



THE OBSERVER

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February 2001

▶ A Word From The President

NHSPE BOARD ADOPTS DRAFT STRATEGIC PLAN

At the December 12, 2000 NHSPE Board of Directors Meeting, the Board accepted the Strategic Planning Committee's draft Strategic Plan summary for discussion. This issue of *The Observer* includes a draft of the Strategic Plan, so that all NHSPE members can review the draft and provide thoughts and comments to the Board.

NHSPE is developing this Strategic Plan to focus the efforts of the Board and members to make the organization as effective as possible. NSPE (national) completed an update to the NSPE Strategic Plan, and has encouraged all state organizations to do the same.

The Strategic Planning Committee met four times this fall to develop this draft. The Committee included Judy Houston, Matt Purcell, Lee Carroll, Joe Ducharme, and Bill Straub. The make-up of the committee was intended to include past, current, and future leadership of NHSPE.

The Strategic Plan summary is presented in a brief, bulleted format. It includes a Mission Statement, delineation of Core Values, a listing of

[Word From President, continued on page 2]



Nick Cricenti presents at the NHSPE Fall Membership Meeting.

FALL MEETING Issues In Fire Protection Engineering



Nick Cricenti, P.E., of SFC Engineering Partnership, Inc., gave a presentation on "Issues in Fire Protection Engineering" at the NHSPE Fall Membership Meeting, in October 2000, held at the Makris Restaurant in Concord, NH. Mr. Cricenti spoke about various topics in Fire Protection Engineering, including pending building code revisions, various fire protection systems, the recent "Worcester Fire" tragedy and lessons learned, and many more interesting topics. The presentation was preceded by dinner and a social hour.

The event was well attended and the talk received rave reviews. Many thanks to Mr. Cricenti!

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Word from President

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Goals of the organization; and then presents specific Objectives for each goal; and a series of Strategies to meet these Objectives. Objectives can be viewed as the "what and when" of meeting goals; and Strategies can be viewed as "how". The Board sees the plan as reflecting well on our organization, and as a useful tool in moving NHSPE forward.

The Strategic Plan is intended to be a dynamic document, to be reviewed, considered, and updated on a regular basis by future boards of NHSPE.

Please take a minute to review the draft Strategic Plan, and reflect on your views of NHSPE and your membership. Please feel free to provide comments or ask questions of any Board member regarding this draft plan. The Board hopes to adopt the Strategic Plan in final form this Spring at our Annual Meeting.

Judith E. Houston, P.E.
NHSPE President



Thinking about getting involved?

NHSPE is looking for volunteers for activities sponsored by NHSPE.

For example, volunteers are needed for **MATHCOUNTS** on a regional and state basis. This is a great way to get involved with high school students and to support your local schools.

NHSPE is also looking for a volunteer to participate in "**Project-Lead-The-Way**" an organization which promotes math and sciences in Secondary Education in New Hampshire and nationwide.

If you are interested in this or other NHSPE programs, please contact Judy Houston, President of NHSPE at (603) 647-8700, extension 236.

SFC Engineering Partnership, Inc.,

of Manchester, NH is a fast growing, multi-discipline Engineering Consulting and Survey Services firm that is aggressively looking to fill the following positions:

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SFC Engineering Partnership, Inc.
25 Sundial Ave., Suite 205W
Manchester, NH 03103-7230
Fax No. 603-647-8711
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THE OBSERVER

The Observer is published quarterly by the New Hampshire Society of Professional Engineers for its members. Its purpose is to inform members of NHSPE activities and related topics.

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CORRECTION, WITH APOLOGIES Without even a plausible excuse, oops!

In the last issue of *The Observer*, I endorsed Russ Martin for the position of regional vice president. My enthusiasm overflowed into this statement: "...This will mark the first time in my memory that a New Englander holds this office."

In fact, that is very wrong. Fred Costello brought this to my attention quickly. And in his own friendly and humorous way, he offered the following:

"Thanks George! I am immediate (one was appointed) Past NE Regional Vice President. I was born in Lynn, MA and have been in VT for 37 years (the 14th state! and still one of the NE states I believe, although we don't have a coast line). I'm also a licensed engineer in NH, having been published in their bulletin also.

Preceding me was Herb Doten from Maine, and Stan Wilbur from Vermont.

I think New England has been well represented as of late."

My apologies to Fred, of whom I really do have fond memories.

Submitted by George Fredette, P.E.
NHSPE National Director

Note that the NHSPE web site address has changed to:

www.nhspe.org

The web site includes general information about NSPE/NHSPE, activities and events. It also provides links to NSPE and other areas of interest.

