



# IEEE PROFESSIONAL NEWS



## Dr. Leo Young, USAC Chairman, streamlines activities for 1974

A thorough reorganization of USAC took place under the leadership of its new Chairman, Dr. Leo Young, staff member of the Naval Research Laboratory, at the January 1974 meeting of the U.S. Activities Committee.

Historically, USAC was conceived in November 1971, and began to operate in early 1972 as a committee of the six U.S. Region Directors chaired by Dr. Harold Chestnut. USAC was expanded in 1973 under the chairmanship of Harold S. Goldberg. The new structure unveiled by Dr. Young provides a USAC Council composed of the six U.S. Region Directors and three Division Directors, plus Committee Chairmen, as shown on the chart on p. 3.

USAC has four divisions: *Membership Services* — Einar E. Ingebreten; *Technical Services* (Chairman to be appointed); *Membership Liaison* — W. L. ("Sully") Sullivan; and *Professional Relations* — Richard J. Backe. Forest G. Hogg is Secretary and Ms. Vivian A. Carr is Treasurer. Robert W. House is in charge of program planning and past Chairman Harold S. Goldberg chairs the Constitution Committee.

John M. Kinn is Staff Secretary and Director of Professional Services, and Joseph E. Casey is his Associate. Both men are members of the IEEE staff in New York. The IEEE Washington office is directed by Ralph L. Clark. He is assisted by Dr. William Morsch and Mel Abramovitch, IEEE staff members located in the Washington Office, who all work closely with USAC.

Washington attorney and IEEE/USAC outside counsel Frank Cummings provides legislative support, particularly in the area of pension planning.

"I believe USAC has a great opportunity to provide expanded services to

(Continued on page 2)

## Pension Activities in Behalf of IEEE Accelerate in Washington and Nationally

### Plan consists of six orderly phases

By Richard J. Backe  
Professional Relations

The rather substantial progress made on the Hill in 1973 can be attributed to the intensive efforts of IEEE's Pension Committee, the Institute's special counsel (Frank Cummings) and the Joint Pension Committee (JPC), the last an ad hoc consortium of most of the major engineering and scientific societies. I am chairman of JPC and did chair the Pension Committee.

Legislative activity is summarized by Frank Cummings in the adjacent column and this report is concerned with programs to accommodate the needs of most U.S. IEEE members and technical professionals. Both the Board of Directors and USAC feel that this entire program should be announced to the members now although some phases depend on successful passage of pension reform bills.

#### Multi-Phase Retirement Program

The entire program has six coordinated phases. They are as follows:

1. Individual Investment Accounts, Non-Qualified.
2. Individual Investment Accounts, Qualified.
3. Multi-Employer, Engineers-Only, Immediate Vesting Plans.
4. Multi-Employer, Non-Exclusive, Employer Paid Plans (Not Professionals-Only).
5. Keogh (HR-10) Plans for Self-Employed Individuals.
6. Coordination for Employees of Non-Profit Corporations.

#### Individual Investment Accounts

Plans are being formulated at present for IEEE sponsorship of a fixed interest accumulation fund to determine if such a move is feasible or possible. We'll report on it as soon as definite conclusions have been reached.

#### Individual Investment Accounts, Qualified

Legal documents are now being drafted to take advantage of proposed laws. These bill provisions, if enacted according to the Senate version, might allow many if not all employed individuals to invest up to \$1,000 to \$1,500 of their annual salaries in qualified retirement funds—and to defer taxes until retirement. This tax break will add 25 percent or more to the amount that an individual can invest for his or her old age. In addition, the earnings will also be tax deferred.

Details will have to wait for final

(Continued on page 2)

### Pension Legislation Near Crucial Phase

By Frank Cummings  
IEEE Special Counsel

At year's end, engineers are on the verge of success in securing federal pension reform legislation.

The pension reform bill includes a number of provisions specifically designed to benefit engineers. The bill passed the Senate in September, and has been churning through the House, and the House leadership has scheduled it for a floor vote action by mid-February.

