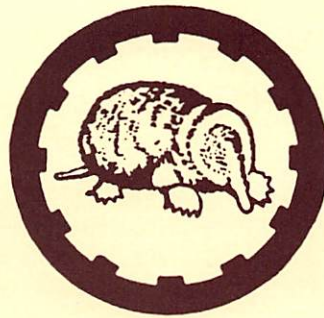


NEWS BULLETIN

AN ASSOCIATION OF INDIVIDUALS



OF THE MOLES

ENGAGED IN HEAVY CONSTRUCTION

HOLING

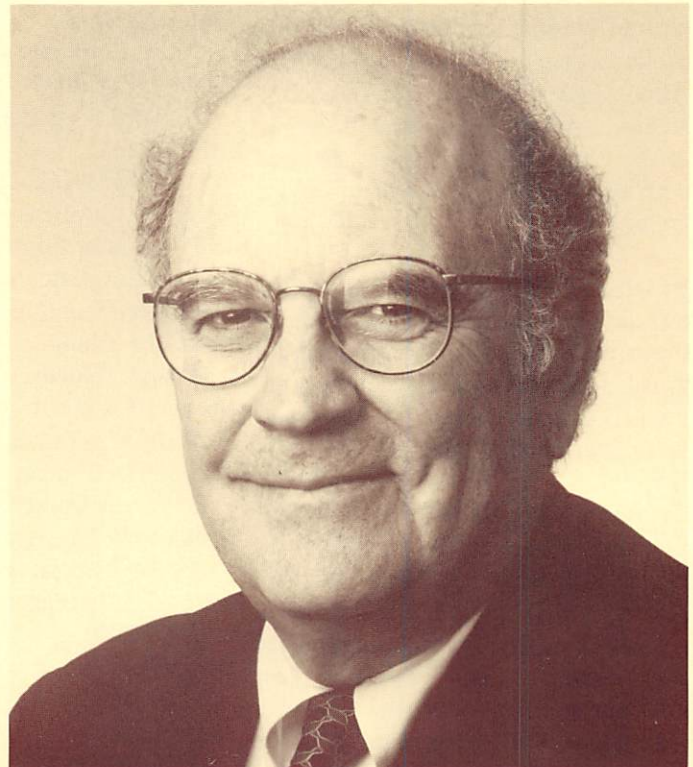
THROUGH

APRIL, 2001

GEORGE J. TAMARO ELECTED PRESIDENT of THE MOLES

GEORGE J. TAMARO, Senior Partner of Mueser Rutledge Consulting Engineers, New York City, has been elected to serve as President of The Moles for the year 2001/2002. He will receive the gavel from retiring President, Robert R. Buckley, at the Annual Business Meeting and Dinner to be held on Wednesday, May 2, 2001 at The New York Hilton Hotel.

Other officers elected are: First Vice President, PETER S. SCHNEIDKRAUT, Kiewit Constructors, Inc.; Second Vice EDWARD CRUZ, E.E. Cruz & Company, Inc.; Treasurer, ALFRED H. BRAND, Mueser Rutledge Consulting Engineers; Secretary, RICHARD S. WEEKS, Weeks Marine, Inc.; Sergeant-at-Arms, ROBERT J. BRUNGRABER, Consultant.



GEORGE J. TAMARO

Trustees elected for three (3) year terms are: PETER E. GETCHELL, PKF Mark III, Inc.; JOSEPH G. GUERTIN, JR. GZA Environmental, Inc.; WILLIAM H. HANSMIRE, Jacobs Associates; and P.A. (ERIC) O'NEILL, New England Foundation Company, Inc.

GEORGE TAMARO joined Mueser Rutledge Consulting Engineers in 1980, and was made a partner in 1983. While at MRCE he has been responsible for the design and construction of structures and foundations for numerous major projects around the world. Such projects include the four-building World Financial Center in New York City; the Chapultapec project in Mexico City; the three-building Friedrichstadt Passagen project in Berlin; the Federal Triangle project in Washington, D.C.; as well as other building foundation projects in New York City, Boston, Milwaukee, and Frankfurt, Germany; dams in New Jersey and Washington; marine projects in New York, New Jersey, Maryland, Oregon and the Philippines; subway and highway tunnels in New York, New Jersey, Boston, London, Taipei, and Korea; and sewerage projects in New York, Milwaukee, Boston and Egypt.