COMMITTEE NEWS

MATHCOUNTS

A total of 63 schools registered for participation in MATH-COUNTS this year, which is an increase from previous years.



The number of schools participating in each region is as follows:

- Seacoast 10
- Plymouth 12
- North Country 7
- Lebanon 4
- Keene 13
- Manchester 17

Regional Competition dates are:

- February 3: Plymouth, North Country, Manchester

- February 10: Seacoast
- February 14: Lebanon
- February 16: Keene

The State Competition will be held at Plymouth State College on March 10 March. I hope that we will have many members join to assist with the work of that day.

*Submitted by Lee F. Carroll, P.E.
State MATHCOUNTS Coordinator*

LEGISLATION



Proposals for new legislation are now in the process of being written by the legal staff of the General Court through requests by members of the newly elected House and Senate. About 1000 requests are in so far for proposed bills, starting with income tax bills by Representative Hager and Senator Below. There are

"targeted" education-aid bills, bills on term limits for judges, annual seminars on ethics for judges, changing jurisdiction of the Judicial Conduct Committee, and many other judicial bills. There are bills to grapple with the impending State deficit and bills on a wide variety of other subjects including a study of wheeled, motorized, off highway recreational vehicles initiated by myself.

The deadline for initiating bills in the House was December 22, but sign off on such legislation extends into late January 2001. The new session begins on January 3, 2001... Come and see the proceedings from the gallery.

*Submitted by Rep. John Alger, P.E.
NHSPE Legislation Committee Chair*

ENGINEERS WEEK

MALL DISPLAY

February 15-20
Steeplegate Mall in Concord, NH

NHSPE's annual Mall Display in support of Engineers Week is scheduled for February 15th through February 20th, 2001 at the Steeplegate Mall in Concord, NH. The display celebrates Engineers and our impacts on society at a local level, and

presents to the public what we as Engineers do. If you are interested in contributing to the display or to 'man' the booth for a time slot during that week, please contact Roch Larochelle at CLD Consulting Engineers at 668-8223. We hope to see you there!!

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NEW HAMPSHIRE SOCIETY OF PROFESSIONAL ENGINEERS STRATEGIC PLAN SUMMARY 2000/2001

DRAFT — DECEMBER 2000

Please provide any comments or suggestions to Judy Houston at 647-8700 x236. This draft is proposed to be adopted in final form this spring at our annual meeting.

MISSION

The New Hampshire Society of Professional Engineers (NHSPE) is the society of engineering professionals in New Hampshire that promotes the ethical and competent practice of engineering, advocates licensure, and enhances the image and well being of its members while implementing the program of the National Society of Professional Engineers (NSPE) at the local level.

VALUES

The core values of NHSPE are —

- ✓ Protection of the public
- ✓ Ethical conduct
- ✓ Professionalism
- ✓ Competency
- ✓ Licensure
- ✓ Fulfillment of member needs
- ✓ Service to the public

GOALS

The goals of NHSPE are to —

- ① Maintain a workable and effective organizational structure.
- ② Be involved in government affairs as they relate to professional issues.
- ③ Promote professional development and education.
- ④ Promote the ethical practice of engineering.
- ⑤ Maintain on-going effective relationships with other engineering

organizations in the state.

- ⑥ Strengthen the public image of professional engineers in the state.
- ⑦ Provide a membership level which enhances NHSPE's viability as an organization.

(Numbering does not denote prioritization)

OBJECTIVES AND STRATEGIES TO MEET GOALS

- ① Maintain a workable and effective organizational structure.

- **OBJECTIVE**

Review in 2001 the NHSPE constitution and by-laws and revise in accordance with the recent NSPE organizational structure revisions, and review on a tri-annual (or other) basis thereafter.

- ▶ **STRATEGY**

NHSPE Board of Directors (BOD) to complete review and recommendations for any changes by June, 2001.

- ▶ **STRATEGY**

Annually review tasks and responsibilities to be distributed among board members and others.

- ② Be involved in government affairs as they relate to professional issues.

- **OBJECTIVE**

NHSPE BOD and members to remain informed of relevant state legislation.

- ▶ **STRATEGY**

Maintain direct liaison(s) with representatives of the NH Legislature.

- ▶ **STRATEGY**

Actively support legislation which strengthens NH's engineering statute; actively oppose proposals which would weaken the statute.

- ▶ **STRATEGY**

Provide input to the legislative process or other branches of state government regarding other issues, when appropriate.

