The IEEE

Newsletter

PUBLICATION OF THE NORTH JERSEY SECTION OF THE INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

MAY, 1986
Volume 32, Number 11

Publication No: USPS 580-500
"The IEEE Newsletter" is published monthly except June by the North Jersey Section of The Institute of Electrical and Electronics Engineers, Inc., a nonprofit scientific society dedicated to the advancement of electrical and electronic engineering and the allied arts and sciences. Headquarters: 345 E. 47 Street, New York, N.Y. 10017. Sent automatically and without additional cost to each member of the North Jersey Section. Printed in U.S.A. Second-class postage paid at New York, N.Y. and at additional mailing offices.

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Deadline for receipt of material is the 1st of the month preceding the month of publication. All communications concerning editorial and business matters, including advertising, should be addressed to: The Newsletter, c/o Girard Associates, Inc., 6 Robert Terrace, Mt. Arlington, N.J. 07856. (201) 398-8534.

Subscription: $0.75 per year through dues for members; $1.50 per year for non-members.

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(201) 981-0060
It is not necessary to inform the North Jersey Section when you change your mailing address. The NEWSLETTER and other section mailings use a list provided by IEEE's national headquarters in New York. This means the Section has no need to maintain a mailing list or addressing plates. Section membership records are changed when Headquarters notifies us.

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Life Cycle Costing And Product Assurance

The NJ Reliability Chapter will meet on May 20, 1986 to discuss Life Cycle Costing (LCC) and Product Assurance. Peter Reisz of Lockheed Electronics will be the keynote speaker. He will discuss how the topic of LCC has grown from its early beginnings through current government requirements. Practical aspects of LCC including tools, and cost computer models for hardware and software will be emphasized. The main theme of his presentation will be the LCC and Product Assurance are "Partners in Excellence."

About The Speaker

Peter Reisz has over twenty-five years of engineering experience. He is currently responsible for LCC at Lockheed Electronics, where he has also done other reliability related work. Prior to working at Lockheed he was an Adjunct Professor at NJIT, and spent brief periods at Automated Technology Corp., Dow Jones & Company, Aircraft Radio Corp., Ft. Monmouth, and Sanders Associates. He received a BSEE and MSEE from Northeastern University and an MBA from Fairleigh Dickinson University. He is a registered PE, ASQC Certified Reliability Engineer, and has memberships with ISPA and ASQC.

Time: 7:30 PM, Tuesday, May 20, 1986.
Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.
Further Information: Hank Moss (201) 284-3237.

Membership Drive Urged By METSAC

The METSAC (Metropolitan Sections Activities Council) membership for the month ending in February, 1986 compares favorably with the statistics of a year ago -- 16,164 vs. 15,820 or an increase of 344 members (2.2% increase). In comparison to the twelve-month total Institute gain, METSAC did not do as well. The total Institute was 4.3%.

February is the month when the Institute drops Members in arrears from the membership. Nearly 20% of the METSAC membership slipped into payment arrears. The significant drop in the Sections' membership reflects this. The Long Island and North Jersey Sections are to be commended on their membership retainment. Their loss was below the Institute and Council percentage levels.

Many of the MEMBERS "flagged" do not intend to discontinue their membership, but have merely fallen into arrears by postponing their 1986 dues payment.

METSAC recommends that all sections institute a vigorous effort to contact all members in arrears. All Sections have received "pink change" sheets with the names and addresses of those who have gone into arrears.

METSAC Section Chairmen are reminded that the 1986 half-payment schedule began on March 1.

For membership information and membership applications for IEEE and the Societies please contact IEEE Membership Development, (201) 981-0060, Ext. 294.

KEEP MEMBERSHIP GROWING!

Your Chance To Suggest Courses

North Jersey Section IEEE courses are provided as a service to the membership and registration fees are set with the intent to provide this service at cost or less to IEEE members.

The North Jersey Section IEEE Education Committee is currently sponsoring a course entitled "Programming in the Language BASIC." Registration for this course has far exceeded our expectations.

