should be held fully accountable for performance.

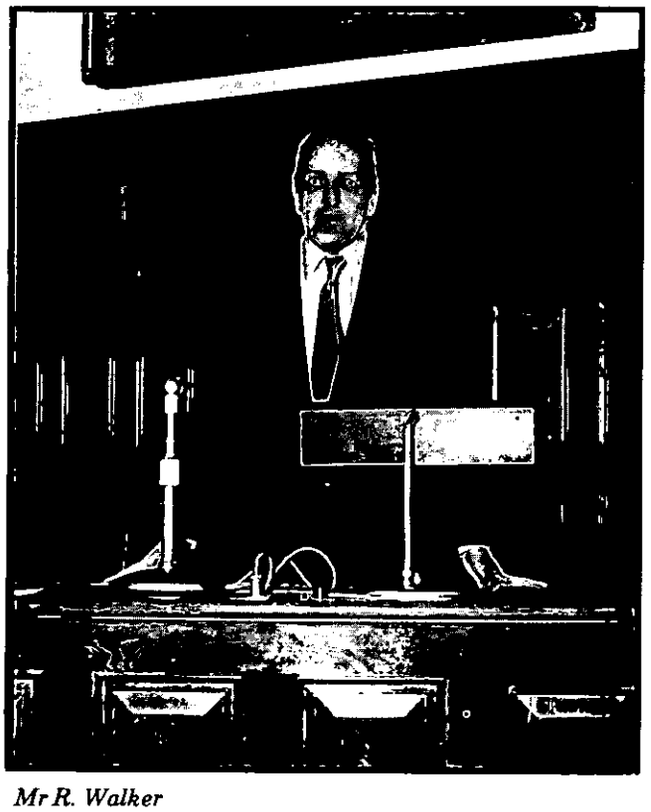
More than one speaker expressed the belief that existing DWOs could cope with the wider responsibilities likely to be placed upon them. Others (some more privately outside the Conference Hall) were concerned that the present levels of mature experience and ability of Works Officers in the Districts might not be 'rounded enough' (compared, for example, with Hospital Administrators) to assess objectively the many facets of

'Patients First' Seminar — the speakers

We are indebted to Mr R. Doubleday for these photographs, taken at the Institute's joint seminar.

Mr H. J. Cruickshank — Chairman

Mr T. Astorga



Mr R. Walker

Mr P. D. Blackburn

medium and long-term policy making, of which Works services were only a part, albeit, where care of the Estate is concerned, the major part. There could be opportunities here for both Institutes to widen the horizons of development education and training for Senior Works Officers in the NHS.

Mr Hermon asked the Conference to consider whether Works Officers in DHAs should be full members of the DMT. This was thought to be necessary. However, merely upgrading existing personnel could not, overnight, produce Officers of wider and more rounded experience for the new posts. There is time, however, for selected Officers to be given, perhaps over the next two years, what industry refers to as courses in 'executive development'.

The Conference appeared to agree unanimously that Works Officers of all disciplines, and at all levels, needed to bring a unified approach to their comments on new works policies arising from the consultative document. Is this too much to hope for? A unified approach to policy does not necessarily mean uniform delegations and uniform procedures within all Regions. General solutions to common problems could be implemented through differential delegations and treatments compatible with the different social and geographical characteristics of each Region. This would allow for closer local attention to be given to the central theme of the consultative document, namely "... a profound belief that the needs of patients must be paramount".

The Working of a Common Services Agency and, in Particular, a Building Division

T. D. W. ASTORGA DA DipTP FRIBA FRIAS FIOB
Director, Building Division of the Common Services Agency, Scottish Health Service

Common Services Agency Functions

Services provided by CSA Scotland

The Common Services Agency was constituted to provide certain specialist services on behalf of the Secretary of State. These functions which are discharged by various Divisions of the Agency, include Headquarters, Building, Communicable Diseases, Dental Estimates, Health Education, Information Services Legal, Manpower, Supplies, Prescription Pricing, Scottish Ambulance Service, Scottish Blood Transfusion Service, Scottish Health Service Centre and the Scottish Health Service School of Catering.

In addition to the above Divisions of the Agency there are certain specialist advisory services such as Domestic, Laundry and Catering.

Scotland:
Fourteen divisions, plus several sections, providing all those services which are deemed to be *commonly* required by all the 15 Health Boards and the Scottish Home & Health Department.

What you first have to decide is what services are required by the District Health Authorities on a common basis? (Region/Nationally).

As works officers in Regions, Areas or Districts what are you really thinking of:

possibly a Common **Works** *Agency for each Region?*

Combined with that possibly other services with a close affinity — Supplies, Legal (Contract Law, arbitration etc).

Perhaps if I firstly outline the structure of the CSA in Scotland and the working of the Building Division therein.

Secondly that I then highlight the areas of advantage and disadvantage and the major factors which I believe you will have to take into account if it was considered that an Agency service was to be set up, either solely for Works or for other additional Common Services.

You need time to think and agree with all concerned how any revised structure will work — without a great degree of agreement and acknowledgement of relationships, interface and procedures you will get nowhere.

Scotland

In 1970 when the NHS reorganisation had been accepted in principle, Scotland set up a series of Specialist Committees, consisting of senior Civil Servants and Senior NHS officers, to look at the requirements relative to various specialities and disciplines — administration, medical (with various sub-groups to look at specialities etc), nursing, building (using that term in its broadest context of building procurement), financing. Unlike England, Management Consultants were not used.

As far as the proposed structure for a Building Division — I was invited to chair a working party of senior Civil Servants consisting of administrator, doctor, nurse, architect, engineer and quantity surveyor, and my Committee which sat for two years, submitted a report recommending the structure for a Building Division and defining its functions and relationships to the rest of the revised NHS, and specifically its duties and interface with the 15 Health Boards, the Scottish Home and Health Department, and the Scottish Development Department.

This Committee had the opportunity of giving their views of the

ideal structure as we saw it.

In the light of a firmer definition of the type of structure which would emerge in Scotland, certain amendments to our original philosophy had to be made. A works structure had to emerge which would provide the Service required by the 15 Area Health Boards which were to be set up.

I think these are very relevant points for your own considerations later today. You can consider an ideal as you see it as works officers, but you are a service to the NHS and may well require rethinking in the light of demand. "Ideal can be the enemy of the good".

The Building Division through the Agency inherited all works staff from the five Regional Hospital Boards in Scotland. It was a political decision to retain the five centres of Inverness, Aberdeen, Dundee, Edinburgh and Glasgow and indeed it was the Secretary of State who decreed that the Headquarters of the Building Division should be in Glasgow, despite the HQ of the Agency and the majority of the remaining Divisions being within the one building in Edinburgh.

The relationship of the Divisions to the Agency as a whole are that the Directors are directly accountable to the Management Committee of the Agency, which consists of a Chairman, appointed by the Secretary of State, together with seven members nominated by Area Health Boards, including four officers ie, Doctor (CAMO), Nurse (CANO), Administrator (Secretary) and Treasurer representatives and five Civil Servants, two Admin, one Doctor, one Nurse. (No building professional).

Building Division is managed on a Functional Management basis — open posts.

Local Offices — SPO(W) open posts.

Para 15, page 8: It is doubtful whether a 'team' can be accountable to a 'team'. It would seem better in these circumstances to establish personal accountability.

Local Offices look after Ordinary Capital Programme, Large OCP and Health Centres, and have an interface with specific Area Health Boards.

The Way the Building Division has Developed

The ideal as recommended was that the Division should deliver buildings to Health Boards, following agreement by the Scottish Home and Health Department and the specific boards on the case of need, content and specialities.

To do so we required not only works, professional, and technical staff, but medical, nursing and administrative functional planners. Together with general administrative, clerical, secretarial and typing back up — which would come from, and does come from, the Secretary, CSA.

We envisaged that the Agency Treasurer would be the paymaster for honouring certificates etc.

Having all these specialists, it was assumed that they would have sufficient collective knowledge to ensure that correctly planned buildings were delivered and appropriate consultation could take place with particular specialists in the case of sophisticated planning requirements.

We continually "reinvent the wheel" through demand of Health Boards, who are probably looking at a specific type of development for the first and possibly only time.

I still believe this to be the correct approach.

The results were that:

Health Boards became the Client Body and Paymaster.

Administrative planners remained in Health Boards.

Building Divisions were to provide works resources and medical and nursing planning advice in respect of all capital development in excess of £100,000 (or £50,000 engineering). (Now £150,000 or £75,000 respectively).

A Scottish Health Building Code defined relationships in planning and responsibilities.

Two categories of Capital Development. Major (over £250,000 at the time — now £1m). *Central Planning Council:* Split in capital programme into (a) Ordinary Capital Programme, (b) Major Capital Programme.

(a) *Ordinary Capital Programme* — up to £1m — Health Boards determine their own programmes.

(b) *Major Capital Programme* — in excess of £1m.

Recommendation for private sector design teams (Form 76/10).

Precise relationships were allowed to emerge.

Planning and development of schemes delegated to Project Teams:

Administrator (Health Board)	
Architect	
Engineer	Building
Quantity Surveyor	Division
Doctor	
Nurse	

Maintenance the responsibility of Health Boards with advice from Building Division.