- ③ Promote professional development and education.

- **OBJECTIVE**

Sponsor or cosponsor a minimum of two continuing education programs annually.

- ▶ **STRATEGY**

Continue membership meetings and programs.

- ▶ **STRATEGY**

Continue to promote educational opportunities sponsored by other organizations to NHSPE members.

- ④ Promote the ethical practice of engineering.

- **OBJECTIVE**

Annually introduce the NSPE Canon of Ethics to newly registered professional engineers and to current P.E.s.

- ▶ **STRATEGY**

Co-sponsor, with the NH Professional Engineers Board, a dinner meeting that focuses on newly registered professional engineers, and engineering ethics.

- ▶ **STRATEGY**

Encourage experienced P.E.s to mentor young engineers within their respective organizations.

- ⑤ Maintain on-going effective relationships with other engineering organizations in the state.

- **OBJECTIVE**

Increase regular communication between NHSPE and other NH engineering organizations.

- ▶ **STRATEGY**

Continue to spearhead the annual Engineers Week dinner and program.

▶ **STRATEGY**

Jointly sponsor membership meetings or events with other engineering organizations.

▶ **STRATEGY**

Promote deserving candidates for NH Engineer of the Year, and NH Young Engineer of the Year.

▶ **STRATEGY**

Seek and distribute to NHSPE members pertinent information regarding programs of other engineering organizations.

- ⑥ Strengthen the public image of professional engineers in the state.

● **OBJECTIVE**

Frequently engage in activities which promote engineering to the public.

▶ **STRATEGY**

Encourage members to publicize engineering accomplishments and activities.

▶ **STRATEGY**

Remain a key organization in National Engineers Week in NH.

▶ **STRATEGY**

Continue to support MATHCOUNTS in NH.

▶ **STRATEGY**

Support qualifications based selection (QBS) of engineering services, and the NH QBS Coalition.

▶ **STRATEGY**

Initiate and maintain a scholarship award from NHSPE.

- ⑦ Provide a membership level which enhances NHSPE's viability as an organization.

● **OBJECTIVE**

Maintain or increase NHSPE membership.

▶ **STRATEGY**

Define and publicize the benefits of membership.

▶ **STRATEGY**

Continue to inform members and others of the NHSPE program through "The Observer" and the NHSPE website.

**UNH to Offer
ISSUES IN
ENGINEERING
MANAGEMENT**

*CIE 778/878 — Durham, NH
Spring Semester 2001*

The Civil Engineering Department at UNH will again offer the popular course "*Issues in Engineering Practice and Management*" from 6:00 to 9:00 PM on Thursday evenings beginning **January 18, 2001**. This is a full semester course intended to offer an introduction to engineering management and professional practice topics to seniors, graduate students and practicing engineers. Class time has been set to be a weekly evening course in order to accommodate practicing professionals. The course surveys ten topics over the semester including: the engineering organization & management of self; communications & human resources; project management; business economics & accounting; gender issues & diversity; legal issues; engineering ethics; marketing professional services and selection of a consultant. The class will contain real world case studies presented by guest speakers who are experts in the field. Student groups will be required to prepare a paper and make a presentation on an engineering management topic.

The course is to be the first course in a new Certificate in Engineering Management program. One will be required to complete a series of three courses to complete the certificate. All of the courses offered will be applicable to a non-thesis Master of Science in Civil Engineering. "We are very excited to begin to bridge the gap between the University and the practitioner. We already have a successful certificate program in water resources. Hopefully this program will also be successful and I can see additional certificate programs such as highway design, bridge design, project management, and environmental design. We are evaluating how several certificates might be combined to fulfill the requirements for a non thesis masters degree." Says Bob Henry, P.E., Chairman of the Civil Engineering Department.

For information about enrolling in this course contact Robert M. Henry at 603-862-1444 or via e-mail: robert.henry@unh.edu.

Welcoming Students to the Wonderful World of Engineering

Next month, engineers across the country will recognize National Engineering Week with a variety of activities...from annual dinners and awards to educational exhibitions to professional development activities. New this year is an opportunity to welcome young people into the world of engineering through the "Introduce a Girl to Engineering Day" which is scheduled for **Thursday, February 22, 2001**. Recognizing the shortage of women in engineering, this day will give girls a firsthand view of the engineering profession through a job shadow experience.

A job shadow is a work-based learning experience that gives students a chance to observe or "shadow" a professional at work. Job shadows can be half day or full day experiences. It offers a unique opportunity for students to learn

about the day-to-day activities of the profession as well as the educational requirements of the field.