#### The Development of Plan Objectives

In the summer of 1972, IEEE had concluded that, while there were good plans and bad plans, no single-employer pension plan could provide a real solution to engineers' pension problems. A survey disclosed that the typical engineer moves from job to job so frequently that, even if he earns a pension from one of his many employers, it will be based upon relatively short service, and will produce relatively low retirement income. To give an engineer full credit for pension accruals through his working life, during which he works for perhaps a dozen engineering employers, the only realistic solution would be to devise a single profession-wide plan which would consolidate a lifetime of pension accruals in a single account, and preclude the possibility of forfeiture of any of those credits, no matter how brief the employment might be.

So what we have in mind is to have the engineering societies, led by IEEE, devise a multiemployer pension plan with these features:

1. *Profession-wide coverage*, of all engineers, not confined to the employees of a single employer.
2. *An engineers-only plan*, so that we would not have to "tailor" the provisions of the plan to satisfy other groups with different employment problems.
3. *Immediate vesting*, so that no employment, no matter how brief, would produce a forfeitable pension account.
4. *Tax Qualification*, through some formula which would satisfy the requirements of the federal tax laws which mandate that a pension plan not "discriminate" in favor of higher paid employees, i.e., that contributions or benefits must bear a uniform relationship to compensation of employees, both high paid or low paid.

#### Initial Approach To The IRS

With these elements in mind, we approached the IRS, and were turned

(Continued on page 2)



## Guarrera pledges IEEE leadership in professional and technical fields

"As your incoming President, I intend to exert direct, active leadership in a vigorous manner to see to it that IEEE accomplishes its objectives of leadership in both technical and professional fields."

This is the charge laid down in a special interview with IEEE PROFESSIONAL NEWS by 1974 President John J. Guarrera, a product of both industrial and academic environments.

"I think the real challenge the Institute had when we first embarked on developing the professional area was the remarkably fine reputation of IEEE in the technical area," he said.

He pointed out that the big job in recent months has been to communicate to all IEEE members what can be done.

"I think that to maintain one's image, we have to tackle problems in bite-sized pieces," he added. "Rather than to get involved in the entire area of professionalism, I think we have been wise to select those areas where we can make an impact. Pensions is a good example, and that is why a good portion of this issue is devoted to this subject."

"Energy is another area where we as IEEE members have a responsibility. In this regard we are joining with other engineering societies such as ASME, ASCE, and AICHE with comparable interests.

"We also have the job of making communications easier through the Coordinating Committee of Engineering Society Presidents (CCESP) and NSPE.

"The problem as I see it is to continue tackling new programs in professional affairs but always to recognize that our reputation is totally dependent on our remaining No. 1 in technical affairs.

(Continued on page 3)

## OUR READERS WRITE.

### Patent Rights

Permit me to present the following on the subject of patents. As has been stated in the respective article of your October, 1973, issue, it is sad enough that inventors are compelled to sell their entire creative faculty for \$1.00. But, what makes matters far worse is the custom that many, if not most disclosures are never reduced to practice by their employers and thusly, put to death in the files of their patent departments. In the meantime, others may, independently and inadvertently, invent the same matter, pursue it commercially and benefit from these efforts considerably. Whereas it is, basically, not unreasonable to require employees to report their inventions first to their employers, it is believed to be most inequitable not to release the rights to the employees if no interest on the part of the employer exists.

Rudolf Steiner  
Los Angeles, California

### Comments

(Editor's note—In the last report, readers were asked to send us their comments on the PROFESSIONAL NEWS. Here is an abridged sampling of their replies.)

It is almost unbelievable to me that in the short space of one year, your Committee (USAC) has made so much progress. Your first issue of the IEEE PROFESSIONAL NEWS has to represent the most significant contribution to the average IEEE member since the organization was formed. Congratulations!

As a member of the society for over twenty years, I want to sincerely congratulate you and your staff for an excellent, well-organized and pertinent newsletter which very quickly informs members of USAC activities as well as informs us of other news concerning our profession.

I would like to take this opportunity to state that your October issue of the NEWS was read with zeal. The things you reported on were of most interest to me.

(IEEE PROFESSIONAL NEWS will print as many letters sent to it as space permits. Letters must include your name and address though your name will not be printed if requested.)