Land and property advice from Building Division/Legal Division on those matters that require expertise; the Client completes the transaction.

Disadvantages

Certainly in early days Health Boards found difficulty in appreciating building matters — certainly with no professional design staff advice, despite being the Client Body.

The loss of experimental administrative planners at reorganisation was a great disadvantage to the Health Boards, and indeed the Division.

Difficulty in appreciating the need for a Building Code and the need to maintain standards — "Building Division acting as Judge and Jury" — the Department's Policy of allowing relationships to emerge.

A disadvantage that has ensued relates to Services Planning. As an Agency we are not involved in a Health Board's planning policies and thinking unless invited to be involved. Even then it is only on specific items, and we are not involved in total discussions. We miss something. So does the Health Board.

If there was any fault at the outset of reorganisation, it was an assumption that Health Boards and their Districts fully understood the role they were expected to play, and the role the Division had to play in health building procurement. Often accusations were made in ignorance.

Two standards have now emerged.

(CSA/Department standards (Building Code).

Unilateral planning by Health Boards.

Allowing relationships to emerge meant new relationships and a suspicion of each other. There was a need for a two year gestation period, to learn new interface, relationships and standards.

Maintenance — Health Boards reluctant to have any interference from Building Division or to accept advice.

Is stock being well maintained?

Involvement in capital by some Health Boards a false economy. Quick, cheap, unorthodox.

Is it to the detriment of maintenance?

Criticism

The division dictates priorities due to its resources — and is responsible for delays.

Advantages of a Building Division

Managed by works professionals and medical and nursing advisers on Functional Management basis.

Own budget to run Division — management accountancy advice as required. Director accountable to Management Committee. Other specialities readily available such as: Supplies Division, Legal Division, Management Education and Training Division, O & M — services, Management Accountancy service, Domestic Supervisory advice and Laundries etc.

A very close interface with SHHD/SDD which is essential to ensure a correct interpretation of national policy.

All expertise in one Division (except Admin Planners). A standard approach, and standards can be maintained, across Scotland.

Director accountable within Division but the Accounting Officer remains Secretary, SHHD and Permanent Under Secretary of State (Sir Wm Kerr Fraser). Secretary of State for Scotland, is the Cabinet Minister accountable to Parliament and therefore will always seek advice from his own advisers.

This is confirmed for England in Para 6 on Page 5 of the Consultative Document.

Management Relationships within Division

Standardisation of knowledge and methods of working.

Director meets management team every month

Director meets management team plus Senior Professional Officers (Works) every two months

Assistant Director (Health Board Executive and Advisory Services meets SPO(W)s every month, or more often if necessary)

Assistant Directors/Chief Officers hold quarterly meetings with Divisional Officers to define professional matters of policy and working

SPO(W)s meet with their own management team of Divisional Officers and their staff.

There are certain areas which I would like to highlight which I believe are of specific importance for works staff to consider at this Symposium.

Page 2 Para 5. Page 18 Para 38. Page 19 Para 40.

All three paragraphs indicate a withdrawal of the Region from its original role.

The Need to Stand Back

This poses such questions as:

Will the District Health Authority become the Client Body and Paymaster for certificate payments etc, and for case of need etc?

Will the District have its own Capital Programme? Ordinary or day to day schemes.

Will it administer the Capital Programme? Central or major schemes.

In the light of decisions on the above, what relationship and structure is to emerge?

Page 3 Para 8 — Regions role may change

Page 6 Para 8, Page 9 Para 16, Page 15 Para 29, Regions responsible for effecting change and review of structure.

If the Regions are to be responsible for effecting change and for reviewing the structure the role of works organisations must be specific:

Type of works organisation?
Regional Works Agency?
Must be specific — how many design offices required?
Will there be branch, or local offices?
How will they relate to Districts if or if not the latter are the Client Body? (Code).
Specific code required if a national pattern is to be maintained. (14 Regions).
How do you maintain standards on a National Basis? (14 Regions).
Standard methods of working and cost control — cost limits etc.

The questions need to be answered.

Region/Agency/District Code of Working
Departmental Philosophy
Standards
Costs
Method of delivering buildings.

Degree of Departmental involvement Responsibility at
Departmental level
Region/Agency level
District level

Who is to provide specialist planning advice relating to building procurement?

Where will it be centred?	*Works Medical Nursing Administrative*	*Precise Role of Works Organisation*

Will there continue to be a management relationship between works at Region/Agency and District level?

Branch offices ie, original area offices Page 8 Para 15 "Team within a team"

How will a design office at Region/Agency be financed? Will it charge for its services?

Ideal in Principle expensive in practice. Recording time/labour resources. Accountants and administrative back-up required. You either do it properly or not at all.

Will it have adequate administrative, clerical, secretarial and typing staff? Particularly if it becomes detached.

Accountable officer for running works organisation and to whom accountable.

The New Districts

Page 7 Para 12. Page 13 Para 24.

Will they have any functional planning expertise or any real knowledge of the planning function in relation to building procurement?

What will the policy be for the maintenance of their Estate?

If the above points are not clarified at the outset then you will encounter: differing opinions and structures; entrenched positions at District/Region; and relationships will emerge and methods of working will differ throughout the country; does the Department wish to see this?

The Department — will need to look at the following and must ensure that policy is clear and can be upheld.

The Client Body may seek different answer from Department if the advice of the design office is not liked. There must be a close and acknowledged relationship.

Maintenance and Management of the Estate—whatever pattern eventually emerges, either the Department unilaterally or with the assistance of Regions or Agencies — will require a total knowledge of the Estate. This will also require the co-operation of Districts.

Ideally I consider all works officers should be within one organisation, with those involved in maintenance being the representatives in the field.

Summary

Works officers must speak with one voice and have a united viewpoint in terms of structure required.

Page 12 Para 22(b) need to know structures elsewhere.

The emergence of 14 to 200 differing relationships and structures, is not going to benefit the Health Service if there is not a defined policy for maintaining standards.

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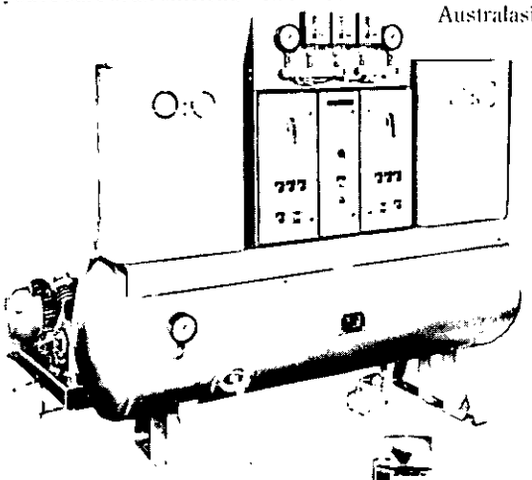

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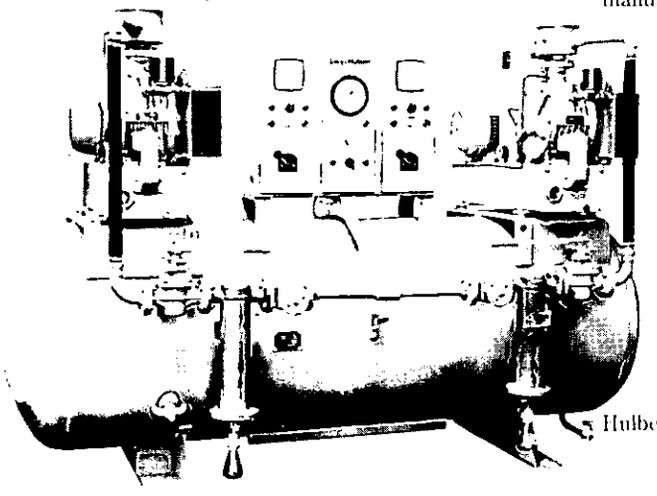

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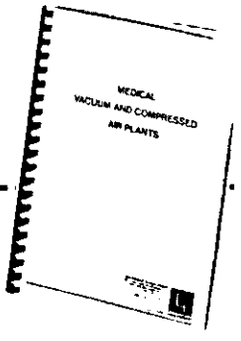

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Patients First

The Viability of the New Authorities in Estate Management

R. WALKER ARIBA *Area Works Officer, Hampshire AHA(T)*

I propose to start with an extract from a book by A. A. Milne. It may be familiar to some of you: "It's a remarkable thing" said Eeyore "It is my house and I built it where I said I did, so the wind must have blown it here. And the wind blew it right over the wood, and blew it down here, and here it is as good as ever. In fact, better in places."

"Much better" said Pooh.

"It just shows what can be done by taking a little trouble" said Eeyore "Do you see, Pooh? Brains first and then hard work. Look at it! That's the way to build a house."

You may wonder why I am quoting A. A. Milne and this passage in particular. I suppose it is because in some way Area Works Officers must feel a little like Eeyore. Over the last five years we have carefully built our house and now find that it isn't there anymore. But maybe the wind of change will be no bad thing and we will find, like Eeyore, that it is "as good as ever. In fact better in places." This time, however, it must be a joint effort with Region and the Districts, if we are to succeed. We should, after all, be providing a total Works Service, albeit from a number of different locations and with different emphases.