Earlier this year, Bow High School student, Erica Moore, participated in a job shadow with Ms. Catharine Breckenridge of DEKA Research & Development Corporation in Manchester, NH. Erica spent the afternoon learning about product development and testing while meeting with mechanical as well as electrical engineers. With a strong interest in mechanical engineering, Erica is enrolled in Project Lead the Way, a pre-engineering program that offers a five-course curriculum to high school students. Erica best described her job shadowing experience this way: "I am now even more interested in becoming an engineer than I was before I came to shadow you. I got a feeling of what it is like to be a

real engineer and I have a feeling I will love it."

In an effort to promote engineering as a career pathway throughout New Hampshire, the Educational Partnership of Central New Hampshire is encouraging engineers to participate in this initiative by welcoming students to spend the day at engineering firms. It is an excellent way to share your expertise, instill enthusiasm for engineering, and prepare our future workforce. If you would like to participate, contact the School to Career Coordinator at your local high school. For additional information, contact Mary Ann Gaschnig, School to Career Coordinator, Bow School District, at 224-3095 x336 or mgaschnig@bownet.org.

*Submitted by Mary Ann Gaschnig
Bow School to Career Coordinator Chair
Educational Partnership of Central NH*

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CONTINUING EDUCATION SURVEY

The **Civil Engineering Department at UNH** is planning to offer several certificate programs, which may be combined toward a non-thesis option Master of Science in Civil Engineering. The certificates are specifically intended to offer courses connected to real world engineering and management issues, which will help the practicing engineer in their daily practice. The department has one certificate program in water resources. The next certificate program will be three courses in engineering management. The first course, Issues in Engineering Management has been offered successfully for several years both on the Durham campus and at the CEPS Manchester Graduate Center. Last year a second course "Legal Issues in Engineering and Construction" was offered for the first time at the Manchester Graduate Center. The third course is yet to be announced. UNH is seeking your feedback about the idea of a new certificate program for one and for topics for the final course in the Engineering Management certificate for two. We would also be interested in any ideas you might have for additional certificates.

**Please take a minute to respond to this questionnaire and return it to
H. Edmund Bergeron, P.E., H.E. Bergeron Engineers, P.A., PO Box 440, North Conway, NH 03860**

1. Have you taken CiE 778/878 "Issues in Engineering Management"? _____
2. If not are you interested in taking this course? _____
3. Have you taken "Legal Issues in Engineering and Construction" or similar course? _____
4. If not are you interested in taking this course? _____
5. Do evening courses serve your need for continuing education? _____
6. Which evening works best for you? Monday _____ Tuesday _____ Wednesday _____ Thursday _____
7. Does 6:00 to 9:00 PM work for you? _____ If not what time does? _____
8. Is there another format that you might recommend (weekends, twice a week, distance delivery, etc.) ?

9. What course would you like to see as the third course of the Engineering Management Certificate?
Please number beginning with your first choice as 1, second choice as 2 , etc.

Advanced Project Management	_____
Marketing Professional Services	_____
Strategic Planning in Engineering/Construction firms	_____
Ethics Issues in Engineering and Construction	_____
Business Economic and Accounting for Engineers	_____
Other _____	_____
10. What other certificate programs would you be interested in? Please number beginning with you first choice, etc.

Bridge Design	_____	Building Design	_____
Project Management	_____	Highway Design	_____
Environmental Design	_____	Other _____	_____
Transportation Planning	_____		
11. Would you be interested in being able to combine certificates to complete a master's degree? Yes ___ No ___

Names & Numbers

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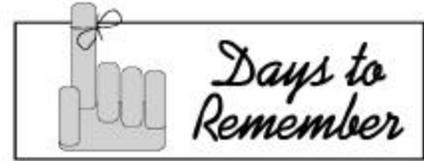
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February 1-5, 2001
NSPE Winter Meeting
Anchorage Alaska

MATHCOUNTS Regional Competitions

February 3, 2001 Plymouth,
North Country, and Manchester

February 10, 2001 Seacoast

February 14, 2001 Lebanon

February 16, 2001 Keene

February 15-20, 2001
Engineers Week Mall Display
Steeplegate Mall, Concord, NH

February 18-24, 2001
Engineers Week

February 21, 2001
Awards Banquet and Exhibition
Center of NH Holiday Inn
Manchester, NH

March 10, 2001
MATHCOUNTS State Competition

Please contact National with address corrections at 1-888-285-6773 or change online at www.nhspe.org.

draft NHSPE STRATEGIC PLAN SUMMARY inside!