ANNUAL MEETING
HOTEL BRADFORD
Boston, Mass.

On Tuesday, March 27, 1962, at 8:30 A.M., the fourth annual NEHES meeting will be held in conjunction with the New England Hospital Assembly in Boston, Massachusetts.

PROGRAM
8:30 A.M. — Registration
9:00 A.M. — Greetings:
   Joseph W. Degen
   President
9:05 A.M. — "Is Your Hospital Fire Safe?"
   Mr. Raymond A. Day
   Senior Vice President
   and Chief Engineer
   Arkwright Mutual Insurance Company
   Member of Factory Mutual
10:00 A.M. — Coffee
10:15 A.M. — "How to Handle the Boss"
   Professor F. Alexander Magoun
   Human Relations in Industry
   Jaffrey Center, N.H.
11:15 A.M. — Business Meeting
   Reports of Officers
   Election of Officers
12:15 P.M. — Luncheon

(Note: Please notify Joseph Degen by enclosed card or letter if you will attend the luncheon.)

Luncheon Cost — $3.00

He who wears mountain boots to climb an ant hill is usually looking for an ulcer.

WELCOME ABOARD
We are pleased to announce the following named men have joined the New England Hospital Engineers Society.

SAMUEL BRODA
Maintenance Supervisor
Holden District Hospital
Holden, Massachusetts

EWEN L. CAMERON
Mt. Sinai Hospital
500 Elue Hills Avenue
Hartford, Connecticut

JOHN C. CAN
Chief Engineer
Belchertown State School
Belchertown, Massachusetts

CHARLES R. DEBUS
Assistant Engineer
Stamford Hospital
Stamford, Connecticut

DANIEL J. KIELY
Maintenance Superintendent
Zambarano Memorial Hospital
Wallum Lake, Rhode Island

CONRAD R. MAGNANT
Chief of Maintenance
Windham Community Memorial Hospital
Willimantic, Connecticut

CLARENCE E. PROVOST
Assistant Chief of Maintenance
Windham Community Memorial Hospital
Willimantic, Connecticut

PAUL E. SAVARD
Maintenance Supervisor
Arthur R. Gould Memorial Hospital
Presque Isle, Maine

PATRICK SAUNDERS
Assistant Chief Engineer
Wessan Memorial Hospital
Springfield, Massachusetts

BERNARD S. SMALLEY
Chief Engineer
Claremont General Hospital
Claremont, New Hampshire

HARRIS L. WINSLOW
Assistant Engineer
Stamford Hospital
Stamford, Connecticut

KNOW BILL PITT
When you attend Hospital Engineering Meetings in New England or an AHA meeting in Washington, D.C., you are very apt to see William Pitt in the audience or taking part in the Engineer's Round Table discussions. When you go to a meeting and Bill isn't there, you are at the wrong meeting. What makes him show this interest, and what are his thoughts and ideas concerning the very involved fast changing field of Hospital Engineering?

Bill is a "Marine Man," with a fine background and foreboding attitude which comes from living and working aboard ship where training, drilling, and self-reliance are the everyday rule by which a competent Marine Engineer must live. He has served in the U. S. Navy and in the U. S. Maritime Service, and holds Marine Licenses in both steam and diesel. Bill taught engineering subjects at Fort Trumbull, Conn., and at the Up-Grading School in Boston.

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NFPA 56

How many Trustees, Administrators and surgeons go through their daily work with a false notion that their O. R. is safe and that a competent, responsible person sees that everything is taken care of in a manner which corresponds with the existing code?

Have you ever had an O. R. explosion in your hospital? Well, let us hope you never do, but with the use of cyclopropane, divinyl ether, ethyl ether, trifluoethylene, ethyl chloride, and ethylene, one or more of which may very well be used in your hospital and under the proper conditions can cause an explosion, it could happen. Law suits or charges of criminal negligence are not to be feared, but the loss of a patient's life or that of the O. R. personnel attending the patient might have some adverse effects. The author knows of three explosions. Two cases involved fatalities and one a fire and injury to O. R. personnel.

Case No. 1—A surgeon was in a hurry. Had on a pair of wool trousers and standard street shoes and told O. R. supervisor he would only be in the O. R. a minute, just to remove a small bit of tissue. His trousers helped generate static electricity. His shoes insulated him from an excellent conductive floor. When he made contact with the anesthetized patient an internal explosion occurred. Needless to say, the patient did not survive.

Case No. 2—Conductive casters were dirty and the drag chain was wrapped around a cross bar under a piece of anesthetic apparatus. It is believed that static electricity was generated and since the unit was insulated from the conductive floor, an explosion and fire occurred which injured O. R. personnel.