Since 1974 a tremendous amount of expertise has been built up in the operation and maintenance of the Estate. A level of expertise which I would suggest was generally not there in the days prior to 1974. This expertise is largely divided between District and Area. Whilst the District share will continue to develop, given a continued independence for District Works Departments, the future development at Area is seriously threatened. We are therefore faced with the problem of ensuring that nothing is lost and that those people who ventured into the then new fields created in 1974 are not penalised for having had the courage and tenacity to tackle a new job and, in the vast majority of cases, make a success of it.

How, therefore, can we deal with the problems brought about by re-structuring? How can we ensure the future growth and success of Works as a positive entity in the NHS?

I would suggest that first we accept, and get others to appreciate, that we are talking about Estate Management Services and not Works in the narrow concept it is still thought of by many in the NHS, despite the changes made in 1974. Secondly, by recognising that Estate Management Services embraces both Region and District. We must get away from our fragmented past to a consolidated future. This does not necessarily mean a single organisation such as a Common Services Agency. I believe that there is an alternative solution, which can achieve the end which we desire, achieve it with minimum disruption and provide a framework upon which we can develop.

The proposal may not be acceptable to you all. In fact I would be surprised if it was. But the intention today is to stimulate debate, which is one reason why I am offering an alternative.

It would seem to me, and to very many of us in Wessex, that we should reduce disruption at District, the operational level, to an absolute minimum. We must continue to provide a satisfactory service despite re-structuring. The District Works Department must therefore continue. It must, however, do this in a more independent role and the District Works Officer must assume something of the mantle of the Area Works Officer. He must be a Chief Officer of the new District Authority, with rights of access to the Team of Officers and the Authority. He must be seen as the District's professional adviser on all Estate matters. This will make additional demands on the District Works Officer and on his second in line Officers.

He will, however, have to do this without much of the professional support which the AWO currently provides, because, in my view, it will not be possible, either economically or in manpower terms to inject into each District in multi-district Areas, the level of professional expertise at present enjoyed by District and Area combined.

How then should this problem be resolved? The DWO cannot be expected to do without this support. This brings me straight to the problem of the Area tier.

The re-organisation of 1974 created at the operational level a pool of expertise which in many places had not existed under the old HMC/ Region System. Some of this expertise found its way into senior management level at District, and the remainder into the newly founded Areas. The Area Works Department was created from very little in the way of "how and why". It had to develop its own identity, and it did this in a variety of ways. Irrespective of the way in which they developed, the Areas have by and large created something which was lacking under the old system, and the staff at Area have become experts in the field of Estate Management. I would suggest that this hard won professional approach — something new in the NHS — must not be lost in any form of re-structuring. Somewhere within the new organisation must be a professional and technical support and advisory service for the Districts. This service must be sympathetic to the needs and problems of the Districts, and must not be allowed to get bogged down in the long term capital planning machinery and approach, which are a part of present day Regional Works Divisions. The existing Area tier can provide this service. It has been doing so for five years. It may need re-modelling and supplementing, but the essential core is there.

The Common Services Agency could include such a service or, the Region could provide this service. Assuming that the Common Services Agency approach were rejected because of the extent to which re-structuring would be necessary, I would suggest to you two alternatives:

The first, and more attractive, would be a situation where the

present District Works Departments had their own independent identity within the new District Health Authorities, together with the creation of a Department at Region to undertake Estate Management and the support for the District Works Departments. Such a process of change could be very simply undertaken. The new Department would be essentially outposted. This would bring its staff into closer contact with the Districts and divorce its main activities from the other main concern of the Regional Works Division, namely the major Capital programme.

The outposting could be within identified Districts. In Wessex, with a possible ten District Health Authorities, two outpost locations would probably be adequate. The number of locations would depend on local circumstances and geography. In addition to the present Area functions would be a greater range of Capital Works, probably up to and including Health Centres. This scale of work is already done in some Areas. There would also be the possibility of giving greater support to the Districts in carrying out maintenance surveys and maintenance planning. In fact, the range of services in Estate Management provided by the Regional Department could be wide. The criteria being economics, and the particular needs of the Districts. I would see the leaders of Groups of this kind working very closely with District Works Officers in the provision of services. Such Departments would also provide a new dimension at Region where, from my own experience, there is at present a lack of understanding of some of the problems facing Districts where the delivery of major capital work is concerned.

Alternatively, the same service could be provided from the Centre. This would depend on a number of factors: the geography of the Region; the availability of accommodation; economy of working; and the best utilisation of existing resources.

Either way, the service should be provided under the banner of an additional Department, working in parallel with the Regional Architect/Engineer and Quantity Surveyor. The new Department would draw some services from other Departments, just as it might absorb some of their current fringe activities which are directly related to the day to day management of the Estate.

It has been suggested that the whole of the current Area workload could be undertaken by existing Regional Departments. I do not believe in this. It indicates a lack of awareness of the size of the problem. This is understandable, as the normal interface between Region and Area is on the subject of capital works.

In 1979 Working Group No. 1 of the Advisory Group on Estate Management published a report on its findings. This set out not only the Strategic and Planning roles of the Area, but also identified the other tasks, which an Area Works Department, together with the Districts, should be undertaking. The extent to which all these tasks are met varies considerably from Area to Area. Nonetheless, all the tasks should be on going, and any new structuring should take account of the need to meet the demand.

A further consideration is the future of those aspects of Area work which are done often independently of the Districts. This involves other Area managed services and the future of this work will rest alternately with the future of these services. I am thinking particularly of the Ambulance Service and the Dental Service.

Somewhere, somehow, must be found a means of ensuring that sound professional and technical standards are maintained. The present accountability of the DWO to the AWO allows this to happen. It is possible, because they are in the employ of the same Authority. In the new situation a different, but very positive link, must be established between Region and its Districts. This link must be one of professional association between the RWO and the DWOs. To work, it must be carefully structured, and in the last analysis must depend largely on the personalities of those involved, and the leadership of the RWO.

The old question of capital works will arise. It is common knowledge that some District Works Officers aspire to substantial involvement in this field. This is an aspiration which, in my view, must be resisted. The prime function of the District is, without doubt, operations and maintenance. What then should be the level of minor capital works undertaken by District? It is often all right that some should be done there. Many cost levels have been suggested to me, ranging from £50,000 to £250,000. I think the answer again lies in the Working Group Number report. Appendix 1A sets out a series of time scales for jobs, ranging from £10,000 to £7,000,000. If one accepts that Districts should be preparing work in one financial year, for execution in the next, then you are talking about a two year commitment. This is about as long as a DWO should consider committing resources, bearing in mind the other problems prevailing at District level. Allowing a contingency margin, one is talking about jobs which are capable of execution from Stage 1 to Stage 4B of Capricode in 21 or 22 months. In current financial terms this equates with a job of about £100,000 to £125,000.

There is a further problem of Estate Management which should be resolved as part of our present opportunity to restructure. This is the question of the Estate Terrier and Land and Property transactions. At the moment this is much the province of the Administration. It is a subject closely linked with Estate Records and one requiring a considerable professional/technical input if the job is to be done in a thorough manner. There is considerable scope here for working in a much more effective way with the Administration, to ensure that the professional/technical resources available within Works Departments is fully utilised. Local Authorities, particularly County Councils, learned the sense of this many years ago. Unfortunately, this has not been the case in the NHS, and the subject has been allowed to go by default together with many other aspects of Estate Management. This time we must rectify the fault.

We are, after all, now in the risk business. Certainly, so far as Area staff are concerned. We must therefore consider how we turn that role to the best advantage. We are not alone in this problem, but for the time being we are alone in seeking our salvation. It is important that we first consider structure:

How can this best be modified?
Have we a clear understanding of the problems to be resolved?
Can we be sure that the gain over the past six years is not squandered?

Secondly we must consider the organisation:

How can it be made effective?
How best can the new style District Works Officers provide a Service?
How can the Region provide the right level and style of support to the new Districts?
How can the existing Regional organisation be modified to produce a better total product?

Thirdly, we must look at the people: Are the present District Works management teams the right people for the new job?
Would the existing Area Staffs be best used to stiffen the weak spots in District Management?
How can Area Staffs be absorbed usefully into a Region organisation?
How can existing Region Staffs adapt to the new situation?

The title of this paper is "The Viability of the New Authorities in Estate Management". I believe there is still a lack of understanding outside the present Works Service of what Estate Management really is. Most people still see Works as a sort of two-headed creature; one of which repairs things or keeps them going, and the other which delivers glossy new goodies. Although much has been done to improve the image of Works, we are still very poor at the Public Relations business. We know that Estate Management covers much more. Unfortunately that "much more" impinges upon the territory of the Administrator and, to a lesser extent, the Treasurer. The need of professional advice is there, and it is through this that we must widen the scope of our role, not by taking away from the Administrator all contact with Estate Management. That would build up a resistance and would achieve nothing. We must remember that in the NHS Estate Management heavily overlaps many other disciplines, not least Service Planning. It is therefore important, if we are to assume the proper control of the Estate as Managers, that we identify ourselves with those aspects where professional guidance is necessary and where technical expertise is essential.