The Education Committee desires to continue our success. However, we need your input. To provide the best service we can, the members' needs must be known. Help us to supply the courses you want by providing the information requested on the form below and sending the completed form to the following address: John A. Baka, Distribution Engineering, Jersey Central Power & Light Co., Madison Ave. & Punch Bowl Road, Morristown, N.J. 07960.

NORTH JERSEY SECTION IEEE
EDUCATION COMMITTEE COURSE SURVEY

Check your interest in registering for the courses listed below if sponsored by the IEEE:

COURSE TITLE	STRONG INTEREST	SLIGHT INTEREST	NO INTEREST
Industrial Power Distribution	.....	.....	.....
Computer Graphics	.....	.....	.....
UNIX	.....	.....	.....
"C" Language	.....	.....	.....
Theory and Practice of Error Control	.....	.....	.....
Microwave Component Design	.....	.....	.....
Programming in the Language BASIC	.....	.....	.....

Please suggest courses which are not listed above and which would interest you. The Education Committee of the North Jersey IEEE also welcomes any other comments and/or recommendations which you have concerning our program and direction.

.....

.....

.....

The following information is optional but would be used for notification purposes if we ran a course of interest to you.

Name .....

Address .....

..... Phone No. .....

CONGRATULATIONS
New Senior Members

Serge Luryi
Albert F. Messano
Tim Mulrooney
Robert A. Ormiston
Michael Parente
Michael A. Schwartz
Robert J. Wilson

Are you eligible for Senior Member grade? To find out, contact Don Weinstein, Kulite Semiconductor, 1039 Hoyt Avenue, Ridgefield, N.J. 07656 (201) 945-3000.

New Management Society Members

New Members joining the Engineering Management Society - Metro New York/North Jersey Chapter during 1985 include:

Dayro Cardenas	Anthony P. Shuen
M. Suchomel	Frank J. Cerra
Manuel A. Costa	Thomas Tortoriello
Patrick W. Rowe	David M. Chiarello
Uldis Cirulis	Frank S. Filiciotto
Timothy O. Nantz	William B. Smith
Gabor Rothauser	Lawrence E. Berman
Takeya Yamamoto	Jonathan H. Goodman
Michael J. Marden	Richard H. Arsan
Yoshisuke Iida	David S. Seraphin
Rafael O. Ocasio	Michael Stock
John P. Karidis	Robert F. Mesnik
Lawrence R. Cohen	Jay Gilbert
Erica J. Williams	Michael G. Verga
Carl Towe	John V. Lombardi
Kai K. Tham	Eugene D. Hinners
Paul N. Cox	Georgios M. Orfanos
Joseph G. Goretick	Thomas H. Browne
Joseph P. Plescia	Anibal Alcantara Jr.
Stephen J. Anton	Stan B. Rabinovich
Peter K. Skurkiss	William E. Jones
Thomas W. Koenig	David J. Quinn
Peter K. Nakada	Loraine M. Locke
Mark J. Dietrich	Edwin E. Montanez
Aldo A. Bottani	Gunnar D. Karlsson
Errol H. Cohen	Robert A. Duhamel Jr.
Calvin F. Glass	Joan H. Delbagno
Sadeg M. Faris	V.O. Casper
Dean M. Reily	Kevin F. Deierlein
Valerie M. Laurent	Anthony P. Maniaci
Janet S.Y. Li	Jeremiah J. Starace
Cho Y Ng	Peter V. Donahue
Jason Kim	Ruben R. Rendow

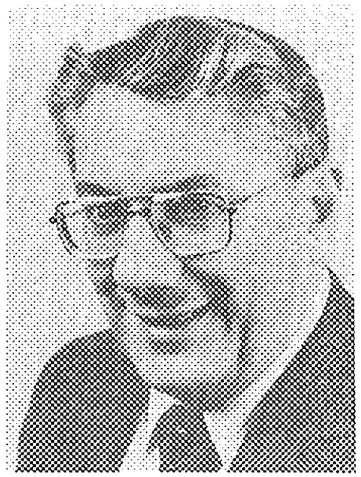
The Chapter welcomes these new members and urges them to become active in the chapter by contacting Al Bottani, Chairman at (212) 319-7444.