George has extensive design and field experience in the construction of slurry walls and earth retaining structures. As Vice President and Chief Engineer of ICOS, before joining MRCE, George was very active in international construction using

(continued on Page 2)

GEORGE J. TAMARO

(continued from page 1)

slurry walls and was honored by the American Society of Civil Engineers with its Martin S. Kapp Foundation Engineering Award. He became an innovator in this field, lecturing internationally on the subject.

George's early career was with the Port Authority of New York and New Jersey where he was involved in the construction of the Second Level of the George Washington Bridge; the World Trade Center foundations; the Newark Airport Redevelopment Project; and the Kennedy Airport Access Project. While at the Port Authority he was honored with the Howard S. Cullman Service Fellowship.

By virtue of his work with MRCE, ICOS and the Port Authority, George is one of those rare individuals who has gained a broad perspective of the construction industry having worked for an Owner, an Engineer and a Contractor.

George is licensed as a Professional Engineer in many states; is a Chartered Engineer in the United Kingdom; and is a registered European Engineer. He is a member of the National Academy of Engineering and among other affiliations is Fellow of the American Society of Civil Engineers and the Institution of Civil Engineers, and Structural Engineers, United Kingdom.

George earned a Bachelor Degree in Civil Engineering from Manhattan College; a Masters Degree in Structural Engineering from Lehigh University; and a Masters Degree in Architectural Technology from Columbia University.

George and his wife, Rosemary, reside in Leonia, New Jersey. George's son, Mark, received a Moles Student Award in 1989 and is now a Project Manager for Thornton Tomasetti Cutts in Washington, D.C.; his daughter, Jean, is an Architect/Project Manager for Chase Manhattan Bank; while his other sons Peter and Paul are in finance and computers.

New Members Elected

At the Executive Committee meeting on April 3, 2001, twenty seven new members (listed below) were elected to membership in The Moles.

Daniel R. Amoruso
Amortech Equipment Rental, Inc.
Erden Arkan
Kiska Construction Corp.
Gerard O. Bassi
Perini Corporation
Ralph P. Capelli
Underpinning & Foundation Co.
Ali M. Catik
Slattery/Skanska, Inc.
Robert A. Cavaliere
B. Anthony Construction Corp.
Richard Cavallaro
Slattery/Skanska, Inc.
Michael J. Chow
Mueser Rutledge Consult. Engrs.
Michael S. Cobelli
Slattery/Skanska, Inc.
Anthony Del Vescovo
Schiavone Construction Company
William W. Edgerton
Jacobs Associates
Michael A. Greenberg
NYC DEP
Philip Helmes
Intercap, Inc.
Gary Higdem
Granite Construction Company
Raymond W. Holdsworth
AECOM Technology Corp.
William J. Lemoine
Modern Continental Const. Co
Lawrence M. Lenahan
McNally Tunneling Corp.
Joseph McAtee
Urban Engineers, Inc.
Kevin J. McMahon
Edwards & Kelcey, Inc.
Matthew M. Neumann
Kiewit Constructors, Inc.
Harvey W. Parker
Harvey Parker & Associates, Inc.
John H. Pastore
Modern Continental Const. Co.
Galyn G. Rippentrop
Frontier-Kemper Constructors, Inc.

(Continued - Column to the right)

Two Moles' Member Celebrate Forty Years

The following Moles members, elected to membership in 1961, will receive life membership effective May 1, 2001.

DONALD CANALE had a 35 year career with Slattery Associates, having begun work there in 1948. Previously, he had served with the Army Corps of Engineers during World War II. Donald was made General Superintendent and Vice President of Slattery in 1962 and Senior Vice President in 1975. Don writes from Palm Beach, Florida that he will not be at the May 2nd meeting because he is recovering from a hip replacement.

HUBERT H. EVERIST, along with his brother, Garland, also a Moles member, were the owners of Western Contracting Company, a firm that performed many heavy and highway projects throughout the country in the middle part of the 1900's. Hubert continues to live in Sioux City, Iowa, home base of the company.

New Members (Continued)

Raymond E. Sandiford
Port Authority of NY & NJ
Angelo J. Silveri
Silverite Construction Co., Inc.
David A. Vosseller
Weeks Marine, Inc.
Michael A. Waters
Slattery/Skanska, Inc.