By identifying ourselves in this way, we will be able to manage the Estate in a total way in association with the Administration, not in conflict with it.

Any Authority with capital assets running into possibly hundreds of millions of pounds would be very foolish in commercial terms not to employ and listen to sound professional advice. This advice must come through a Works Officer, accountable to an Authority.

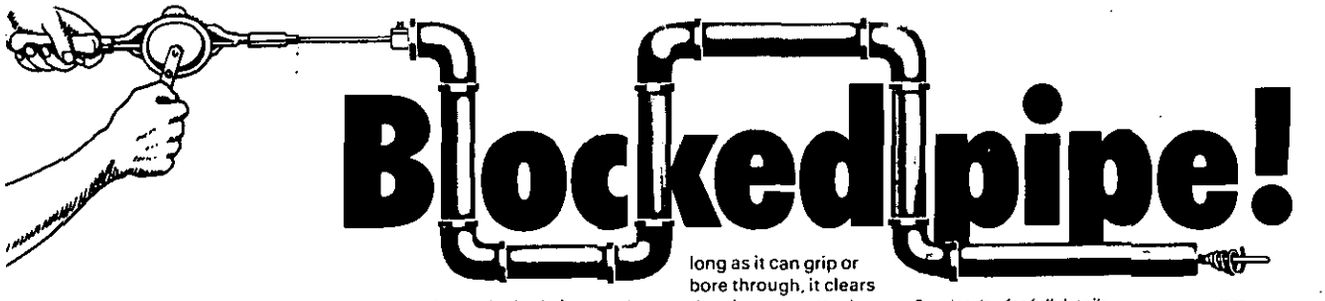
Having said all that, it does place the onus on us of giving sound professional advice. This requires not only experienced managers, but a high level of expertise. The reorganisation of 1974, for a number of very good reasons, did not always ensure this sort of standard. This coming re-structuring must do more to ensure that these standards are available in Senior Managers of the Works Service. If it does not, then a difficult future lies ahead of us, and the viability of Estate management in its fullest sense will be at risk in the new Authorities.

The key to viability in the new Authorities is functional management, and functional budgeting. This, I know, seems contrary to the general concept of the Government Paper "Patients First" but, whilst it may be true for many parts of the Service, I believe that Works or Estate Management Services is a necessary exception to this rule. It is essential, for the proper management of the vast capital asset of the NHS Estate, that sound professional judgement is applied to its maintenance and future development. These judgements cannot be properly implemented if the control of the resources is in the hands of others.

It must be accepted that the pressures brought to bear upon the Administration and others, create a bias towards alteration and improvement work to an extent which takes resources away from maintenance. In such a bias lies a grave danger for the continued safeguarding of a huge capital asset. There is also the danger that the Works budget will continue to be used as a financial regulator in terms of economic stringency. This is a situation which is bound to continue and which we must accept. The worst effects of such policies can be offset by skilful professional management.

Another factor in viable estate management is the depth of involvement in planning at both Region and District levels. The professional estates manager can make a major contribution, not only through his expert knowledge of the Estate as it exists, but also its potential for development. This information must be available in a direct form to Service and Capital planners at an early stage in planning, and not as a convenient afterthought.

At the end of the day, the viability of the new Authorities in Estate Management lies in a unified approach by the Works Service as a whole. The 1974 re-organisation created attitudes between some levels, which have not helped in our attempt to raise the image of Works as a professional service. This must, where it exists, be extinguished. It must be recognised in re-structuring that Region and District provide complementary, not competitive services, and that jointly they are providing a total Estate Management Service. During the past months I have had the opportunity to discuss with Works Officers throughout Wessex, the problems which will face us as a consequence of the Government's initiative. I am heartened by the unity of purpose prevailing amongst the majority I have spoken to. If this is indicative of the country as a whole, then there is a great deal of hope for a fine future for Estate Management in the NHS.



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This paper, and the one that follows, were given at the Institute's highly successful symposium on Health Buildings — Fire Precautions *held on November 14, 1979 and repeated, due to the numbers wishing to attend, on December 5, 1979.*

Mr Greenwood is an Inspector of Fire Services at the Home Office

Health Buildings — Fire Precautions

T. GREENWOOD FIFireE

My task is to talk about the contents of a draft Home Office guide on existing hospitals.

From the onset, I knew there would be difficulties, mainly due to the wide range of duties which were carried out by members of the Institute.

I am conscious that some of you are highly skilled in the technicalities of: fire alarms and detection systems; the provision of fire fighting equipment; emergency lighting systems and the problems associated with the evacuation of patients.

All these things are closely related to the structural fire resistance of hospital buildings, and in particular, the means of escape.

I intend to steer a 'middle course' through the draft guide, and concentrate on means of escape principles and the details, which in my view, are worth stressing.

Background

During the passage of the Fire Precautions Bill, assurance was given that technical guidance would be issued when a designating Order was made. This order became section 1 of the Fire Precautions Act 1971.

When the first designating Order was made, the Home Office issued Guide No 1 — Hotels and Boarding Houses, before the effective date of the Order. Subsequently, when the second designating Order was made for 'places of work', the Home Office issued Guide No 2 for Factories and Offices and No 3 for Shops and Railway Premises. Remember, that in existing hospitals both Guides No 2 and 3 will apply in respect of parts of hospitals which are by definition, a factory, office or shop.

Principles for Drafting

The following principles were adopted in the preparation of the draft guide:

The evaluation of existing guidance.

Current fire prevention practices.

Consultation with the Department of Health and Social Security, the Joint Fire Prevention Committee of the Central Fire Brigades Advisory Council, and ultimately the private sector.

Regard was also had to the Coldharbour fire.

Current Department of Health and Social Security Standards Hospital Design Note No 2; Hospital Technical Memorandum No 11; and Hospital Technical Memorandum No 16.

It must be emphasised that the Draft Guide is a 'Guide' to the Fire Precautions Act 1971, which relates to personal safety, and not for example, to the provision of sprinklers or drenchers. The draft must be regarded as 'A Guide to Reasonable Standards of Uniformity'.

A hospital — as you know — is a very complex building, ranging from the large Teaching Hospitals with buildings dating from before the first World War, to the newly-opened small cottage-type hospitals. In practice disciplines vary — staffing ratios differ and may vary between full and part-timers, often of different nationalities etc. This highlights difficulties of producing uniform guidance. If one adds to this the problem of dealing with hospital patients, of varying degrees of disability you will understand that flexibility has to be the keynote to the application of the Guide to existing hospitals.

Within the Fire Service we have a saying that no two fires are alike. I suggest it is also true in respect of an inspection made by a fire prevention officer — because no two buildings are alike!

The Guide

In the event of a designating Order being made in respect of patient areas of hospitals, a Guide will be published in two parts. Part 1 will deal with Guidance to the Fire Precautions Act 1971 as it applies to hospitals. Part 2 will deal with fire precautions in hospital premises. This will be divided into the Sections as follows:

Introduction.

Definitions.

Structural Precautions (fire resistance etc).

Means of Escape, including emergency lighting.

Fire Warning Systems, including automatic fire detection.

Fire Fighting Equipment.

Staff Training.

An Appendix — dealing with the surface finishes of walls and ceilings.

As it is not possible to deal, in depth with each of these sections, I have chosen those paragraphs in which the principles are highlighted.

Definitions

Are based upon BS 4422 terms with additions or enlargments as necessary.

Areas of high fire risk are those areas which call for a judgement to be made by the inspecting officer.

The nursing section means ward areas.

Surface Linings

Are expressed as Class A walls, or Class O ceilings. These consist of non-combustible surface material (or if bonded to a substrate — the surface material and the substrate). Class 1 has an index less than 12 and sub-index less than 6.

Any new work must comply, in spirit, with the Building Regulations. Without doubt, the inspecting officer will need help to determine the classification of existing surface linings, and judgements will need to be made.

Means of Escape

The Home Office approach was made along generally accepted principles, but because of the nature of hospital buildings two divisions were made. They are Patient areas and Non-patient areas.

These were based upon Protected Areas, which were originally conceived in Design Note No 2, and Fire Prevention Note No 2/64 which relates to Old People's Homes etc. This concept relies on two stages:

i. Horizontal movement out of the affected area, and
ii. If necessary, either horizontal or vertical evacuation of the building.

This gains time for the staff and other helpers to marshal forces to help in the evacuation, and if possible, in the initial attack on the fire.

Protected Areas

The protected area approach relies upon four fundamental points:

Escape in two or more directions.
Distance of travel to a door of another protected area (30 m).
Distance of travel for the second stage to the final exit, or protected stairway. This provides two safeguards:
It limits the distance of the second stage to 60 m and it limits the linking of protected areas indefinitely.

In addition, paragraph 2.1.2.3 limits the number of beds in a protected area to:

Intensive therapy — 20
Other nursing sections — 40

(Again there is a need for flexibility and regard to individual circumstances).

Where it is impracticable, or unreasonable, to provide the fire-resisting sub-division necessary for the adoption of the protected area approach the means of escape will have to be planned on the more usual vertical movement basis and the protected area approach should, in these instances, be disregarded. For example, where recommended standards of fire resistance cannot reasonably be achieved, or where the actual sub-dividing structure presents very difficult problems in day to day running. This also applies to all parts which are not used to accommodate in-patients.