  
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(Continued from page 1)

### Pension Legislation Near Crucial Phase

down flat. The Chief of the IRS Pension Trust Branch told us that his branch had issued a number of rulings against plans such as the one we had in mind.

After we were turned down by the IRS, we researched the question further, and discovered that the particular rulings which the IRS had cited to us had, on occasion, been taken to court, and that the IRS was, in fact continuing to adhere to a position which had already been rejected by at least one Court of Appeals, although the Supreme Court had never ruled on the question.

### A Second Approach To The Treasury Department

We then tried to go "over the head" of the IRS, and went to see the Assistant Secretary of the Treasury in charge of tax policy — Assistant Secretary Fred Hickman, and his assistant, Deputy Assistant Secretary John Hall. We explained our problem, and we received a most sympathetic reaction. Indeed, Hall began to explore a proposed new ruling which would have allowed our plan to qualify. But when it went down to the IRS for consideration, it became embroiled in bureaucratic haggling, and the ruling still languishes there.

### The Legislative Route

So next we turned to the legislative route.

Two pension bills were pending in the Senate in early 1973. One was the so-called Williams-Javits bill, S. 4, which originated in the Senate Committee on Labor and Public Welfare, and a companion bill (S. 1179) was pending in the Senate Finance Committee.

The engineering societies formed a group—the Joint Committee on Pensions—and decided to lobby for a number of amendments in each of these bills, with the hope that all of the amendments and bills could be consolidated into one bill eventually.

### 1. The Procurement Regulations Amendment

First we went before the Labor Committee and asked for two amendments, neither of which involved the tax laws, but each of which would be of some help in solving engineers' pension problems.

The first amendment we sought from the Senate Labor Committee involved federal procurement regulations. It provided that all federal procurement regulations should contain a uniform provision assuring that, to the maximum feasible extent, when a government procurement contract terminates, leaving employees in a pension forfeiture position, the only way the employer can treat his pension costs under that contract as reimbursable from the government is when there is some provision to guarantee that employees would not forfeit pension accruals earned under the contract.

### 2. The Special Study Amendment

Second, recognizing that we could not get a tax amendment in a Labor Committee bill and that we could not ask for universal immediate vesting for all employees (not just engineers) without losing majority support for the entire bill, we asked for a provision in the bill requiring a government study of the unique pension

problems of high-mobility employees such as engineers, with early recommendations as to additional legislation for our specific protection.

The Labor Committee adopted both of our proposed amendments, and S. 4 was reported out to the Senate floor.

### 3. The Tax Amendment

But we still had not solved the problem created by the IRS, so we moved on to the Senate Finance Committee, which was considering another bill, S. 1179. There we explained our difficulties with the IRS, the fact that the IRS was taking a position which had already been rejected by one court, and the fact that even the Assistant Secretary of the Treasury had been unable to shake the IRS's blockage of our pension plan. After testifying, we met individually with a number of Senators and their staffs, and we worked out an amendment to S. 1179 which would permit the kind of plan we had in mind. The amendment was accepted and reported out to the Senate floor.

### 4. Senate Floor Action

What followed was several months of negotiation between the two Committees to try to synthesize the two bills into a single measure, and throughout these negotiations we continued contacts with both sides to assure that all of our amendments to the various bills would survive in the consolidated measure. And on September 19, 1973, the Senate passed a consolidated bill (H.R. 4200) with all of our amendments surviving.

### 5. House Committee Consideration

We testified before the House Education and Labor Committee, chaired by Congressman John Dent, and we testified before the House Ways and Means Committee, chaired by Acting Chairman Al Ullman. As this column is being written, the draft Ways and Means bill has been issued, and it includes two of our three amendments—the one permitting us to set up our own pension plan, and the provision dealing with government procurement regulation. The Labor Committee has agreed to add a version of our third amendment. The House leadership will be made the pending business is February subject to approval of the House Rules Committee, and a compromise between the two House bills now seems likely. So, it now seems to be a very strong probability that a major pension reform bill will pass by mid 1974. And it seems likewise more than probable that the principal engineers' amendments will be enacted, and take a great step toward solving the engineers' pension problems which heretofore had seemed insoluble.