ANNUAL BUSINESS
MEETING AND
DINNER
MAY 2, 2001
NEW YORK HILTON
HOTEL

LET'S BE THERE TO
WELCOME OUR NEW
MEMBERS

NEWS OF MEMBERS

BOB BRUNGRABER, Professor Emeritus of Civil Engineering at Bucknell University, and owner and president of Slip-test Inc., Spring Lake, N.J. has been named a recipient of the Charles H. Irvine Memorial Award for his contributions to ASTM Committee F13 on Safety and Traction of Footwear. Bob is the incoming Sergeant at Arms of The Moles.

FRANK LOMBARDI, Chief Engineer of the Port Authority of New York & New Jersey will be honored as a Construction Industry Man-of-the-Year by the American Heart Association at the Rye Hilton Hotel on June 22, 2001. Frank was also honored by City College of New York with the Distinguished Public Service Award on February 1st at a luncheon at the Sheraton NY Hotel and Towers. Honored at the same luncheon with one of the Milton Pikarsky Distinguished Leadership Awards in Engineering was MICHAEL HARATUNIAN, Chairman of STV Group, Inc.

Two Moles members will be honored by the American Society of Civil Engineers with Outstanding Projects and Leadership (OPAL) Awards at its annual dinner at the Shoreham Hotel in Washington, D.C. on April 28, 2001. BEN C. GERWICK, JR., will receive the Construction Award and JIM LAMMIE will receive the Management Award. Gerwick has been both a Professor of Civil Engineering at the University of California at Berkeley and a practitioner active in the design and construction of marine and offshore facilities. Lammie is the former Chairman of Parsons Brinckerhoff.

RICHARD J. RACZYNSKI was named Chief Engineer of the New Jersey Turnpike Authority, effective February 26, 2001. Rich is a graduate of Newark College of Engineering and spent his career with the Port Authority of New York & New Jersey before before taking on this new position.

KEN STINSON, Chairman and CEO of Peter Kiewit Sons' Inc., and a 1964 civil engineering graduate of the University of Notre Dame presented, as part of the Distinguished Lecture Series at the University, a lecture on "Building our Infrastructure: The Role and The Romance".

ROOMS AT NEW YORK HILTON HOTEL

The Moles office has arranged for a block of rooms at the New York Hilton Hotel for all Moles' functions at the special rate (not to exceed \$240.00 per night) It is necessary that you make your reservation three weeks in advance of your arrival.

Who is Nadel? Who is Samuels?



Do you know who is Norm Nadel and who is Rube Samuels? People often get the two former Moles' Presidents mixed up. We put the Nadel name tag on Samuels (right) to confuse you. Rube Samuels is on the left and Norm Nadel on the right.. Is that really right?

THE MOLES

Holing Through is published by The Moles three times a year: April, July and November. The Moles is an organization of people engaged in heavy construction. Its purpose is to promote better acquaintance among individuals engaged in heavy construction to the end:

- That past and future friendships and a spirit of fraternization among the members be fostered.
- That meetings and other gatherings be held to exchange construction information and promote good fellowship among members.
- That advancement of the Construction art be achieved and outstanding performance be recognized through awards and otherwise.
- That the youth of our country be encouraged to participate in heavy construction by a multi purpose program of education in cooperation with engineering colleges and other associations.
- That, in the public interest, standards of construction shall be raised both as to engineering and business ethics.

The Moles' office is located at 577 Chestnut Ridge Road, Woodcliff Lake, New Jersey 07677. Telephone: 201-930-1923 Fax: 201-930-8501 Executive Director: Gerard J. Carty, P.E.

RAY MONTI, CONSTRUCTION MANAGER OF THE WORLD TRADE CENTER, DEAD AT AGE 71



Ray Monti

Ray Monti graduated from Manhattan College in 1952 with a Bachelor's Degree in Civil Engineering. While he was in college, the Port Authority came on campus to recruit trainees. But Monti had already enlisted in the navy reserve when he was eighteen, and he had gone to officer's school in the summers. He was prepared to take a commission upon graduation but just for fun he took the Port Authority's examination for junior professional trainees.

Through a rigorous selection process, Monti was one of nine accepted for the program. Though he was supposed to begin a two year tour of duty in the Navy, the Port Authority got the Navy to postpone the service and Monti spent a year in the Port Authority junior executive training program serving in each department for a short rotation.