Distance of Travel in Other Areas

These distances are prescribed in two tables. Table A covers escape in more than one direction, and Table B one direction.

Recommendations relating to these, and other matters of escape, are set out in the draft guide under the various stages:

Stage 1 Travel within rooms and nursing sections.
Stage 2 Travel from rooms and nursing sections to a stairway or final exit.
Stage 3 Travel within stairways and to final exits.

Fire Separation

Paragraphs 2.2.1 to 2.2.4 deal with fire separation in areas of high fire risk (kitchens, boiler rooms etc), main stores etc. These are intended to protect the means of escape routes. In operating and intensive-care departments, the one hour standard of fire resistance is primarily designed to protect the patients.

Stairway Separation

All stairways must be enclosed. The ideal arrangement is a lobby approach, but this cannot always be achieved and a judgement is necessary. As a general rule 'the fewer doors to stairways the better'.

Unorthodox Means of Escape

Just a word about 'unorthodox' means of escape eg lifts and chutes. These are not precluded, but careful consideration is needed and a dialogue with the inspecting officer is vital. The cost survey carried out revealed that no lifts were acceptable!

Fastenings on Doors

Paragraph 2.6.17 states that "Wherever possible doors used for means of escape should be kept unlocked . . .". If this cannot be achieved the problem must be resolved by consultation.

Fire/Smoke Spread

It is not detailed in the guide because its issues are complex. It is absolutely vital that safeguards are taken to prevent the spread of fire and smoke affecting the means of escape. In this context, I appeal to those of you who have detailed knowledge of hospital buildings, to think about the weaknesses in the design aspects of ducts, chutes, trunking, voids, cavities, shafts, openings in floors etc. Your knowledge is of tremendous help to the inspecting officer.

Furniture and Fittings

The paragraph dealing with this is not intended to seek 'non-combustible furniture etc'. It is trying to ensure that there are no hazardous situations which are of greater importance in some cases, ie nursing sections where efforts are made to generate a domestic atmosphere. The following documents deal in some detail with the problem:

DHSS booklet Fire Risks associated with Furniture, Furnishings and Textiles. June 1976.
CFBAC Report of the Technical Subcommittee on the Fire Risks of new materials. November 1978.

Fire Warning Systems

Fire warning systems based upon Hospital Technical Memorandum 16, and the guide, refer to BS 1019 which is shortly to be superseded.

Automatic Fire Detection

Whilst the guide covers all types of hospitals, automatic fire detection is specifically required in premises catering for geriatric, mentally ill or young chronically sick patients. In addition, AFD can be installed in other areas if it is considered necessary, particularly to safeguard the patient's means of escape.

Type of Automatic Detection

Generally, if AFD is to be installed for patient areas, it is preferable to chose smoke detectors which give rapid response to flaming fires.

In other areas, particularly those which are not constantly occupied, smoke detectors which respond rapidly to smouldering fires are preferred.

Heat Sensitive Detectors should be used in industrial, laboratory, kitchen and similar area.

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Another paper given at the Institute's Seminar on Fire Precautions in Health Buildings.

Mr Robinson is an Inspector of Fire Services at the Home Office.

The Home Office Approach to Hospitals and the Fire Precautions Act 1971

P. ROBINSON FIFireE

Introduction

In thinking about the title of this piece it came to me that I could express it in just two words — 'with reluctance' — but, on second thoughts I felt that I should not be allowed to get away with it that easy.

So I should like to outline how we have come to the present situation, and enter into the world of fortune telling by exploring what the future has in store.

The Philosophy of Fire Precautions Legislation

There are over thirty statutes in the UK which contain fire protection provisions of one sort or another. They all have one thing in common. They are directed at the protection of life, as distinct from the protection of property. But of course the measures required for the protection of life often have the incidental effect, a spin off as it were of protecting property, by preventing or restricting the spread of smoke and fire, both within a premises and from one premises to another. That philosophy is unlikely to change, unless and until it is demonstrated that property losses from fire are making unacceptable demands on our national economy. We may well soon be reaching this situation if losses continue to rise as they are now — to well over £300 million per year.

New and Existing Buildings

This philosophy is common to the control of both new and existing buildings, although as you are well aware they are governed by different types of statutory provision.

The great advantage in dealing with a new building is that, to begin with it only exists on paper. Therefore it is perfectly feasible to say that certain common provisions shall, in the interests of the safety of life from fire, be applied in its construction.

Now, in the case of existing buildings and hospitals in particular, it is far from easy to achieve satisfactory standards of fire precautions, a problem with which you will be very familiar.

We have in this country some 3,000 hospitals and nursing homes, ranging from modern teaching hospitals to Victorian infirmaries — all built to a wide variety of designs and standards. The preparation of standards of fire precautions which apply in varying measure to all these widely differing buildings, differing in age, construction, layout, size and use, is extremely difficult. You will appreciate therefore that a great deal of heart searching discussion has taken place, and is indeed still in progress, between the Home Office, DHSS and other interested organisations, in an effort to make the guidance as practical and effective as possible.

The Fire Precautions Act 1971

I have already referred to the fact that we have over thirty statutes which include fire precautions in one form or another. These statutes covered a wide range of classes of occupancy and were administered by different authorities, often without fire expertise and without a capacity to look at the fire problems of the premises against the background of fire problems generally. Secondly, new forms of activity may emerge which lie outside the scope of existing controls altogether. Because of this, and in the light of the increasing complexity of fire precautions, it was decided by the Government in 1971 to adopt a new basis of approach.

We now have one piece of legislation designed to protect life in the event of fire in existing buildings over a wide range of activities — The Fire Precautions Act 1971. Included in the scope is 'use as, or as part of, an institution providing treatment or care', and will therefore cover hospitals.

The Act is administered throughout England, Scotland and Wales primarily by 63 fire authorities which are either County Councils or Metropolitan Authorities. These authorities, almost without exception use the fire brigade, a department of the authority, to carry out the inspection work.

In the first place the Act provides the power for a fire authority to go to court for an order to prohibit or restrict the use of premises having an unduly serious fire risk to life until that risk has been reduced to reasonable proportions. That power is already in force and applies to all premises within the scope of the Act. It is, of course, an emergency power for very serious situations where immediate action is necessary.

Then there are two main types of control. The first is activated when an order is made designating a particular class of occupancy. The second makes them subject to control by specific regulations under the Act.

The designating order results in due course to the issue of a fire certificate, tailor-made to each individual premises. A fire certificate is a comprehensive record of the fire precautions finally agreed and completed — as much a protection for the occupier as for the brigade. Once issued it cannot be revised or amended until, and unless, a material change in the premises affecting the

fire certificate has taken place. It can cover means of escape and arrangements for their use, means for giving warning, and means for fighting fires. It may also impose requirements dating from its issue, ensuring that the means of escape are properly maintained and kept free from obstruction, for the training of staff, for the limitation of the number of persons resorting to the premises and for any other precautions which may require to be observed.

Regulations can cover similar things, but on a general basis, and not tailor-made for a premises as is the certificate.

Application to the Crown

The Fire Precautions Act 1971 applies to the Crown. There are a few exemptions eg special hospitals, Broadmoor and Rampton.

Enforcement responsibilities for Crown Premises under the Act lie with the Fire Service Inspectorate of which Mr Greenwood and myself are members.

Since NHS hospitals are Crown premises, it follows therefore that the enforcement of fire precautions under a designating order for hospitals, should one be made, would be the responsibility of the FS Inspectorate.

Before venturing into the considerations of why hospitals, and perhaps what is more important, when and how, I should just like to explain what the FS Inspectorate is, and where it fits into the fire service arena.

The Fire Services Act 1947, which created fire authorities and fire brigades in their present form, provided for the appointment of inspectors for the purpose of obtaining information as to the manner in which fire authorities are performing their functions under the Fire Services Act, and as to technical matters relating to those functions.

Inspectors are appointed by Royal Warrant, and are therefore known as HM Inspectors of Fire Services. Assistant Inspectors are appointed by the Secretary of State. Our relationship with fire brigades is a fatherly one with little or no legal control, but through our annual inspection of each brigade in England and Wales we build up and maintain a close relationship and liaison with fire authorities, Chief Fire Officers and personnel.

By far the largest division of the Inspectorate (23 out of 37) are engaged on fire prevention and fire precaution matters. In 1977, as one result of a transfer of functions from the Department of Employment to the Home Office, the Inspectorate became responsible for the inspection and certification of Crown offices, factories, and shops. It had already begun to deal with a few hotels which were on Crown land.

I have nine Assistant Inspectors who are geographically located and are concerned with the certification of Crown premises. You will readily appreciate that nine men covering England and Wales, plus a small back-up administration here in London, cannot achieve rapid or even reasonable results. However, we are in a climate of economic stringency and cut back, and it is doubtful whether any increase in this staff is likely in the immediate future.

Application of the Fire Precautions Act 1971 to Hospitals

I must first point out that the Fire Precautions Act 1971 already applies to those parts of hospitals which come under the second designating Order, that is to say those parts which can be said to be factories or offices or shops within the meaning of the relevant legislation.