Not that there will be any instant solution. Even if all of our amendments are enacted, we will still have to go through a tedious process of drafting, developing, and tax qualifying the plan which the new law would permit. And we would need to "sell" it—which will involve considerable effort by the engineering profession, the engineering societies, and individual engineers in persuading employers to accept this kind of a plan for engineers.

**BULLETIN**—The House has passed our pension reform bill containing the provisions we've been fighting for. The bill will now be sent to a joint Senate-House committee to iron out the differences between their two pension bills.

## 1974 will present problems, promise for the Engineer

By Robert Rivers  
Employment Practices  
Survey Committee

IEEE has been working for a considerable period of time to develop guidelines for the "professional employment for engineers and scientists" in cooperation with other major engineering societies.

The purpose of this program is to answer the need for scientists and engineers to play a larger role in developing employment policies, a need dramatized in recent years by large-scale layoffs and relocations.

These guidelines change periodically as conditions change, but they do provide a framework to mutually satisfying relationships between professional employees and their employers. The guidelines represent desirable general goals rather than a set of specific minimum standards.

It is felt by many of us that if the spirit of these guidelines is observed, they can help to minimize personnel problems, reduce misunderstandings, and generate mutual respect. They should be of use to employers in evaluating their own practices, and to professional employees in evaluating both their own responsibilities and those of their employers.

In order to determine just what the situation is, an employment practices survey was taken in 1973 to determine current conditions revolving around salary structure, fringe benefits, physical facilities, communication of employment policies, pension plans, and related matters.

The survey suggested that areas for future emphasis should include proper documentation and communication of employment practices and guidelines. The problem areas indicated concern for:

1. Government funding,
2. The age of engineers in various positions,
3. Short- and long-term employment situations.

An experimental program of regional meetings is being planned to provide direct employer consideration of employment guidelines, and in order to promote employer implementation of the guidelines.

We must appreciate that there are really no models for this kind of problem. The energy crisis precipitated by the Mideast conflict and the subsequent embargo by Arab nations is a classic example of the kind of unprecedented economic situation that may have wide repercussions which are not now predictable for the entire engineering profession.

This is, in effect, a knob-twisting situation, and may hold promises or perils for the electrical engineer. I defy anyone to predict exactly what is going to happen.

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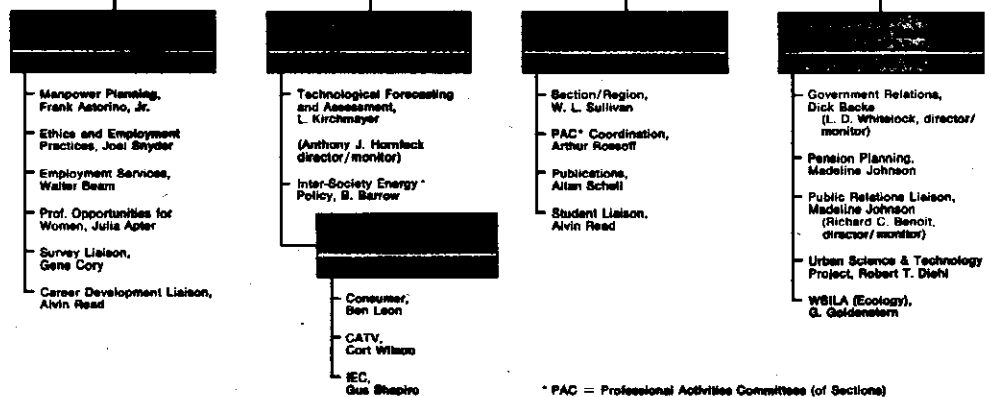
Frank Cummings



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Constitution—Harold S. Goldberg (Ex-Officio)

Advisory Committee



\* PAC = Professional Activities Committee (of Sections)

## Brief Events of General Interest to IEEE Members

### IEEE Endorses Energy R&D Bill

The Institute joined with other engineering societies in sending two statements to Congress in support of legislation that would create the Energy Research and Development Administration (S. 2744 and H.R. 11510). This new Administration would have the central responsibility for managing government R&D programs pertaining to all energy sources.