Monti reported for duty with the Navy Civil Engineering Corps in 1953 and was told he would have to leave within three days for North Africa. When he arrived in Port Lyautey in what was then French Morocco, it was quite a surprise to his Commanding Officer who was expecting a Lieutenant Commander, not just an Ensign, to supervise construction of 800 foot high radio antennas.

Things went well in the Navy, and Monti was planning to stay with it. However, the chief engineer of the Port Authority, Jack Kyle (a Moles member) would write to Monti every few months describing current projects and encouraging him to return when his service was complete. Without the prodding of Kyle, Monti might not have returned to the Port Authority.

It was a good career move for Monti, since the 1950s was a period of tremendous growth in large scale public works projects throughout the United States and nowhere were there more projects than in the New York and New Jersey region. Monti worked at Kennedy and Newark Airports, as well as on the third tube of the Lincoln Tunnel. By 1959, Monti was promoted to assistant resident engineer on the \$30 million expansion of the mid Manhattan bus terminal.

As the bus terminal project was winding down, Monti and another engineer were sent to a three day course at Saranac Lake, New York, in critical path method (CPM) scheduling. This was a new technique that was just beginning to be understood and used at that time.

Monti was subsequently promoted to resident engineer in charge of the Port Authority's exhibit at the 1964 New York World's Fair. Monti used his newly acquired CPM skills to anticipate problems before they held up the work and the job was finished on schedule and on time, a challenging accomplishment considering all of the construction work going on at one time within a compressed area.

It was his success on the World's Fair project which resulted in his appointment as construction manager of the World Trade Center project. It was in January 1964 that the Port Authority announced that the project would include the world's tallest buildings; twin 110 story towers, rising 1350 feet above the streets, 100 feet higher than the Empire State Building. Construction cost was estimated at \$350 Million and total cost of the project at \$525 Million.

The architects for the project were Minoru Yamasaki & Associates of Birmingham, Michigan and Emery Roth & Sons of New York City. Structural engineer was Worthington, Skilling, Helle & Jackson of Seattle.

A 1964 article by Martin Kapp (then Engineer of Soils for the Port Authority and a Moles member) described the proposed foundation design and anticipated construction methods. The then normal construction method of excavating and dewatering the site could not be utilized because of the concern for settlement of surrounding structures. Rather, a new method, the slurry trench method would be used. In this method, a bentonite slurry pumped into an excavated trench retained the earth, while tremied concrete formed the walls. Though this method had been previously used for subway and building construction in Europe and

MONTI, WORLD TRADE CENTER - CONTINUED FROM PREVIOUS PAGE

Canada, its use on the World Trade Center Construction marked its first use in the U.S.

To keep the progressing excavation free of conventional cross bracing, the Port Authority planned a system of prestressed rock anchors. One million cubic yards of material was to be excavated to a depth of 75 feet. The excavated material was hauled to a close-by site extending into the Hudson River (prepared to receive the excavated material by the construction of cellular cofferdams) on which ultimately was built the World Financial Center.

In 1968 The Port Authority let a contract for the foundation work in the amount of \$18.7 Million to West Street Associates (a Joint Venture of Slattery Associates; Gull Contracting Co. Inc.; Poirer and McLane Corp; Tully & DiNapoli, Inc. and Spencer, White & Prentis). Sadly, all of the joint venture members (who were active Moles members), are no longer in business, except for Slattery Associates, which is now Slattery Skanska, Inc.

West Street Associates also did the landfill under a separate \$4.4 Million contract with the Port Authority. It in turn subcontracted the marine work to a joint venture of Horn Construction Co., Inc., and Spearin Preston and Burrows, Inc.

Among the challenges of the foundation contract was the maintenance and support of the two tubes of the H&M Railroad which ran right through the site. These tubes, which brought riders from New Jersey into New York City (as they continue to do today) needed to be kept in continuous operation throughout the construction period and this was successfully accomplished.

The cutoff wall was installed by Icanda, Ltd., an affiliate of Icos of Milan, Italy under an \$8.4 Million contract with the Port Authority. An April 1967 article in ENR contained the following: *"In one section (of the slurry wall) the overbreak was 85%, according to ARTURO RESSI di CERVIA, Icanda's field engineer.* Not only was Arturo Ressi involved in the foundation work, but Moles President-Elect GEORGE TAMARO was then a Port Authority engineer working under Ray Monti and his ability to speak Italian enabled him to converse with Arturo and the workmen brought from Italy to operate the slurry wall excavation equipment.