The definitions are firstly those inherent in the Factories Acts and OSR Act. Then, under the terms of the second designating Order, those areas of hospitals which apply are subject to the fire certificate procedure, and some amongst you may already have experienced the effect of this.

To go on to the possible extension of designation to hospitals in the general sense you will recall that, following the major fatality fires at the Shelton Hospital, Shrewsbury in 1968, and at the Coldharbour Hospital, Shelborne in 1972, the Government of the day announced its intention to designate hospitals as soon as practicable, notwithstanding that the great majority are Crown Premises. Since then, discussions have been taking place between the Home Office and the Department of Health and Social Security on the timing and scale of designation and of standards to be applied.

However Ministers agreed that before they took any final decisions they needed to know the nature and distribution of the risk and the likely overall cost of bringing NHS hospitals up to the standard considered appropriate. To obtain this information the two departments agreed to undertake a survey of hospitals in England and Wales. It is obvious that the implications of designation with the work to be done to bring fire precautions up to desired standards are going to be costly. This comes at a time when cuts in expenditure are the order of the day, and is complicated, as always, by the difficulties of sharing out what money there is between all the valid and often vital demands for new medical equipment and so on.

I find it sad looking back over 25 years of fire prevention involvement, much of it with hospitals in various parts of the country, that little was done to steadily improve fire precautions in hospitals over the years since the last war. Had that been the policy and had it been carried out, we should not be in such a difficult situation. However, this is all water under the bridge and we must face up to the present need for decisions.

We are, alas, not in a position to suggest when designation might come. Our respective Ministers are in correspondence, and I really cannot tell which way the decision will fall.

Let us, however, speculate as to what might happen if designation is decided upon. I think that such designation might well be limited to those types of hospital where fires are most likely to occur. It is clear that these are the hospitals for psychiatric and mentally ill patients. Both of the multiple fatality fires occurred in this type of occupancy.

However whilst the overall number of fires in hospitals has steadily increased from 684 in 1968 to over 2,000 in 1977, it is clear from casualty analysis that the majority of both fatal and non-fatal casualties in hospital fires are just single casualty incidents, and in the main the fire confined to the room of origin. We know, of course, from the surveys that there are widely differing degrees of risk situations between hospitals. Some are more of a potential life risk than others.

So if designation did take place as I have already explained, it would be the responsibility of the FS Inspectorate to secure certification. It has been suggested in the past that we may delegate this work to fire brigades, but I fear that in the

present climate of restricted local authority expenditure it is unlikely that we shall be asking them to take on extra responsibility which is not directly their own, particularly central government responsibilities. The task therefore would probably remain with the Inspectorate, and even if we were able to augment our staff to some degree, it would be a small increase. There is little doubt that we should not be in a position to deal with any more than the worst cases for some considerable time. I do not think therefore that you should visualise an immediate all out countrywide assault.

In addition, and very much to the point, is the advantage that it would be easier for us to maintain an even standard, based on the agreed guidance administered with flexibility and understanding. Assistance in difficult cases could fairly easily be forthcoming from the Headquarters Section at Queen Anne's Gate.

Indeed, I can visualise a small panel of both Home Office and DHSS technical staff at senior level, who could assist in achieving a mutually acceptable solution to any really difficult problem.

Conclusions

All this is somewhat conjecture, and will depend on the Ministerial decision as to whether or not designation will take place.

Meanwhile, it is intended to produce the agreed guidance as a working draft without too much delay so that it can be used by health authorities, fire brigades and ourselves alike, and use the money available for fire precautions in as effective manner as possible.

I have, of course, been speculating as to how the fire certification of hospitals could be implemented. I have little doubt that it could be introduced and progressed steadily with common sense and close consultation on priorities, phasing of work and all the other devices to ensure that whatever money is available for fire precautions is spent wisely, and where the need is greatest.

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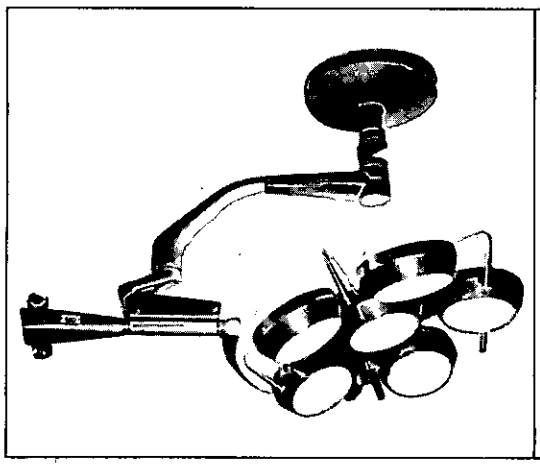

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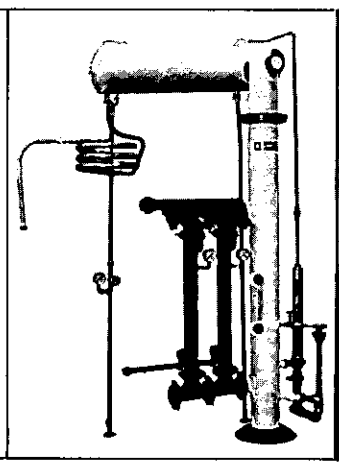

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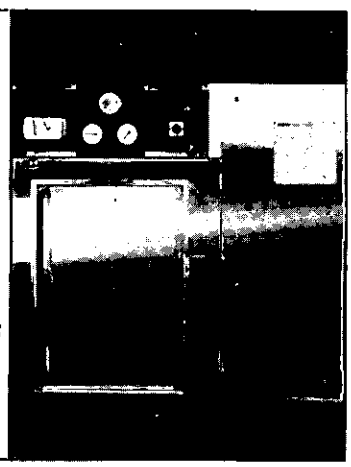


Powerclave Sterilizers.

Previous articles on the Developing Management Effectiveness *Courses (formerly the* Keele Course*) have been contributed by members of the tutorial staff. In order to obtain a different view Mr Hall who was a course member on the 1979 Senior Management Course, has briefly set down his impression and experiences of the course. The courses are now held at the Hospital Engineering Training Centre, at Falfield in Gloucestershire.*

Mr Hall is a Principal Assistant Architect with the Welsh Health Technical Services Organisation, Cardiff. He has been with the Health Service for three years and was formerly in private practice.

Developing Management Effectiveness at Falfield

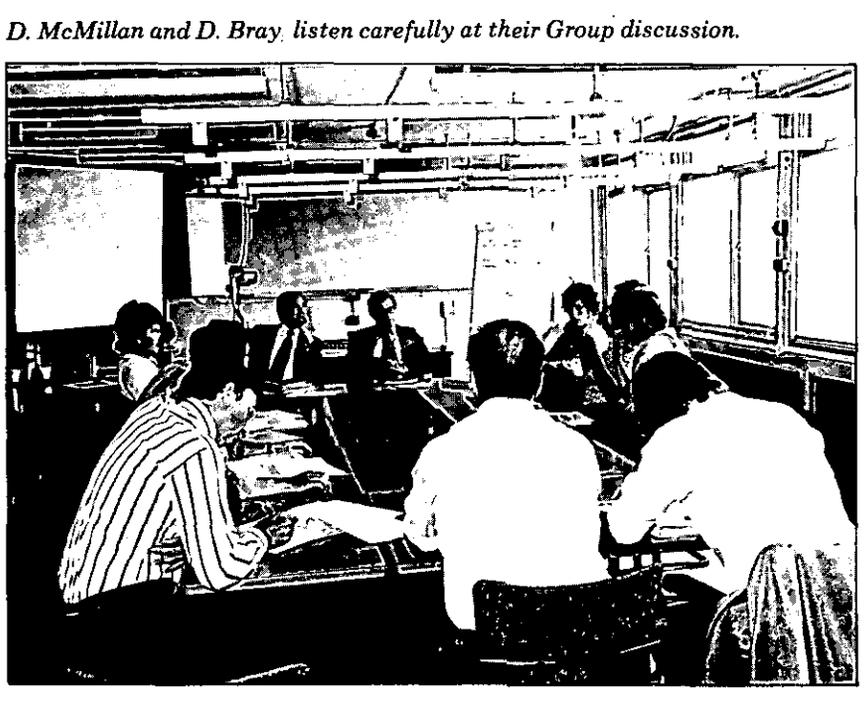
J. R. M. HALL BArch

"*Management is the least known,* and least understood of our basic institutions. There is probably no field of human endeavour where the always tremendous gap between the knowledge and performance of the leaders and the knowledge and performance of the average is wider or more intractable". (Drucker).

The five-day course at Falfield on *Developing Management Effectiveness* concentrates on the problems of management as exhibited in the Works Organisation of the Health Service. The course has, in the past, been aimed at Engineering Works Staff, but recently a leavening of Architects and other from the Building side has added another dimension to the course. So as an Architect with WHTSO, I attended the Senior Management Course at Falfield from September 16–21, 1979.