Case No. 3—An explosion occurred in a hospital O. R. where nearly all movable parts had been lubricated with petroleum type lubricant on the anesthetic apparatus. In this case, the loss of life resulted.

These happened in excellent hospitals with fine reputations operated by capable personnel, but you can see the many violations if you know the code.

The code is NFPA Bulletin No. 56, FLAMMABLE ANESTHETICS (safe practices for hospital operating rooms). This bulletin has nearly 180 articles and is divided into four parts:

Part I — General, dealing with the nature of hazards within the scope of this code;
Part II — Construction and Equipment, containing requirements with respect to physical features of the anesthetizing and anesthetic storage locations;
Part III — Administration and Maintenance, containing requirements with respect to operating standards to be maintained in anesthetizing and anesthetic storage locations; and
Appendix A, containing supporting material and dealing with the background information explaining the reasons for many of the requirements.

Engineers, Maintenance Supervisors, electrical, heating, ventilating, and air conditioning personnel should within the Engineering and Maintenance Departments of all hospitals know the code. This document spells out the terms and uses the word "SHALL". Example, article 2221, "Relative humidity in the anesthetizing locations SHALL be maintained at not less than 50 percent."

It also uses the word "SHOULD." Example, article 2222, "The temperature to be maintained in operating rooms SHOULD be chosen on the basis of the well being of the patient and the operating team."

There are many more SHALL'S than there are SHOULD'S. Under article 2484B flexible cord shall consist of two insulated conductors, shielded by a peripheral metallic braid which is jacketed and connected to the ground terminal of the polarized plug to assure adequate ground for monitoring purposes. This article became effective January 1, 1962. (I question if many are cognizant of the above article and its demand that metallic braid jacket be used.)

To this point, nothing has been said about floors and the code, but it is assumed that all hospitals have an Ohmmeter and that it is used often in all areas where conductive floors have been installed and that the resistance readings are less than one million ohms and more than twenty-five thousand ohms. As of late many cases have arisen where floors have failed

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New Engineering Course

University of Rhode Island Extension Division in Providence has offered a 10 week course in Management and Engineering for Hospital Engineers. The starting date is Wednesday, Feb. 21, 1962. Engineers meet each Wednesday from 7:00 p.m. to 9:00 p.m. This is a rare opportunity for all within commuting distance. It is the only one of its kind, and has a great deal to offer. The subject matter runs as follows:

- **Power Plant Technology**
- **Utilities**
- **Preventive Maintenance**
- **Hospital Planning and Design**
- **Hospital Law**
- **Psychology**
- **Departmental Administration**
- **Personal Relations**
- **Communications**

The faculty consists of very well qualified men well versed in their own fields. The Hospital Engineers of Rhode Island are to be congratulated for their efforts, and the fine cooperation which exists between them.

This group puts on excellent programs and is able to hold interest of all regardless of the size of Hospital from which an engineer may come. These men set an excellent example to all small hospital engineering groups.

Know Bill Pitt

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Mass., for U. S. Maritime Commission. This must be the reason for his interest in seeing that his personnel are well trained and can handle their projects and maintenance tasks in an expert manner.

In 1951 he became the Chief Engineer of the Memorial Hospital of Pawtucket, Rhode Island, and has been engaged in modernizing an older hospital, making improvements, and up-dating the facilities to meet the demands of modern patient care. This type of work is about as hard as anything can be for a Hospital Engineer, since dollars are scarce and the work is never ending, plus the fact that all the day to day maintenance still must be carried out.

Bill was instrumental in forming the Engineers Section of the Hospital Association of R. I., which has become a very active and helpful group to all hospital engineers in R. I. He is a member of American Hospital Association, and a very interested member of the New England Hospital Engineers Society.

Bill is married and has two children; likes to sail, fish, has an interest in Cub and Boy Scouting, and in free time enjoys the solitude offered by his camp in Gouldboro, Maine. He also has a magic touch when it comes to cooking lobster.

Next time, look for Bill Pitt.

NOMINATIONS

Bill Ornberg, Chairman, with Past Presidents and State Representatives form this Committee.

Nominations run as follows:

President — Edwin W. Chaffee  
Plant Engineer  
Rhode Island Hospital  
Providence, Rhode Island

Vice President — William T. Harvey  
Plant Engineer  
St. Vincent's Hospital  

Treasurer — Vincent F. Gardner  
Administrative Engineer  
Beth Israel Hospital  
Boston, Mass.

