

New England HOSPITAL ENGINEERS SOCIETY Newsletter



FEBRUARY 1981

What's In A Title

According to our membership roster, as reported by Ralph Henry, we have approximately 63 distinct job titles amongst 237 names polled within our ranks. Although this doesn't compare with the 22,000 titles listed by the U.S. Department of Labor, it does indicate a trend toward non-standardization in the Hospital Engineering profession. On closer examination our 63 titles actually boil down to just six main categories, as shown in the table below.

	General Services	Plant	Engineering	Maintenance
Administrator	1	1	15	0
Director	23	10	29	29
Superintendent	2	23	2	2
Chief	0	0	36	5
Engineer	1	29	15	4
Manager	0	2	4	4



SPRING SEMINAR

TOPIC: HAZARDOUS WASTE REGULATIONS
TUESDAY 31 MARCH
COPLEY PLAZA BOSTON

The host program coordinators for the 1981 Spring Seminar are the Middlemac Engineer Association. This is a subgroup of Mass. Engineers north of Boston. They decided that the most needed subject to review at this time is that of hazardous waste regulations. These seem to be giving us headaches because we don't know all there is to know about them. Because there are other hospital departments involved in waste handling we gambled on attracting a larger audience than our normal spring seminar whose attendance has run about 125. This time we have the ballroom which seats 200.

Speakers from the Environmental Protection Agency State Departments of Environmental Quality Engineering (DEQE) and the Safety Officer from the Harvard Medical Schools will participate. From the EPA will be Mr. Richard Cavagnero. He is the project officer for hazardous waste notification. Changes in EPA regulations are ongoing and we expect him to bring us the latest information and be able to translate some of the governments hard to understand instructions.

Representing the hospital industry will be William Jordan, Safety Engineer for the Harvard Medical Schools. He is also the secretary for the Harvard Medical School Subcommittee on Hospital Safety. Mr. Jordan is speaking later in the morning to the Mass. Safety Council and we are privileged to have that group share his time so he can bring us the problems he sees from a hospital engineer's point of view. If anyone has a hazardous waste problem it probably isn't any greater than Bill Jordan's at the multiple Harvard complex.

One of the DEQE representatives we have speaking is Jim Coleman for Mass. He is the Director of Hazardous Waste Regulatory Task Force and although the Mass. DEQE has borrowed engineers from other sections to staff this division Jim has mastered the regulations well. He spoke at a seminar in June, 1980 that the Harvard Safety Group sponsored and we are sure that you will find Mr. Coleman's remarks pertinent and helpful.

The printed program didn't contain all the DEQE's because these contacts are ongoing

and we expect to have a representative from each state to speak.

We expect a fine response and hope to insure a more orderly session by having a registration cutoff on 24 March. So make your reservations now if you haven't already. If you know another department head involved pass the program to them and bring them along.

A.S.H.E. NOTES

Financial Analysis Procedures For Hospital Engineers

A new workbook, *Financial Analysis Procedures for Hospital Engineers*, was previewed September 22, 1980 in Mankato, MN during the Annual Meeting of the Twin City Hospital Engineers Association. Designed specifically for hospital engineers, it provides a step-by-step explanation of various methods used to analyze the potential financial benefits of energy conservation projects that require capital outlays.

The preview of the workbook was well received by the engineers in attendance at the Mankato meeting. As a result of this meeting, the workbook is undergoing minor revisions. It is expected to be released in final form early in 1981. The price and HRET order number for this publication have not yet been determined but will appear in a forthcoming edition of *Hospital Energy Strategies*.

1981 Ashe Publications

ASHE publications will appear in a new format beginning January 1, 1981. During the first few weeks of January, each ASHE member will receive:

- An ASHE Binder
- A Set of Tabs
- 1981 ASHE Calendar of Events
- Roster
- Newsletter
- One or more Technical Documents

The newsletter will be published monthly, condensed to 4 pages of timely news and will be accompanied by technical documents which provide in-depth examinations of specific topics. We hope that this new format will allow you to more easily save and refer back to the information ASHE provides.

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President's Corner

Continued Pursuit of a Changing Role

I wish to continue the theme of my previous comments that "our roles are changing and we must change with them" and encourage attendance at the Society's Spring and Fall Seminars as one method of keeping abreast of change. To this point, I would submit two of the Society's objectives which are worthy of specific note:

- To promote and present an educational program for Hospital Engineers.
- To promote a mutual exchange of information and technical assistance among Hospital Engineers.

Both objectives are met in the Society's Annual Rite-of-Spring which is held in Boston in conjunction with the New England Hospital Assembly. It is not by coincidence that our meeting is held in Boston, on Tuesday, of the Assembly Week. It is also not a coincidence, that we have worked hard and long with the Assembly people to demonstrate that we are part of the Assembly. The timing and location of our Spring Seminar is a studied effort to maximize the attendance of our members at both functions. For many years, the desired effect has been achieved and I feel confident that many of our people have benefited by this arrangement and thereby their institutions have benefited by the information gathered at both functions.