I arrived on a sunny Sunday afternoon, observing the well-kept lawns, the landscaped grounds, the putting greens, the tennis courts, the few early arrivals lounging about on the grass, the ivy-clad country house, and thought to myself, "This is going to be a piece of cake — I should have brought the old tennis racquet". I was warmly welcomed by Mr Harry Pethen, the Course Administrator, who showed me to my room, which overlooked more beautifully maintained lawns and flower beds. After a quick wash and brush up, I sauntered down for tea and biscuits, and then on to the opening session of the course.

D. McMillan and D. Bray listen carefully at their Group discussion.



This caused a few qualms, because every course speaker seemed to take it all so seriously, but I comforted myself with the thought that they had to put on a bit of a front to start with, and this could soon ease up. But it was not to be. For we all split into groups, and my little group of Mafiosos, clearly recognising me as a born follower and incapable of coherent thought or speech, quite properly elected me Chairman, where I could do the least harm. I bore this blow with reasonable equanimity, until I started to read the course instructions given to us by our Group Tutor. The truth slowly dawned. As I believe, it dawned on quite a few other course members. This was no 'holiday' — this was hard work. And I was going to have to start the session off the following morning at 09.00 hours. Public Speaking so soon? When was the next train home?

The following morning did not go too badly, however, and the purpose of the course began to become considerably clearer. For the subjects of the course are aimed directly at approaching management problems logically and in sequence, and solving them by similar means.

Outward appearances, we were taught, are all too often deceptive, and to be an efficient manager one has to analyse a problem in depth, and to tackle the solution by considering all the facts that are available, to assimilate and understand them, and then, and only then, to come to a rational decision. A cursory, or hasty decision is almost inevitably the wrong decision.

To this end the course concentrates on group working, as opposed to

single person problem solving, to enable the benefits of the exercises to be spread amongst all course members. A wide spectrum of management responsibility in the Health Service was covered, ranging from the analysis of problems to the presentation of reports, with a particularly stimulating series of talks and exercises on Public Speaking.

The course builds up, through the subjects covered, to the high point of the week — the Project, in which groups are given a real-life project based on administrative problems actually experienced at the neighbouring Southmead Hospital, Bristol. Each group has a different problem, and have to analyse it, prepare the appropriate documentation and arrange a mock District Management Team Meeting with another group to discuss it. This exercise was valuable in many respects, but the pressure of time, and the acting ability of those appointed to take the part of, for example, the District Nursing Officer, lacked reality, and it was generally felt that this exercise could well have been extended to be more meaningful, or else altered in favour of a less stylised approach.

Some light relief is introduced into the course, in the shape of a Formal Debate, organised by one of the Groups, on a subject chosen by that Group. A good exercise in Organisation and Public Speaking, but the choice of subject was perhaps not as good as it might have been. Another evening was spent on a panel game modelled on the 'Krypton Factor' called the 'Falfield Factor' woven round subjects connected to Health Service matters but without the concomitant strenuous 'Battle School' test of physical stamina. This was the first time it had been tried, and was a great success.

The members of each group are deliberately chosen to give each group a wide variation in ages, disciplines, skills and regional backgrounds. Thrown together arbitarily for five days to work as a team, the special individual skills — and weaknesses — of each member soon became apparent and were made use of by the group, and by the Course Tutors. One of the interesting by-products of the course was, for me, at any rate, watching the effect the pressure of the course (and it is certainly pressurised) had on individual course members, and on particular groups. Several members tend to become a little larger than life, beavering away and being frightfully efficient and gung-ho!

A few tended to opt out and were to be seen smoking the metaphorical fag behind the metaphorical hedge. And one group ran out of wind completely on the third day, due to two strong conflicting personalities within the group; the 'atmosphere' was almost tangible and the Chairman was forced to use the whip. But generally people came out of their shells, and the shy and introverted were soon to be seen bellowing at full power with apparent supreme confidence at the Public Speaking Tutorials.

Our own group was interesting in that, for the first 48 hours, we were really rather casual about the whole thing, but we suddenly woke up to the fact that we would have to put in some hard work in the evenings, *after* the formal lectures or entertainments had finished, if we were going to achieve anything. And when we did just that, things became easier for us and we appeared to go steaming along. We seemed to work very well as a group, due, no doubt, to the complete lack of effective control by the Chairman.

The Course Organisation is first class. Every lecture discussion and exercise slotted neatly into place (punctuality being a pre-requisite) and every available moment during the day is put to good use. The wealth of expertise and 'know-how' exhibited by the Course Tutors and Organisers, and the help and encouragement they gave the Course Members, were greatly admired and appreciated.

There is no doubt that a great deal of useful information is packed into the five days. But it is very concentrated and is hard work. One has the uneasy feeling that one should keep referring to the course notes from time to time for some months after the course has ended, to refresh one's memory of all the salient points. But there may be a chance of going a second time for a refresher. For it is really very much worth while. And next time I will know the ropes. It really will be a piece of cake. And I *will* take my tennis racquet. Providing they put floodlights on the court so we can play in the only *real* leisure time — between Midnight and Breakfast Time!

The 1980 Courses

Anyone who has attended a previous course would undoubtedly recognise various basic parts of the course.

This is inevitable as certain basic subjects must always form part of management courses. What does change is the approach to these subjects and their presentation.

Added to this there are always additional subjects being introduced as interests arise and also following requests from course members.

The increasing number of course members from the range of professions within the Works Organisation has also caused a reappraisal of the course content in order to reflect the broader approach now required. It has also been considered desirable to augment the tutors' panel to include representatives from the building profession.

Apart from the subjects dealt with as specific items in the various sessions, the programme is designed to develop the more intangible aspects of management such as co-operation with others, team working and team spirit, initiative and drive, consideration and valuation of the other point of view, etc.

The broad objective of the courses remains the same, namely — to assist staff to make their proper contribution to the wider aspects of the Health Service, both in their present and future positions.

Broadly speaking, the courses are split into the following categories:

Middle Management Course — K9
July 13–18, 1980
Third-in-Line Works Staff (newly appointed); Senior Engineers and Senior Building Officers; Engineers and Building Officers; RHA Works Staff up to and including TA1; Foremen with Potential for promotion.

Senior Management Course — K10
October 12–17, 1980
Senior RHA Works Staff up to RE, RA, RQS; Third-in-Line Works Staff at Area and District; Area and District Works Officers; Area and District Engineers and Building Officers; Professional Staff of Consultants.

Course Fee
The course fee for members within the National Health Service is £100, inclusive of meals and accommodation. For those outside the Service the charge is £250 inclusive.

Enquiries
Nominations and enquiries should be made to the Principal, Hospital Engineering Centre, Eastwood Park, Falfield, Wotton-under-Edge, Gloucestershire GL12 8DA. Tel: 045-48 207.

The following article is supplied in the interests of helping those members who may be considering working overseas — especially in developing countries. The author has several years' experience of conditions away from the UK, but since he still works overseas, has asked not to be named.

Working Overseas - a Personal View

The biggest single cause of unhappiness, especially with married couples is accommodation. Be determined to terminate if it is not up to expectations.

Your wife may have the worst of conditions, particularly in Saudi Arabia. Her biggest problem will be boredom. Will she be free to work? Although a shortage of work is most unlikely, especially if she can type, work permits can be very difficult to get especially for young women.

Be very sure, before you leave the UK, that you can get out of the country you intend going to, eg an exit visa is needed to get out of Libya. Do NOT surrender your passport to your employer.

Accept that you will be giving your expertise to nationals above you. That a white skin is not a right of supremacy. That you will need infinite patience, a sense of humour and "eyes in the back of your head" to supervise the minutest detail. Of course you will change things but remember that IBM (no connection with business machines — it means Insha-allah Bokra Mallish or never mind, tomorrow, God willing) has been the way of life for a long time.

Be sure you know the reason for working overseas. Usually it's money.

With all local taxes and expenses paid, other than food and clothing the following league table is the minimum nett salaries comparison with UK gross salaries. Otherwise the question should be — is it worthwhile?

Remember these are nett to gross comparisons. If you are offered a housing allowance will it be adequate? In Libya, rent can swallow half the salary even with government employee's allowances. You will have to pay at least £6,000 pa to rent a flat in the Emirates and more than that elsewhere.

You should be able to save half your salary but don't leave it in the country of origin. Jersey is a good safe place, but will you be free to transfer as much as you want to?

You will leave the five-day working week in UK. Overseas it is forty hours and six days in Government jobs, longer hours for consulting firms and up to sixty for contractors.

Make sure that you understand your tax position at both ends — UK and overseas. For UK taxation and investment the best advice is given in "The Brown Guide" and the Daily Telegraph booklet "Working Abroad". With those two books go to your local bank for advice on both ends, but make sure that you know the facts, many of the expats who fled from Iran got a dreadful shock from the UK taxman.

A lot of nonsense has been written about booze. In several places it is illegal but a blind eye looks at the home brew providing it is not given to Muslims. You can expect punishment if you brew and sell, the booze barons who were flogged will have stashed away a great deal of cash. Many places give expatriates (that's you) a booze licence and also allow club licences, it is often generous but you should know the consequences of giving any to Muslims even through another person.

