A FIRST FOR N.E.H.E.S.
A THREE DAY FALL SEMINAR
WITH CEU’S

An Educational experience presented by the College of Business Administration, University of Rhode Island.

To be held October 17, 18, and 19, 1979, at the Sheraton Islander Inn (on Goat Island) in Newport, Rhode Island.

The Program: A two track program consisting of two separate courses carefully planned and organized by the Fall Program Committee to provide an Educational experience to the Multi-Disciplines of Hospital Engineering.

Course A: Management will be aimed at getting results. It will present techniques with a method for their application. The sessions will attempt to bridge that precarious gap between Learning and Theory by use of experiential learning. Participants will have the opportunity to exchange ideas and suggestions with other participants throughout the day. This interchange is a valuable part of the program and will serve to reinforce theories of management put forth in the seminar itself.

Real problems will be discussed by the instructors and techniques of Management will be applied to illustrate their uses. Mini-lectures will be supplemented by case histories, exercises and audio-visual materials.

Basic objectives for this track are:
1. To develop a facility for the use of basic management skills.
2. To understand the applications of management theory in the hospital setting.
3. To gain a better understanding of your staff and motivational techniques which will increase their productivity.
4. To develop a facility for better problem-solving.
5. To open channels of communications with subordinates.

Course B: Preventive Maintenance. The participants will learn valuable details and specific information that can be put to immediate use. The program will include such topics as: how to plan a P.M. program, how to implement it, how to keep the daily records (with handy charts provided), and how to evaluate it.

The sessions begin with the basics and will move into computer applications by the final session. Participants will find that the specificity of the sessions can be directly translated into time and money for their hospital.

Basic objectives for the Preventive Maintenance track are:
1. To develop a plan for an efficient P.M. program.
2. To determine your P.M. needs and objectives.
3. To make more effective use of maintenance personnel and equipment.
4. To develop a facility for evaluating a P.M. program.

Workshops: Each track will be composed of individual sessions of one and one half hour durations. Attendance at all four sessions will comprise one whole program of instruction. As such, application will be made for .5 CEU’s per entire track attended. Each CEU is defined as 10 contact hours of instruction. With this in mind, the four sessions will be a little over .5 CEU. The University shall serve as sponsor for this credit.

A pre-registration survey has indicated a potential for a large turn out for this seminar and about a 50/50 split for course “A” and “B.” Registration forms will be enclosed with this Newsletter mailing.

An exciting program has also been planned for the ladies.

DISASTER PLANS:
RADIATION/FALL OUT?

The advent of Three (3) Mile Island, the proliferation of nuclear weapons and the availability of materials to be used in the construction of nuclear bombs, as well as the increased transport of nuclear material on our highways is more than reason enough for hospitals to include plans for radioactive admissions in their internal disaster plans.

It is suggested that the Disaster Planning Committees contact the local Civil Defense Chairman and discuss radiological monitoring procedures, and I would suggest training of hospital personnel as radiological monitors. It is true that a hospital should have only to notify Civil Defense to have trained personnel assigned to assist the hospital in these emergencies. The unfortunate truth is that many localities have little or no Civil Defense Organization. In these areas it might be necessary to wait for State Civil Defense personnel to arrive on the scene, allowing ample time for serious contamination of personnel and property.

It is my opinion that the first step to be taken in the preparation of such a plan is to have familiarization training of all personnel that would be involved in the admission, treatment and care of radiological victims. The prime cause for the fear of radiation is the lack of understanding that people have on the subject. Hospital personnel may be trained, at no cost to the hospital, by your State Civil Defense Agency, and these people can then provide training for the remaining hospital personnel in the development of a good emergency plan. The presence of trained hospital personnel at the arrival of radiologically contaminated victims can provide maximum safety for all concerned.

The hospital plan should provide for notification of State Agencies such as the Health Department, etc., the preparations necessary to protect the admitting area, such as shutting down air handling systems, covering the floors to make decontamination simpler, removal of all unnecessary equipment to avoid unnecessary contamination and subsequent decontamination.

(cont’d on page 3)
NEW ENGLAND HOSPITAL ENGINEERS SOCIETY

We had this meeting as an educational seminar and extended it to two days, 20-21st.

The first seminar was conducted by the State Fire Marshall's Office on "101 Fire Safety Cues" pertaining to new hospital construction. It was attended by 19 hospital engineers from across the state. We all found it to be very helpful in our everyday work.

The second day consisted of two seminars, the first given by Barkley Chemicals on the treatment of steam generators. Because of the fine weather this seminar was not as well attended. Maybe we should hold it on the golf course. The ones that did attend felt it worthwhile being there.

The third seminar was given by the Devac Window Corporation on new installation and retrofit of the window they manufacture. They pointed out the good and bad of various types of windows and how they conduct (upon request for prospective customers) air infiltration and heat convection in a building. This is very helpful in the energy crisis that we are going through now.