I present these thoughts, at this time, because budgetary constraints will have an ever increasing impact upon our ability to attend educational sessions. Decisions will be made based upon the benefits derived from attendance at a specific seminar. The pressures will increase and unless you are convinced of the benefit of attendance at a N.E.H.E.S. Seminar, you may elect not to engage in even a minor skirmish regarding attendance. I submit that the Spring and Fall Seminars of your Society are valuable educational tools which can only assist in the performance of your job; if you attend the Seminars and participate in the exchange of information.

The Seminars are scheduled and notice-posted well in advance each year. In fact, the meetings fall within a very confined range of dates each year to assist our members in scheduling attendance. The subject material is selected as being timely and stimulating. This criteria is employed to encourage a common direction for the conversations that abound at our gatherings.

The meetings encourage, even if for only a little while, the mutual exchange of information which often ranges far and wide from the seminar subject material. The point is, that we gather in a common place and discuss common problems with people who know, understand and appreciate what the other person is saying. In this climate of mutual understanding, much has been accomplished and will continue to be accomplished. Therefore I urge continued attendance at the N.E.H.E.S. Spring and Fall Seminars as valuable investments in your continuing education in your chosen field.

To those who have not attended the Seminars for one reason or another, I extend an invitation to join us at a Seminar and contribute what you can even if only your presence. Take your cue from others, who are participating in their local, state and regional groups. The benefits are there only if you look for them.

DONALD J. KOHLER
President

Pre Plan Construction Interference

Last fall we installed two 6 inch welded steel chilled water lines a distance of about 175' through the ground floor of the hospital. They passed above two major corridor intersections, the Day Care waiting room and O.R. nurses' locker room. This degree of disruption could have had a severe impact on hospital operations and employee morale. It didn't. I believe the reason why was the great care taken to involve everyone effected by this work so they could understand the purpose for the work and the urgency in maximum coordination between the contractor and each department. We had two posters put in the corridors, one of which is shown below. These helped keep the "bottom line" in everyone's mind — that expensive and inconvenient as this work was, it would finally save the hospital money and help lower our dependence upon imported fuel. Our poster was made by a student in our X-ray dept. whose talent was observed and well utilized.

DAVID HATHAWAY



Clinical Engineering

An Overview

The current concept in large and small hospitals is to establish clinical engineering programs. Clinical Engineering, which sounds both impressive and expensive is simply the process of effectively applying technology to the solution of clinical problems. Since most problems in a hospital relate to the patient and to patient care, the appropriateness of a clinical engineering program is easily justified. In all applications of this concept, the program is tailored specifically to meet the needs of the hospital and will usually consist of a composite of technical capabilities. The clinical engineering program will be implemented by a nucleus group of full time and shared professionals supported by a administrative and clerical staff.

Some advantages of the group is in its ability to establish and meet the following goals:

Seek methods to provide improved patient care by review and screening of new technologies.

Determine priorities and protocol for maintaining effectiveness and productivity.

Resolve methods and determine the adequacy of the preventive maintenance and repair effort.

Monitor and determine the need for training programs directed to equipment users and maintenance workers.

Establish internship programs with local schools as a means of developing trained technical personnel and of reducing overall operating costs.

Once operational, the clinical engineering group is capable of accepting responsibilities in many broad areas, some of which are listed below.

1. Hazard Control
 - Electrical
 - Shock, Fire Source
 - Mechanical
 - Mobility devices, Architectural Barriers
 - Traffic Patterns
 - Environmental
 - Waste Disposal, Noise, Utilities,
 - Building Safety
 - Biological
 - Infection Control, Sterilization

Radiation
Diagnostic, Nuclear, Therapeutic,
Waste Disposal

2. Equipment Control
 - An institutional effort to procure, manage, utilize and maintain equipment in the health care delivery system.
 - Inventory Control
 - Cost Control
3. Equipment Acquisition
 - Clinical Requirements
 - Surveys and evaluation of equipment, cost and operation
 - Quality Assurance and system testing
4. Clinical Education
 - Clinical Procedures
 - Continuing Education Programs
 - In-Service Training
 - Internship Training
5. Quality Assurance and Program Improvements
6. Legal Liabilities

A typical staff arrangement for the clinical engineering group is shown below.