Student Activities

By Edward B. Farkas

PROFILE

This month our profile will be **FRANK P. FARINELLA.**



Frank has the reputation of someone you can count on. Active at the Power Engineering Societies Winter Power Meeting, Historian for the New York Section and Columnist for the MONITOR, Frank encourages newcomers with enthusiasm and wisdom. Frank remains active as a member of the New York Section Executive Committee and was recently elected a Director of ELECTRO.

Frank Farinella remains someone you can count on. We salute you.

CAREER TIP OF THE MONTH

On the resume and during the interview: Never underestimate your capabilities and never overstate your abilities.

KEEP THOSE LETTERS COMING

We have been receiving record volumes of correspondence...as many as 40 letters per issue...we hope the trend continues. It may take us a bit, but we intend to respond to each and every letter so please be patient with us. Most of all, KEEP THOSE CARDS AND LETTERS COMING. Your comments, suggestions and criticisms are most welcome.

THE SPAC STORY

With the assistance of Section Chairman Richard Tax, Section Student Activities Committee Chairman George Graul, Area Chairman Lou Luceri, Branch Liaison Sal Rotella and Regional Student Representative Ken Stauffer, New Jersey Institute of Technology and Stevens Institute of Technology Student Branch Officers organized two Student Professional Awareness Conferences last month.

New York City Technical College in the New York Section is now in the process of organizing a Model SPAC. Representatives of all the colleges and universities in Area 8 will be invited as guests of the Region. New York City Technical College was selected because it had previously sponsored a successful and historic Student Professional Awareness Conference -- with an attendance of over 500 people.

Stay tuned to this column for further details...then come and see a Model SPAC.

ELECTRO '86

This year the ELECTRO show will take place in Boston, Massachusetts on May 13, 14 and 15. While many of us who live and work in the New York area will not be able to attend this year...wait till 1987. ELECTRO '87 will take place April 7, 8 and 9 in the new Jacob Javits Convention Center in Manhattan.

RIDING FOR HELP

For **SUSAN FICHTER** helping people has become a way of life. In June Susan will ride in a 175 mile trek around the Finger Lakes region of New York. The funds she raises will be donated to the American Lung Association. Why not come along for the ride? How? By pledging to sponsor her. Any sum, large or small will not only be appreciated but is tax deductable. Help her help others by contacting Susan at the Port Authority of NY & NJ, TB&T Engineering (SHV), One World Trade Center, New York, N.Y. 10048 or call at (718) 867-6235.

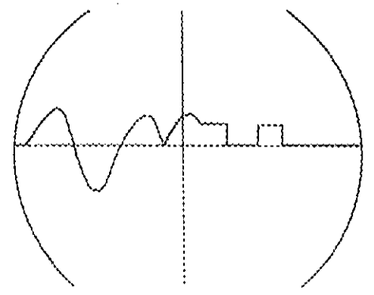
WEST POINT BULLETIN

The Regional Paper Contest, arranged by **Major Andre Sayles** of West Point on Saturday, April 12th was a resounding success. **Steven Kaufman** and **Stephen Searle** of Cooper Union, **Michael A. Massa** of RPI, **John J. Zygmaniak** and **Mark David Brown** of Trenton State College were the big winners. Excellent papers were also presented by **Jemine Alexander, Maria Gemmola** and **Adolfo Montenegro** of Cooper Union, **John Urban, Robert W. Sadowski** of the U.S. Military Academy and **Brian Gagno** of SUNY, Binghamton.

QUICKY CONTEST

Quicky Contest winners include: **Steve Kleinman** of NYNEX Co., **Mark Alan Napolitano** of the New Jersey Institute of Technology and **Keith J. Speak** of RE & C.