As president of the Maine Group, I want to say thanks to those who did attend and I am looking forward to next year for more in the way of educational type meetings.

Percy Hanscom
President, Maine Group

A LITTLE HELP, PLEASE

Having been associated with all of you Hospital Engineers has given me the insight that you have a wealth of knowledge and experiences to share. You also possess a great willingness to talk to your fellow engineers about their problems as well as your own. This is demonstrated during the three day conferences where communication "outside the classroom" is consistently present. Unfortunately this only happens once a year.

What some of you may fail to realize is that through the Newsletter, which is published four times a year, this same "outside the classroom" knowledge and experience sharing can exist. Unfortunately due to this failure it is becoming increasingly more difficult gathering items of interest and importance to you to publish in the Newsletter. Therefore, if you have something you think may be of help or interest to your fellow engineers, write it up and send it along. Don't feel that you need to have a degree in writing in order to submit an article. The editor gladly accepts any information you wish to send (cont'd next column)

for publication in the Newsletter. Remember, it can be helpful and beneficial to all if you take the time to write. Thank you.

The Editor
A Fellow Engineer

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HURRY UP PROJECT!

The Lawrence Memorial of Medford has been limping along for nine months on 2 year old steam lines which had a manufacturing defect. In July BALCO was in the process of installing a permanent crossover connection between the two primary (and separate) supply lines to parts of the hospital when one line began to fail rapidly. Steam pressure on this line had been reduced last November from 125 PSIG to 80 PSIG. Fortunately after this recent failure it could be operated at 40 PSIG and not lose too much steam. BALCO had originally scheduled four weeks for the crossover work. With this latest failure BALCO was requested to work around the clock. Even though the enclosure had not been completed (in fact the footing excavation was open during all of this period) BALCO was able to mobilize and complete the work in 110 hours.

The above picture shows one of the more complex connections.

Editor

MAINE GROUP ENDS YEAR WITH M.H.A. ANNUAL MEETING

The Maine Hospital Engineers held their last meeting for the summer on June 20th at Castine (Maine Maritime Academy) in conjunction with the Maine Hospital Association's Annual Meeting.

(cont'd next column)
DISASTER PLANS
(Cont’d from page 1)

Emergency/rescue personnel must be included in this plan and their monitoring and decontamination should be performed by the “RADEF” personnel (Radiological Defense Monitors). Provision must be included for the decontamination of the victim, personnel and equipment, as well as the specific techniques required. (In most cases the State Civil Defense Organization will supply the radiological survey instruments necessary for this purpose)

There are three (3) types of radiological victims: The first is the patient that has been radiated by radiological source material, but has no contaminant on his person. This victim represents no more hazard than a person that has been X-rayed to attending personnel. The second type of victim may have inhaled or injected alpha or beta source material and again represents no hazard to attending personnel, providing that no source materials are on his person. The third type of victim, and the one of major concern, is the victim with radioactive contaminant on his person or in his wounds. The radiological monitor with the assistance of medical personnel must make the determination, based on the level of radioactivity and the condition of the victim, on the degree of decontamination that can be effected before treatment of the victim’s injuries. The monitor is responsible to limit radiation dosage received by attending personnel in accordance with federal regulation. He must provide for complete decontamination and proper disposal of all materials used in the decontamination process.

It is anticipated that the hospitals will receive technical assistance in such emergencies from their state agencies, but in the interest of saving time and unnecessary contamination I feel that hospital personnel should be trained in this field. I would further recommend that a member of the hospital staff be trained by their state agency as a Radiological Defense Officer to insure the hospital’s capability of training and implementation of their radiological admissions plan.

Reynolds J. Aoe
Radiological Defense Officer
Rochingham Memorial Hospital
Bellows Falls, Vermont 05101

PROPOSED BYLAWS CHANGE

Your Board of Directors has submitted the following proposal for consideration at the Fall Seminar and Annual Meeting.

That the Bylaws, Article IV, Section 4-1, Eligibility and Membership, be amended as follows: This paragraph currently reads: “All persons having supervisory responsibility for engineering, maintenance and equipment, buildings and grounds and other engineering related disciplines of hospitals and medical research facilities located in the New England states are eligible for membership.”

The amendment would change this to read: “All persons having supervisory responsibility for engineering, maintenance and equipment, buildings and grounds and other engineering related disciplines of hospitals or medical research facilities, and who shall be in direct employment of said facilities, located in the New England states, are eligible to apply for membership.”

This proposal has received the appropriate endorsements under Section XV of the Bylaws, and is intended to clarify the recurrent question of eligibility, and to define the ineligibility of vendor supplied maintenance services.

Respectfully submitted,

Ralph M. Henry
President Elect

CUT BOILER PRESSURE — SAVE FUEL

Boilers were operating at 100 pounds and the highest pressure we needed was 60 pounds (to supply sterilizers), so boiler pressure was cut to 60 pounds and we had to bypass the 100 pound to 60 pound steam reducing valves.