Secretary — Louis B. Ely, Jr.  
Chief Engineer  
Mary Hitchcock Memorial Hospital  
Hanover, New Hampshire

STATE REPRESENTATIVES

Connecticut — Warren Marble  
Chief Engineer  
Danbury Hospital  
Danbury, Conn.

Maine — Winslow Harris  
Chief Engineer  
Maine Medical Center  
Portland, Maine

Massachusetts — Alton Rouse  
Administrative Engineer  
New England Baptist Hospital, Boston, Mass.

New Hampshire — Richard Hersey  
Chief Engineer  
Huggins Hospital  
Wolfboro, N.H.

Rhode Island — Thomas Manchest er  
Chief Engineer  
Kent County Hospital  
Warrick, Rhode Island

CONTRIBUTIONS TO THE NEWSLETTER

You are invited to submit material and news items for publication. Subjects should be of special interest to Engineering and Maintenance personnel in the Hospital Field. Please write:

Louis B. Ely, Jr.  
Secretary, N. E. H. E. S.  
Chief Engineer, Mary Hitchcock Memorial Hospital, Hanover, N. H.
NFPA 56
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after only a few years use, and it seems especially true with conductive terrazzo type floors. Conductive rubber, linoleum, vinyl, and composition plastic floors have also given trouble. Why does this happen? Sometimes the matrix and the acetylene carbon black does not remain compatible in terrazzo floors and thus a breakdown occurs after a few years. Sometimes the joints fall in sheet and tile type floors or the mastic lets go and in some cases the grounding strips are installed too far apart. Some floors never were right at the time of installation. Other floors behave in a very erratic manner and seem to fail only in certain spots at certain times.

There are several preparations on the market for the use of bringing back so called bad conductive floors. These compounds usually consist of moisture retaining salts which if applied often enough and enough water is used prior to use of the O. R. a controlled condition can be obtained, but this means a good deal of floor maintenance, a cost of an additional product, and more time and effort than is normally used on a good conductive floor. Before considering using such a product, run a test and then determine what the additional labor and materials would cost over a period of years; then decide which is the best method from time and trouble and a return on your money invested.

In order to be safe, pay a visit to the O. R. and using your code book, check for violations which concern the Engineering and Maintenance Departments. Listed below are a few items to check:

A. What is the humidity?
B. Are the floors checking out on the Ohmmeter?
C. Are the surgeon's headlights acceptable according to the code?
D. How many extension cords are in use which do not have explosive proof fittings?
E. How many adapters are in the O. R. area which allow standard cords to be used in conjunction with explosion proof outlets?
F. Has any electrical equipment been introduced to the O. R. area which is not grounded?
G. Are the storage facilities for the various types cylinders meeting the code requirements?
H. Does the flexible cord meet the latest code requirements?

After all the violations have been determined, make the necessary recommendations to correct the situation and forward a copy to the Administration. Make this a real document by quoting chapter and verse from the code book, date it and sign it.

Copies of the code may be obtained by enclosing 50 cents for a single copy to the National Fire Protection Association, 60 Battery-march Street, Boston 10, Massachussetts.

SAFE PRACTICES

Not too long ago, our Canadian friends, in their Medical Journal, carried a report concerning teflon being dangerously toxic. This was a rather alarming report since the uses of this material have become very common in a great many commercial, industrial, and institutional organizations. The panic button was hit and hit hard, with all sorts of publications picking up the hue and cry, and passing the word. This is a real tribute to the high state of uncoordinated communications which exist both in this country and in Canada. It is also a tribute to the Medical Field inasmuch as everyone listened when they spoke. Last but not least it is a real tribute to the safe practices and the emphasis being placed on the sincere attempt to eliminate all risks whenever and wherever possible. During the past few years we have seen better labels with special markings and colors on containers with special storage areas for certain types of materials. The elimination of some products due to their not being safe enough for general use by the public.

Teflon (tetrafluoroethylene resin) is a Du Pont product which was field tested and passed for being a safe product to be used in all types of applications without special warnings of any kind. Naturally Du Pont was very interested in all the proceedings, and they conducted an investigation with the result being a retraction of the statement in the Journal. Du Pont is still making “Better products for better living through chemistry,” and we as users are still getting benefits of the teflon as one of the wonder products of modern science.

The point to be made is that we in hospital business are safety minded, and the protection of human beings is an equal responsibility with that of patient care. If you feel there is a fire, pull the alarm and if necessary apologize if you are wrong. We were wrong and we apologize to DuPont and all concerned.

TEFLON IS SAFE