The correct answer to the April Contest is:

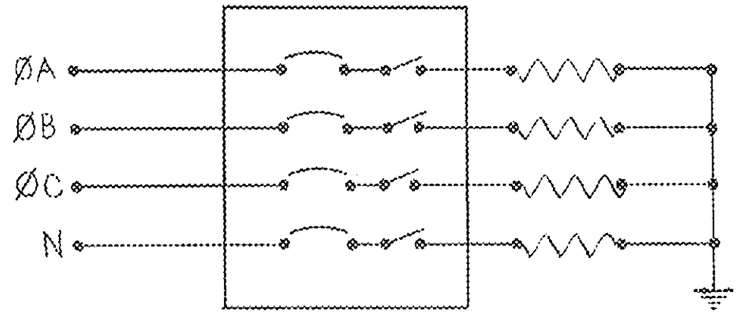


The waveform represents the output at different stages of a DC Power Supply. First we have a sinusoidal waveform, it is then half rectified, then undergoes full wave rectification, we then have a DC voltage which...can either represent the output of an operational amplifier or...can you figure out what?

And now the May contest. The drawing shown is an AC power distribution schematic.

1. What is wrong with this schematic?
2. Why?

Hint: It contains NEC violations.



pensions, benefit plans, salary reduction plans, and patent policies. Through the actions of the cartel, engineers are *not* employed in a free market but are subjected to controlled employment.

Corporate Views

The attitude of a company with respect to age discrimination is set by top management. When the Chairman of the Board of a *Fortune* "Top 10" company addressed a meeting of his vice presidents and general managers and said, "Anyone who has not risen into the ranks of management by the age of 40 is worthless," that set the stage for age discrimination within the company. When a manager, who had just been given an IEEE presentation on the age discrimination law, said, "I will hire engineers between ages 25 and 35, but I will not hire engineers between 35 and 45," that was a declaration of age discrimination.

Sam Robinson, Chairman and Chief Executive Officer of Robinson Nugent, in an article in *Electronic Engineering Times*, wrote, "We're currently taking too much from the productive portion of our society and handing it over to the retired portion. The only solution, as I see it, is to phase out the Social Security system. Meanwhile, we can also help solve the problem within our companies by scaling down the financial rewards for older, less productive employees. We'll keep you on, Mr. Jones or Miss Smith, at age 55, but we'll have to reduce your compensation; and if that is not satisfactory, then you have six months to look for other employment." Sam Robinson is in error when he links age with productivity.

IEEE in *The Institute*, displayed the headline, "EE Obsolescence Is Predicted in Massachusetts." The article was based on a survey commissioned by the Massachusetts High Technology Council, an industry organization, and it said, "Managers consider engineers beyond their prime at 33 years of age. . . ." At a meeting of more than 1,000 of his employees, the Vice President of Corporate Research and Development, General Electric Company, said, "No inventions are made after the age of 25." The President of the Massachusetts Institute of Technology, in a statement to Congress, is reported to have said that mathematicians are "over the hill" at age 19.

In yet another article in *The Institute*, the Chairman of the Board of Texas Instruments, Mark Shepherd, is reported to have said that "the biggest barrier to keeping the U.S. engineering workforce up to date is the reluctance of older engineers to go back to school. When asked whether he thought his company might discriminate against older engineers, Mr. Shepherd said, "There are rules about age discrimination and you have to worry about that. Have I sufficiently evaded the question?"

These examples are representative of the misguided corporate view that uses age in making employment decisions, rather than performance on the job.

The Long-Range Outlook

On July 1, 1983, people over 65 outnumbered teenagers for the first time in American history. Under intermediate demographic assumptions, the number of persons age 65 and over will grow from 25 million (11 percent of population) in 1980 to 32 million (13 percent) by the year 2000, and 55 million in 2030. Ninety-five percent of those over 65 live in the community, and most of them head their own households and make consumer decisions. Unless economic growth comes to a screeching halt, companies will be forced to rely more on older workers as job creation outpaces new entries into the labor force.

These changes in the age distribution of the work force call for greater employer commitment to restructuring of work time and to providing opportunities to retrain a qualified, better-educated, older labor force.

Because of demographic and social changes, it is certain that employers will significantly modify their personnel, employee benefits and training policies in the future so as to retain the work force required to meet business objectives. Current retirement policies continue to result in more and more early retirement by talented, productive, and usually healthy employees.

One important step that should be taken by the Federal Equal Employment Opportunity Commission is to change the rules to allow employers to continue the build-up of pension benefits for workers who stay on the job beyond age 65. Presently, the EEOC rule discourages work beyond age 65 because pension benefits remain fixed at the age-65 amount.