The structural steel requirements of the project were enormous. Five contracts were let for furnishing the



1970 Photograph of steel erection at the 103rd floor of the World Trade Center

192,000 tons of structural steel and the erection of all the structural steel was performed by Karl Koch Erecting Company under a \$20 Million contract. Koch continues to operate under the same name, but is now part of the Skanska organization.

The World Trade Center project was successfully completed due in great measure to Ray Monti's efforts. In 1971 he was honored by Engineering News Record with its Construction Man of the Year Award and in 1972 he was named Chief Engineer of the Port Authority.

Ray left not only a monument of concrete and steel, but he was also a fine human being who was interested in the people who worked with him over his 40 year career with the Port Authority. Frank Lombardi, current Chief Engineer of the Port Authority was quoted in Ray's obituary in the New York times as follows: *"He was known in the contracting community as someone who was firm, but also fair. People who knew him respected him"*.

Ray accomplished a great deal in his career. There are many others like George Tamaro and Arturo Ressi who worked with him and benefitted from that experience. It is a lesson for all of us in the construction industry to learn: that we must go about our jobs on a daily basis doing our absolute best and doing it in an honorable manner.

Ray Monti is survived by his wife Gloria; two daughters, Janet Monti Nevin and Carol Monti Barris; and one grandchild, Jennifer Nevin.

A MOMENT OF SILENCE

1995 Award Recipients, Bob Koch and "Mac" Magann, Pass On



WILFRED F. MAGANN



ROBERT C. KOCH

The November 1994 issue of *Holing Through* announced the selection of BOB KOCH for the Moles 1995 Member Award and of "MAC" MAGANN for the 1995 Non Member Award. "Mac" Magann died on October 27, 2000 at the age of 87 and Bob Koch on February 20, 2001 at the age of 77. Bob Koch was President of The Moles in 1991 and spent his career with J. Rich Steers and Yonkers Contracting Company constructing many major bridges and other heavy construction projects around the country. Mac Magann was founder and CEO of W.F. Magann Corporation, a heavy marine and industrial company located in Portsmouth, Virginia. The Moles mourns their loss and the loss of our other members listed below and are thankful for their contributions to our industry and our opportunity to know them as friends and men of high character.

JAMES A. BREEN intended to be at the January Awards Dinner but passed away suddenly on January 8, 2001. He and his father and brother, who predeceased him and were both Moles members, operated Michael F. Breen, Inc., a New York City based excavation and foundation contractor. Jim's sister was married to Bill Finneran who sadly is also among the current deceased members (see below).

LOUIS L. CAPONE was employed by Perini Corporation for 45 years before his retirement in 1984. He graduated from Northeastern University with a Civil Engineering Degree. He died on December 25, 2000 in Framingham, MA the the age of 88.

JAMES A. CAYWOOD, died on July 10, 2000 at the age of 78. Jim was a civil engineering graduate of the University of Kentucky and spent most of his career with De Leuw Cather & Co., serving for many years as Chairman Emeritus. He is best remembered for leading the engineering design of the Washington, D.C. Rapid Transit System.

WILLIAM C. FINNERAN, JR. died on January 18, 2001 at the age of 67. Bill was a Manhattan College civil engineering graduate and earned a Law Degree from St. John's University. He was with the firm of Shea Gould Climenko & Casey and served as General Manager and

Director of Labor Relations for the General Contractors Association.

CHARLES L. GUILD, Founder and Owner of C.L. Guild Company, and a Life Member of The Moles, died on October 29, 2000 at the age of 90. He has been described as a businessman, an inventor, a contractor and an equipment expert. He was the first recipient of the Deep Foundation Institute's Award in 1981.

WILLIAM MC PHILLIPS died on December 2, 2000 at the age of 78. He was employed by Weeks Marine Inc., Cranford, New Jersey, for 25 years before retiring as Vice President in 1986. He established the firm's dredging division and was a key member of Dick Weeks' team in developing Weeks Marine from a small stevedoring company into the major marine and dredging company it is today.