The three major divisions within the clinical engineering organization are:

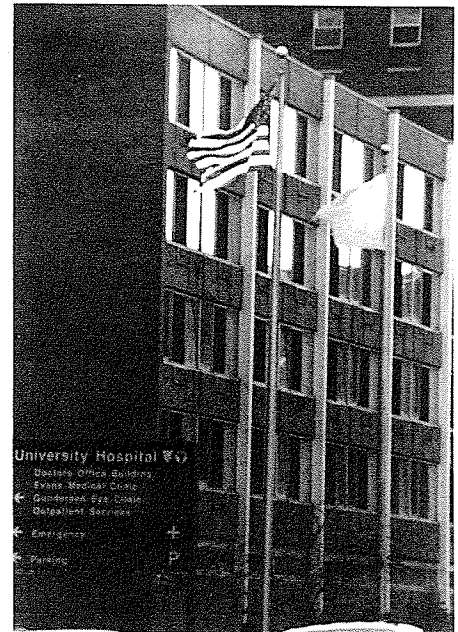
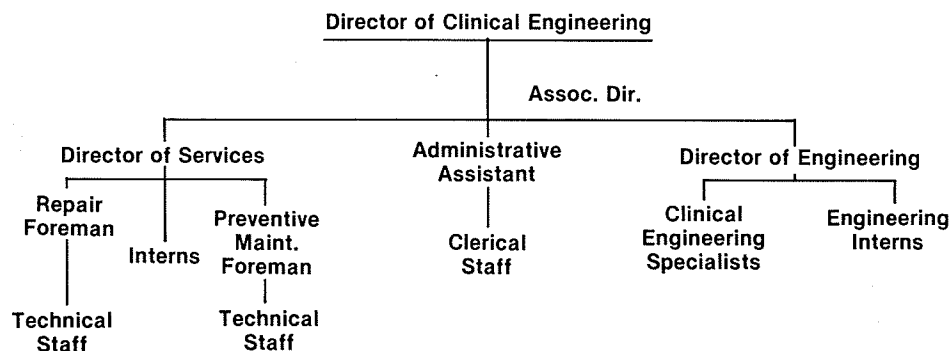
Service and Maintenance Section — handles all tasks once equipment has arrived.

1. Safety and performance tests
2. User education
3. Installation and implementation
4. Preventive maintenance and repair

Engineering Section — handles longer range problems.

1. Renovations and new facilities
2. Custom device development
3. Assist in establishing hospital policies
4. Comprehensive in-service education programs
5. Support and review of service/maintenance section

Administration and Clerical Section — maintains central files for equipment control, technical manual library and filing system.



On January twentieth, the American flag was raised to full staff in front of University Hospital as it was at hospitals across the United States. The hostages had been set free and were coming home.

New Members

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It is with great sorrow that we report the passing of GEORGE CARLSON. George was active in our organization until his retirement and relocation to Dunedin, Florida.

A.S.H.E. Region 1 Representative

For the year Jan. 1 to Dec. 31, 1981 the following elected individuals will serve on the A.S.H.E. Board of Directors.

President — Robert Mack
President-elect — Gary Cousin
Region 1 — James Lawson
Region 2 — Robert Falaguerra
Region 4 — Glen Jenkins
Region 5 — Timothy Enright
Region 9 — Joseph Viera
Clinical Engineering — K.C. Rock
Telecommunications — Nancy Aldrich

For Region 1 (New England) representative, John Crowley received 41 votes, I received 45. Note also that Nancy Aldrich from Mt. Auburn Hospital, Cambridge, Mass., was elected as representative for the Telecommunications groups of all regions. I offer my sincere thanks to those A.S.H.E. members who supported me.

At this time I am aware of the following New England representatives appointed to A.S.H.E. Committees for 1981.

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MEMBERSHIP

Over the next two years, I intend to represent your interests on the A.S.H.E. board or on any committee assignments. But you must remember, that if I am to understand and respond to your interests, we must first establish an adequate level of communication and understanding.

Please feel free to phone or write. I am generally available to receive phone calls on any week day between 8:15 and 9:00 A.M. and between 11:30 A.M. and 12:30 P.M. and I will call back.

I plan to attend the A.S.H.E. board meetings during 1981 and at your convenience I invite any expression of concerns, questions or suggestions regarding your relationship with A.S.H.E. Nancy Aldrich also would like to hear from anyone regarding any Telecommunications issues.

If you are not a member of A.S.H.E. but would like information and application for membership, please contact me.

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Notes From The Editor

- Cutoff date for the next NEWSLETTER issue will be July 31. We need short articles about state activities and articles of general interest.

- The recently approved National Fire Protection Association Standard, NFPA 76B, STANDARD for SAFE USE of ELECTRICITY in PATIENT CARE AREAS of HOSPITALS is being published and will be on sale in March.

- A FIRE SAFETY EVALUATION SYSTEM (FSSES) workshop sponsored by the AF and JCAH is scheduled for May 14, 15 at the Springfield Marriot Hotel. Contact Mary Joe Marks at AHA or one of the NEHES staff at the spring seminar for more details.

- Plans are well underway for the NEHES FALL SEMINAR. Jim Bernard and Jim DuCharme report that the planning is going well for the Burlington, Vermont meeting scheduled for 13-15 October. Two programs will be offered addressing the problems of TIME MANAGEMENT and WASTE DISPOSAL.

NEW ENGLAND HOSPITAL ENGINEERS' SOCIETY

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