A committee of the White House Conference on Aging engaged Data Resources to study the following question: What would happen to the economy of the United States in the period 1980 to 2005 if older people, instead of continuing to leave the work force in ever-increasing numbers, should gradually return to work at the level prevailing in 1970? An economic analysis yielded some highly interesting results:

- The U.S. economy would show significant long-term improvement as a result of increased work by older people.
- Opportunities would expand for older workers without closing off opportunities for younger workers.
- The Gross National Product would grow 3.9 percent more by the year 2005 than it would without the stimulating effect of older worker employment.
- By the mid-1980s annual inflation would average two-tenths of a percent less each year.
- By the year 2005, Federal tax revenues would increase by $40 billion.

Encouraging a longer work life for older workers will increase productivity and national output while making a positive contribution toward remedying financial problems. ❖

IEEE Seminar
CORPORATE NETWORKS — NEW DIRECTIONS AND OPTIONS

Thursday, May 15, 1986, 9:00 AM - 5:00 PM
UNITED ENGINEERING CENTER
345 East 47th Street, New York City

Sponsored by:
The IEEE Communications Society, NY Section

AGENDA

1.	Introduction by Keynote Speaker	Dr. Paul Green, IBM
2.	Corporate Networks - New Directions and Integration	Mr. D.M. Rappaport Arthur Andersen & Co.
3.	Maturing Telecommunications Standards - The Challenges and Opportunities	Mr. L.J. Bolick Coopers & Lybrand
4.	Methods of Corporate Network Design	Mr. H. Cravis, A.D. Little
5.	INET — An Integrated Communications Network for IBM in the 1990s	Dr. K. Banerjee, IBM
6.	Integrated Operations Systems for Private Networks	Mr. M. Kaplan AT&T Bell Laboratories
7.	An SNA/ASYNCH Emulator for the IBM Personal Computer	Mr. M. Orenstein Travellers Insurance
8.	Networks - Today and Tomorrow	Mr. R. Uhl, Wang Corp.
9.	A High Bit Rate Optical Fiber Corporate Network	Mr. R. Vuono New York Telephone
10.	Panel Discussion	

FEE: $125 for Non-Members, $95 for Members, and $10 discount toward early registration before April 15, 1986. (Fee includes lunch, coffee breaks and seminar proceedings.) For further information: Mr. T.V. Seshadri (212) 754-4521, or Mr. J. Barbera (212) 395-8766.

Registration for "Corporate Networks - New Directions and Options"

TO: Mr. Jim Barbera, N.Y. Telephone, 1166 Ave. of Americas, New York, N.Y. 10036, Rm. 8J4.

Name:.....IEEE No.....

Affiliation:.....Phone:.....

Title:.....

Address:.....

Make check payable to NY IEEE COMSOC

Using Closed Circuit TV In Radiology Instruction

An example of electronic business applied to medical applications and diagnostics will be detailed at a May 14, 1986 meeting at Roosevelt Hospital. "Application Of Closed Circuit TV To Teaching Radiology" is the main subject of the May 14 meeting of the Metropolitan Chapter of the Engineering in Medicine & Biology Society. Other interesting applications of modern TV in cardiology and opthalmology will be included. Most of these installations are in the Metropolitan New York area.

The speaker will be Jerry Minter, President, Components Corp., Denville, N.J. A graduate EE from Massachusetts Institute of Technology, Mr. Minter is the holder of 17 patents in the field of precision measurements and instrumentation. He is the author of 16 published technical papers.

ALL WELCOME

All members and non-members are welcome, but RESERVATIONS are necessary.

Time: 7:30 PM, Wednesday, May 14, 1986.
Place: Radiology Teaching Room, Roosevelt Hospital, 58th and 9th Ave., NYC.
Pre-Meeting Dinner: (Optional) 6:30 PM, The FLAME Restaurant, 893 Ninth Ave., Corner of 58th Street, NYC.
Further Information and Reservations: Edna Feher (212) 757-0610, Mark Restivo (718) 836-6600, Ext. 318, or Ben Caref (718) 270-1568.