After the first month of operation we saved approximately 200 gallons of oil per day, or 18t.

We are looking into operating at 25 pounds nights and weekends when loads are light and higher pressure steam is not needed for sterilizing or the laundry.

On light loads most steam reducing valves with lower initial pressure will deliver enough steam at near the desired pressure.

If you go to 25 pounds make sure fireman is notified when the O.R. has an emergency so he can supply the higher pressure for sterilizers.

Joseph J. Sheehy
Chief Engineer
Bon Secours Hospital, MA
A.S.H.E. NEWS

The A.S.H.E. Annual Meeting and Seminar held in San Francisco June 18-22 inclusive was attended by 363 registrants, of which seventeen were from Region 1 (New England).

At the Regional meeting, attended by all present at the Conference, a discussion of the upcoming 1980 Annual Conference to be held in conjunction with the 6th International Congress of Hospital Engineering in Washington, D.C. next July (1980) which is being hosted by A.S.H.E. A.P.A.C. (Professional Action Committee) established by A.H.A. to encourage financial support of political candidates that have demonstrated or indicated a willingness to approach health care issues with an open mind. A further approach to cooperation/support of the telecommunication personnel within A.S.H.E. And a need for financial support from individuals as well as affiliated chapters for the 1980 joint meeting of A.S.H.E./I.F.H.E.

At the Annual Meeting, reports of the officers and regional directors indicated a healthy present and future anticipated for A.S.H.E. and the affiliated chapters.

At the annual banquet, the Twin Cities Hospital Engineers' group (Min./St. Paul) won the chapter of the year award and New England Hospital Engineers' Society came in second. N.E.H.E.S. would have been the recipient if our percentage of members that were also A.S.H.E. members were higher. (Presently N.E.H.E.S. has 27% co-membership with A.S.H.E. and Twin Cities has 56%). Levels of membership awards were presented to twenty-three Senior applicants, two from Region 1, namely Ed Chambers from Mt. Auburn Hospital in Cambridge and Jim Hanlon of Bradleboro, VT, and twenty-one (cont'd next column) Distinguished member applicants, two also from Region 1, namely Vincent F. Gardner from Mass. General in Boston and Donald J. Kohler of Bridgeport Hospital in Connecticut.

William H. White
A.S.H.E. Representative

PATIENT ROOM MODERNIZATION

You might have an older patient room which needs revitalization. Here's one architect's solution to organizing the general clutter of devices and services at the head of a patient's bed. A 5/8 inch piece of wood in the center is edged with vinyl over soft board. The oxygen and suction piping is unchanged, but other services are relocated within the panel. The result can be pleasing.

Dave Hathaway

INSTITUTIONAL FIRE

NFPA July Issue of Fire Journal reported $65,000 damage from a fire in an x-ray control cabinet. Inside the 8 x 2-3/8 x 8 foot closet were the control panel, molded case circuit breaker, two transformers, and various papers and books. As you guessed, the latter two items contributed to the fire once ignition occurred. How many of our x-ray cabinets are totally free of the combustibles?

ENERGY MANAGEMENT WITH A MICROPROCESSOR

The microprocessor (Sunkeeper) which is installed at St. Luke's Hospital in Middleboro, Massachusetts has a primary purpose to control the use of energy. With the scarcity of energy resources and skyrocketing prices, the efficient use of energy must be the mainstay of cost effective programs.

The microprocessor has the ability to gather information from analog and digital input. Analog inputs are of variable data in nature, such as temperature and pressure changes. Digital input information is that of switching in the off/on state. This information is processed and the most efficient energy action taken.

The microprocessor is the heart of our energy program. By centralization of control, we can have a much closer supervision of our energy usage. We can control all heating, air conditioning, pneumatic control systems, and the solar system on an as-available basis.

The microprocessor has the ability to store pertinent information in its memory banks which can be retrieved when desired. It also has the ability to be useful in troubleshooting — warning of equipment failure — with readout of the malfunction. By reprogramming as to nature of malfunction, pinpointing the problem, corrective action is much simpler.

I feel that now and in the future a centralized system is the answer to supervisory control of a Total Energy Management Program. The microprocessor as a central control is here to stay and in the future will be a great asset to energy management.

Jim Parmenter
St. Luke’s, Middleboro, MA

You Will Be Here For Fall Conference

DID YOU SEE?

N.E.H.E.S. member Bob Barris, Director of Engineering, Lowell General Hospital, MA, was featured in the May 16th issue of Hospitals Magazine published by AHA. He was demonstrating a filter device which removed hard water scale that was affecting his mixing valves.

STANLEY ADDYMAN, P.E. Director of Engineering, Nashua Memorial Hospital, NH, was on the faculty of a seminar sponsored by Northern New England Clinical Engineering Center, University of New Hampshire. The subject was "Brownouts, Blackouts and Emergency Power Systems". That was May 22, 1979. (Wasn't that some timing! On that very morning eight (8) Boston Hospitals were without power for five (5) hours!).