The IEEE supported these bills because "self sufficiency in energy production . . . involves large scale increases in research and development related to energy." A statement signed by IEEE and NSPE noted that "once we establish an adequate R&D organization, we can proceed to install the visionary leadership and administrative talent needed to accomplish this truly herculean task."

### Government Relations Committee Moves Ahead on Programs

The Government Relations Committee, which is organized by USAC, is proceeding on three major programs: a special Congressional reception, the IEEE Congressional Fellow, and its legislative program.

The Congressional reception, to which IEEE has invited all U.S. Senators and Congressmen, will provide the Institute with a chance to inform our legislators about many USAC projects. These include the salary survey, the manpower report, and the Institute's position on energy legislation.

Our first Congressional Fellow, Dr. Ronald Larson, has also been active in government affairs. He has been working with the House Committee on Science and Astronautics and their subcommittee on energy.

IEEE's support of legislation that will benefit its members, especially in the pension and energy fields, have been detailed in other articles. In addition, the Institute, in cooperation with ASME, publishes abstracts of legislation which are of interest to engineers. (Copies available from Emma White at Headquarters.)

### IEEE Launches Urban Science and Technology Project

One of the most dramatic innovations of the current IEEE program is the new Urban Science and Technology Project which is now being tried out in Region 6.

Its basic objective is to establish a means for IEEE to provide leadership so that members in local sections across the country can provide technical advice and assistance to officials of local governments. It may also motivate their own cities to establish individual science and technology programs. Ten cities are targeted for presentations in 1974.

(Continued from page 1)

### Plan consists of six orderly phases

legislative action but such a plan can and will immediately incorporate a stock portfolio option and will be integrated with all other IEEE plans in terms of money management, administration, and reports to members.

### Multi-Employer, Engineers-Only, Immediate Vesting Plans

These plans depend again on passage of legislation incorporating IEEE's amendments. This will permit the Institute to set up a multi-employer plan under a special exception to the Tax Law.

Under such a plan, each cooperating company would make pension contributions for its engineers (or at least for those who were interested) into a central fund. The money would be immediately vested in an individual's account and every subsequent employer could contribute without delay vested money into this same account throughout the engineer's career.

It is important to note that the legislation is an enabling tax law, not a mandatory provision. Thus, each engineer may and should negotiate with his employer regarding adoption of this plan for himself. However, those members already vested in a company plan may not want to choose this option because their ultimate benefits under the company plan may be better.

### Multi-Employer, Non-Exclusive Plans

They have already been designed by the Pensions for Professionals Corporation (PPF), a multi-society pension corporation. These will be of use mainly to small employers who will insist on a single plan for all their employees, engineers and non-engineers — such plans

are permissible under the current law. Although the ideal goal of PPF is to obtain immediate vesting, cost considerations and traditional notions have forced a compromise with vesting intervals up to five years.

For this and other reasons, IEEE does not plan to duplicate PPF's efforts. However, since these plans may be the only offering that some employers of IEEE members will make in the foreseeable future, we are in intensive negotiations with PPF to arrange for reciprocal offerings between IEEE and PPF members.

### Keogh Plans

These will be added to the program for self-employed IEEE members. These permit individual tax-deferred investments both under present and proposed tax laws. Although available from a variety of sources, investment through IEEE's pension corporation will permit coordinated accounting of pension funds throughout one's career which may include periods of employed and self-employed engineering jobs.

Lastly, the committee is looking into the need for additional plans for IEEE members employed by non-profit corporations and for the degree of coordination desirable between the IEEE Corporation and the TIAA/CREF organization.

### Merger Talks With PPF

Although IEEE can make all of the previously mentioned plans available through the pension corporation it has just chartered, marketing the multi-employer plan to large corporations will be much easier if the plan is supported by all the technical professions and associated societies.

(Continued from page 1)

## USAC streamlines activities for 1974

the entire membership of IEEE in this country," said Dr. Young in commenting on his plans for 1974.