Cable Lab Tour

The May meeting of the North Jersey Section, IEEE Power Engineering Society will feature a tour of Cable Technology Laboratories, an independent cable test lab in New Brunswick, New Jersey.

Cable Technology Laboratories performs extensive cable testing for New Jersey utilities, for electrical consultants, and for other utilities as far as Texas. CTL also conducts numerous EPRI research programs.

The equipment at CTL includes a 1000 kV impulse generator, a 600 kV dc test set, a 500 kV ac test set, an EPRI funded cable extrusion line, and numerous test bays for cable load cycling and other tests.

Tour attendance is free and is open to all interested parties.

Time: 7:30 PM, Wednesday, May 14, 1986.
Place: Cable Technology Laboratories, Triangle Road off Jersey Avenue, New Brunswick, N.J.

Directions: Follow signs to N.J. Turnpike (direction south) to Exit No. 9 take Route 18 West (New Brunswick). After approximately 1/2 mile, switch to Route 1 South. Follow Route 1 South and at its intersection with Route 91, make a sharp 180° turn onto Route 91 (this is Jersey Avenue). Follow Route 91 until two blocks after the first traffic light. On the left hand side is Triangle Road. CTL Laboratory is behind Triangle Industries on Triangle Road.
Further Information: Joseph L. Kane, Jr., (201) 466-8466.

Artificial Intelligence

"Artificial Intelligence" will be discussed by Daniel Schutzer at the May 28, 1986 meeting of the North Jersey Joint Chapter of the Computers & Communications Society.

About The Talk

The speaker will define artificial intelligence, and will then proceed to discuss the following topics:

How AI differs from conventional processing
Key concepts and techniques
Available AI tools
The importance of AI
How to get an AI project started
Some case studies
Prospects for future applications.

About The Speaker

Dan Schutzer is Vice President at Citibank and NA Investment Bank with responsibility for developing advanced support products. He was formerly Technical Director of Naval Intelligence, and has previously worked at Sperry Rand and Bell Telephone Labs.

He received the PhD degree at Syracuse University, and has published over 65 papers and three books.

ALL WELCOME

IEEE membership is not required for attendance. Refreshments will be served.

Time: 8 PM, Wednesday, May 28, 1986.
Place: ITT Auditorium, 500 Washington Ave., Nutley, N.J.
Further Information: David Perry (201) 325-3769, Fran Stork (201) 884-6042.

PACE NEWS

Professional Activities Committee for Engineers

The following article was written by Walter R. Nial, past chairman of the USAB Age Discrimination Committee. This article is republished from the March 1986 issue of "IMPACT" our national PACE publication. Our appreciation is extended to Walter Nial for his effort to improve our profession. RICHARD F. TAX, Chairman, North Jersey Section

Age Discrimination Against Employed Engineers: An Overview

by **Walter R. Nial,** past chairman,
USAB Age Discrimination Committee

Age discrimination in employment has been illegal in the United States since 1967, but the problem has not gone away. While there have been a few signs of some small improvement in the treatment of older engineers, recent letters and phone calls from engineers and managers give the impression that such discrimination has actually worsened.

Some people make excuses for age discrimination by using such terms as "obsolescence" or pointing to a need for "additional refresher courses." These are smoke screens that obscure the heart of the issue. Age discrimination occurs when employment decisions are made on the basis of age; it is as simple as that. It is also quite simply a fact that *age discrimination in employment is illegal.*

There are IEEE members who believe that age discrimination is too controversial an issue for IEEE. Age discrimination is not controversial; it is illegal.

There are still others who would rather attack the messenger than listen to the message; but I would ask you to listen to the message from IEEE members and do your part to eliminate age discrimination, which is so disruptive to so many lives and careers.

Prior to about 1920, age discrimination in employment was justified primarily on the basis of the belief that "modern technology" required substantial physical strength, agility, and endurance, which was thought to be beyond the capacity of older workers.

Despite gradual publication in the 1930s of industrial studies that demonstrated the advantages of older workers in terms of productivity, reliability and physical capacity, age discrimination persisted and grew, because personnel managers and corporate officials remained unconvinced of the value of older workers.