Location	*UK Salary*	*Comment*
The Emirates	×2	Good.
Kuwait, Oman & similar	×2½	Reasonable.
Mainland Africa & Libya	×3	You might like it.
Saudi & Iraq	×4	You will gloat over the money, but *will it be worth the conditions?*

A lot of advice is often given about Contracts of Employment, but in reality the expatriate has no security and very little redress. The vital condition is a short break clause (one month) on either side.

A good appointment will provide for the following. If your offer does not mention them make sure that you know what the probable cost will be.

Electricity, water and gas. Air conditioners take a lot of current.

Children's education. Local schooling up to 11 is expensive and older children will almost certainly have to stay in UK.

Furniture and household equipment and linen.

Air fare to and from UK for leave and termination. Most labour laws demand that the employer bears the cost of returning expats to the country of recruitment, so make sure you know your rights.

Leave frequency.

Insurance of personal effects as well as yourself.

How long to stay? Two years is a critical period for a young man. If you stay longer will you be able to get back into the competition of UK? What will happen to your children at 11? However long you stay do keep paying your retirement pension contributions. Why not try your own business, there are many engineers who become very wealthy in a few years, of course it is risky but you will need a local (sleeping) partner and such people have capital if nothing else.

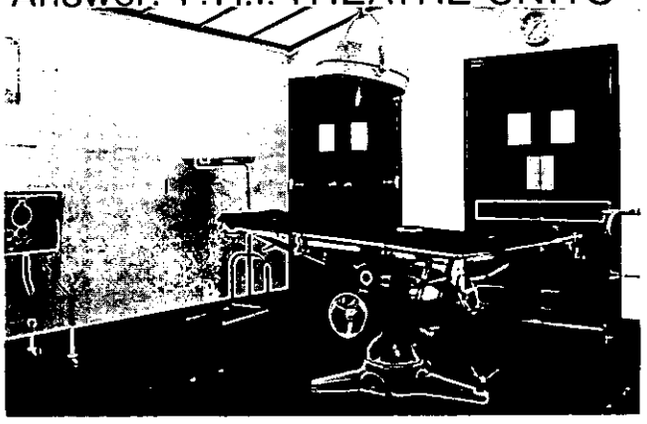
For the older man at the end of his UK career, overseas is a good financial boost but before you commit yourself make sure that you will be given a Work Permit and an Entry Visa (also called a NOC — No Objection Certificate).

After all this advice a fair question would be — would the author do it all again? Emphatically yes, because if nothing-else, "getting sand in my shoes" and "brown knees" has convinced me that England is still the best place to retire.

Accepting all the strikes and rising cost of living many people still regard a British passport as something to cherish, I agree with them.

Theatres closed.. Surgery as usual?

Answer: P.H.I. THEATRE UNITS



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For application form, job description, full list of properties and qualifications required, please write to or telephone the District Personnel Officer, Southern District – Highland Health Board, 14 Ardross Street, Inverness IV3 5NT. Tel No Inverness (0463) 32401 ext 44.

Closing date for receipt of completed applications forms April 28, 1980. Previous applicants should not re-apply.

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Applications and Job Descriptions from: The Area Personnel Department, General Hospital, London Road, Croydon CR9 2RH. Tel: 01-688 7755 ext 29/31.

To place a classified or display advertisement Please contact Barbara Wilby Hospital Engineering 17 St Swithins Lane, London EC4 01-623 2235

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Duties and Responsibilities
The Chief Engineer is the chief works officer and is responsible for all professional and technical advice within the Ministry on matters pertaining to the capital building programme and the maintenance of all health care buildings and engineering services.

His duties include overall management and direction of a workforce of approximately 300 employees including 9 professional engineers of various disciplines.

He is responsible for the supervision of all minor works of construction.

Major works are constructed by the Ministry of Works but the Chief Engineer has a liaison and monitoring responsibility.

Qualifications and Experience
Full professional qualifications are required and a minimum of ten years professional experience, at least five of which must have been at a senior level in a hospital maintenance organisation or a similar organisation of comparable engineering complexity.

Salary
The tax free salary is 13975 Bahrain Dinars per annum including gratuity (current rate of exchange £1 = .820 BD).

Contract Conditions
The contract will be for 24 months. Earned leave accrues at the rate of 3 duty days per month (36 duty days per year). Economy class air fares are paid at the commencement and end of the contract and for a mid term home leave.

Hard furnished accommodation is provided for the officer, his wife and family.

Details of other allowances and conditions will be given to applicants selected for interview.

Applications will be considered from active engineers approaching retirement age but they must be in good health.

Applications
Written applications must be accompanied by a comprehensive curriculum vitae addressed to:

The Director, Health Building Overseas Group, Department of Health and Social Security, Euston Tower, 286 Euston Road, London NW1 3DN.

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RESIDENT ENGINEER

who will be responsible for the efficient functioning of all plant and apparatus and the systematic management of building maintenance in a large modern school complex. To assist in this task, he has control of a maintenance staff.

The successful applicant will have served an engineering apprenticeship and have a wide experience of electrical installation and building maintenance. He/she should be between the ages of 35 and 50.

A generous salary, which will be adjusted to accord with the successful applicant's qualifications and experience, is offered for this appointment; which is pensionable.

A house, free of rent, rates and services (including telephone) is available for the use of the Resident Engineer, and a free lunch is provided during the week at the School.

Applications, with the names and addresses of two referees, to be addressed to the Bursar, at the above address, not later than April 18.

GWYNEDD HEALTH AUTHORITY, N. WALES

ASSISTANT AREA ENGINEER

Applications are invited for this new post at the District General Hospital (Ysbyty Gwynedd), Bangor, North Wales.

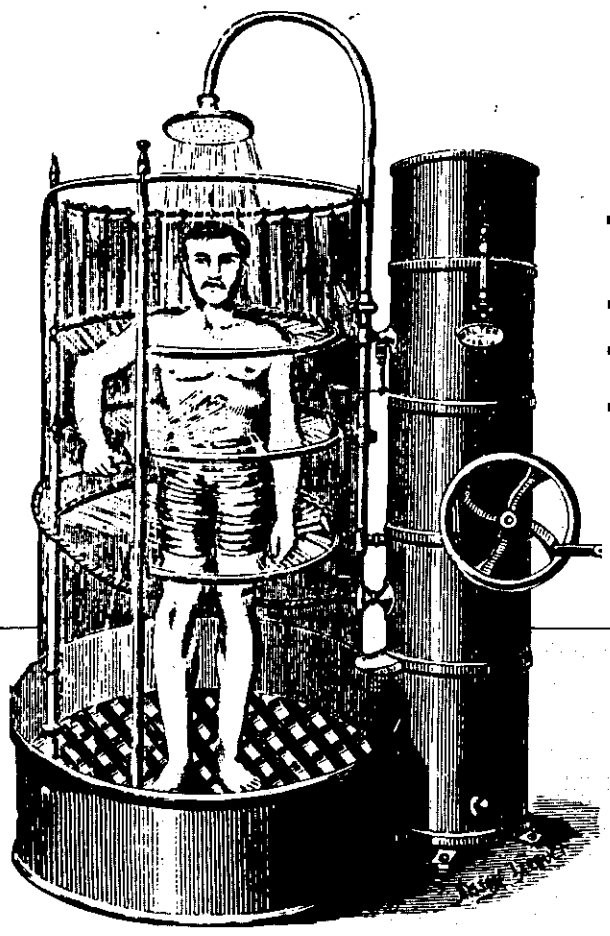
The Assistant Area Engineer will be responsible to the Area Engineer for the engineering maintenance of the above hospital and it is calculated that he/she will be assisted by three engineers.

Applicants should hold HNC Mechanical or Electrical Engineering with Mechanical and Electrical endorsements as well as endorsements in Industrial Administration.

Salary: £6,624 pa rising to 5 annual increments to £7,845 pa (new entrants to the Health Service will commence at the minimum of the scale).

Application forms and job description available from: Area Personnel Officer, Area Offices, Coed Mawr, Bangor, Gwynedd. Information about the post can be obtained from the Area Works Officer. Tel: Caernarfon 4667/8.

Closing date: April 25, 1980



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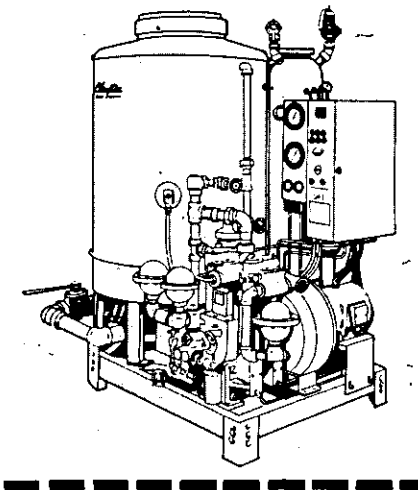

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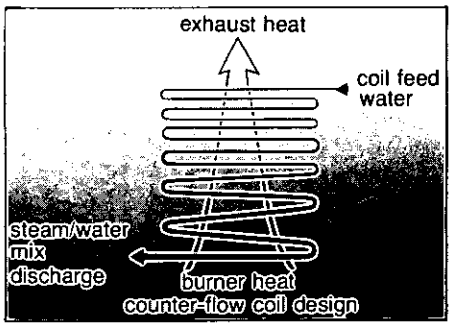

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