"It is of utmost importance that we involve as many IEEE members as possible in professional activities, from serving on committees to informing their Congressmen. There are now some 20 Section Professional Activities Committees (Pac's) and we would like there to be more."

"Every member should ask his colleagues to join IEEE — our professional society — and thereby show his support. To paraphrase one of our late leaders — it is not just what IEEE can do for you, but what can you do for IEEE, and through it for your profession, and for all of society?"

\* If you are interested in forming one, write to J. M. Kinn at IEEE in New York.

## Guarrera pledges IEEE leadership

(Continued from page 1)

"We are second to none in electrical and electronics engineering, and we are looked at and dealt with on terms that respect this position. And we must never forget that we are the largest engineering society in the world with the possible exception of the Russians."

Mr. Guarrera said that IEEE has not been "bashful" in going to the outside world for professional help either in the technical or professional areas.

At the same time, Mr. Guarrera said, IEEE has become extremely sensitive to member reactions and needs through polls and other opinion-gathering techniques.

### IEEE members to hear Emilio Q. Daddario at INTERCON on technology assessment



IEEE members will have the opportunity to hear the new Director of the Office of Technology Assessment (OTA), former Congressman Emilio Q. Daddario of Connecticut, at the INTERCON banquet. He will discuss technology and the future of America.

John M. Kinn, Director of Educational Services of IEEE, recently met with Mr. Daddario to talk about his INTERCON speech—which will be one of Daddario's first major addresses as OTA Director—as well as to extend the cooperation of IEEE

with his office. Sen. Edward Kennedy is Chairman of the OTA board, which has six Congressmen and six Senators and is bipartisan. The OTA Advisory Council includes, among others, Dr. Jerome B. Wiesner, MIT head who was nominated by IEEE, John T. McAlister, Jr. of the Stanford University School of Engineering, Dr. Harold Brown, President of Caltech and formerly Secretary of the Air Force, J. Fred Bucy, Jr. of Texas Instruments, and other distinguished scientists.

In an interview with IEEE PROFESSIONAL NEWS, "Mim" Daddario, as he is known, said that his office is now actively studying the major areas which will be of interest to Congress. Energy, while currently a prime target for attention, may not be as important in the future as, for example, the future availability of mineral resources.

Daddario has written to all Committee Chairmen of Congress, asking them for nominations of areas of prime importance to them.

"Our problems are very interesting," he said. "There are stacks of forecasts. But we have to find out: where is the methodology? Where is the expert thinking?"

"We need a digest of this mountain of literature. And we have to find out how we can help Congress do a better job, how improvements can be made in the legislative branch which can hopefully affect comparable activities in the executive and judicial branches as well."

The former Congressman and his staff are now trying to block out areas which will be of interest to Congress—there is a matrix of approximately 300 to 4000 areas of possible interest to OTA. Some of them are energy technology, land use, use of scientific and technical manpower (Daddario has a copy of the IEEE's latest "Career Outlook in Engineering" Report), computer use, urban mass transit, and other problems.

OTA started from a congressional need to improve the scientific and technical information capabilities of both

Houses of Congress. It stems back to 1958 when science committees were created in both Houses, and it was given impetus by the Sub-Committee on Science, Research and Development, of which Daddario was the first Chairman. In 1966 he introduced the first bill which originated the concept of technology assessment whereby Congress would have an intelligence arm to give it early warning of the consequences of technological developments for good or evil.

He told PROFESSIONAL NEWS that he regards "the whole problem of manpower use as a key to the survival of our democratic society."

In a report to the Committee on Science and Astronautics of the House of Representatives recently, the Congressional Research Service of the Library of Congress defined Technology Assessment as "the thorough and balanced analysis of all significant primary, secondary, indirect, and delayed consequences or impacts, present and foreseen, of a technological innovation on society, the environment or the economy."

It goes on to say: "Technology Assessment is not a search for only the adverse effect of a technology; it is not a determination that a technology should or should not be employed; it is not a mechanism to halt or slow the development of technology."

And technology is defined as the "systematic, purposeful application of knowledge, skill, and expertise toward a function or service useful to man."