A Louis Harris poll in 1981 and earlier in 1974 showed essentially the same public opinion on age discrimination:
- 80 percent agreed that most employers discriminate against older people.
- 86 percent agreed that forced retirement is unjustified.
- Most employers believe discrimination against older workers exists in the marketplace.
- Employers still exhibit widespread negative stereotypes about older workers.
- 92 percent of workers between the ages of 18 and 24 were against forced retirement, if older workers were willing and able to do the job.

In 1981, William M. Mercer, Inc. surveyed 552 employers nationwide. Many said they would not hire a person over age 50. Salary discrimination is an admitted problem. Most employers believe age discrimination exists.

Results of a 46-state survey show age-based discrimination in employment affects every type of industry and every level of employee. Termination, forced retirement, and resignation under pressure were the most commonly recognized forms of age discrimination. Supervisory or management personnel were the most likely victims of age discrimination, although no one at any level of seniority or skill is immune.

Employers' rationales for mandatory retirement were:
- To assure open positions for promotion of younger workers;
- A belief that productivity declines with age;
- Measuring productivity would be too costly;
- Mandatory retirement is administratively easier than individual performance evaluations.

William F. Kieschnick, President, Atlantic Richfield Company, wrote in *Aging and Work* that older Americans do not want to be "put out to pasture." They do not want to be told that because they are 60 they are no longer useful. Kieschnick says that business cannot take that attitude because it is clear that the older worker will be an increasingly important element of the American work force in the 1980s and 1990s.

A committee of the Scientific Manpower Commission reported that a substantial number of older scientists, who find themselves retired or unemployed, encounter difficulty in gaining employment. The Commission held that it is the function of the specialized professional societies to assist older scientists and engineers in gaining employment.

The Good News

Researchers can now demonstrate that certain crucial areas of human intelligence do not decline in old age among people who are generally healthy. Some of the most important forms of intellectual growth can continue well into the eighties. Earlier notions about the loss of brain cells as a person ages were in error. A recent study of brain chemistry at the National Institute of Aging shows that the healthy aged brain is as active and efficient as the healthy young brain.

Dr. Martin Diamond, University of California at Berkeley, is conducting research that undermines the notion that mental decline is a natural, inevitable feature of old age. The implication is that anyone who is in good health has a good chance of keeping his or her wits as well. Dr. K. Warner Schaie and his colleagues at the Gerontology Research Institute at USC have shown that, at all ages, a majority of people retain their intellectual powers.

John Horn, a psychologist at the University of Denver, says that crystallized intelligence continues to increase steadily throughout life. Crystallized intelligence is a person's ability to use an accumulated body of general information to make judgments and solve problems.

Texas Refinery Corporation of Fort Worth, Texas, has learned that older salespeople are often more productive than their younger counterparts. More than 20 percent of the firm's salespeople are over 65. W. D. Sear, Texas Refinery President, says "We found that our older salespeople are more disciplined, more self-motivated, and follow instructions better than younger workers. They are more productive."

Monsanto Company has teamed with Washington University in St. Louis, Missouri, to provide a training program for engineers who need to be reassigned and for engineers who wish to broaden their background in an advanced technological field. Monsanto pays all expenses for the full-time, one-year program. During the first five years of the program, the average participant was between 40 and 50 years old and had 20 years of service with Monsanto. Monsanto's program is successful because management believes that the program is worthwhile in terms of both profits and effective utilization of human resources.

Some Bad News

The bad news is that age discrimination is still a serious constraint to a lifetime career in engineering. Horror tales are abundant, such as the company that lays off engineers after nine years of service so that they will not have vested pension rights; or the company that lays off engineers at age 39 just prior to their coming under the protection of the age discrimination law at age 40; or the company that forces engineers to retire at age 60.

An excellent job of investigative reporting was done by *Electronic Engineering Times* in exposing the workings of the salary cartel, also known as the "R&D Group." It is composed of the 29 largest employers of engineers. Among its members are GE, IBM, GM, Exxon, MIT, and DuPont. Membership in the R&D Group is not open to all companies with R&D labs, but only to those companies that have successfully petitioned to join the cartel. Its deliberations are not limited simply to salary, but it also meets annually to trade confidential information on other personnel matters, including