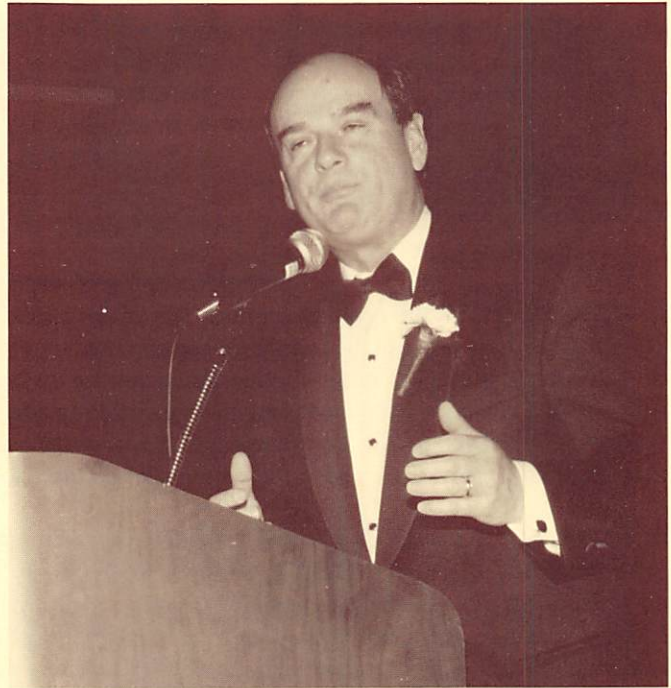
JAMES PARSONS, an Honorary Member of ASCE, passed away on January 19, 2001 at the age of 91. He earned Bachelor and Master Degrees in Engineering from Harvard University and spent his career with the firm now known as Mueser Rutledge Engineers, starting there in 1940 and continuing until his retirement in 1975.

RECORD TURNOUT FOR 2001 AWARDS DINNER

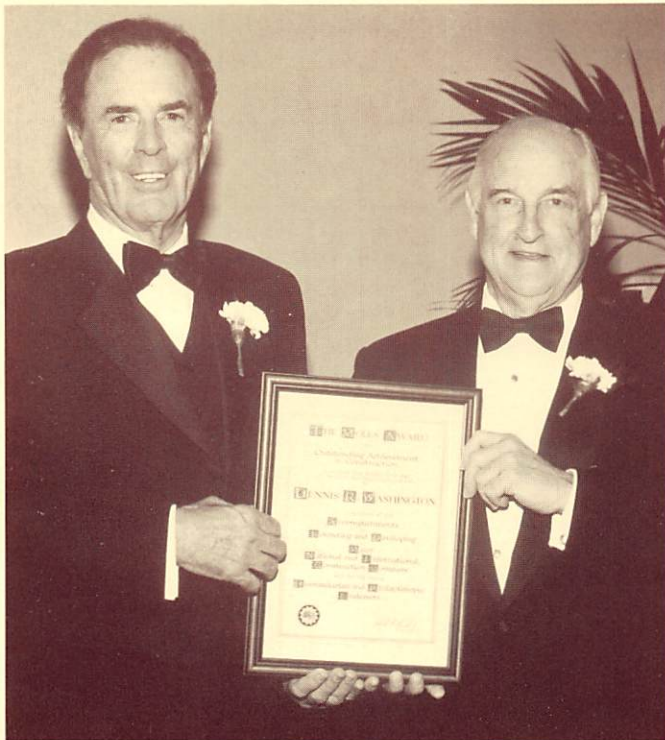
Almost 1600 Moles members and guests assembled in the Grand Ballroom of the New York Hilton Hotel on January 31, 2001 to honor two construction men for their outstanding achievements in heavy construction. DENNIS R. WASHINGTON, CEO of the Washington Integrations Group, Inc. was the recipient of the Non Member Award and RICHARD N. WEEKS was the recipient of the Member Award. WALTER SCOTT, JR., presented the award to Dennis Washington and RICH WEEKS presented the Award to his father.

Through the efforts of GEORGE NEUMANN, The Moles had arranged to have DONALD T. DI FRANCESCO, incoming Acting Governor of New Jersey, as the Principal Speaker and it was fortuitous that the Governor was sworn in the afternoon of the Awards Dinner and then came over to New York City to address The Moles as his first public appearance.

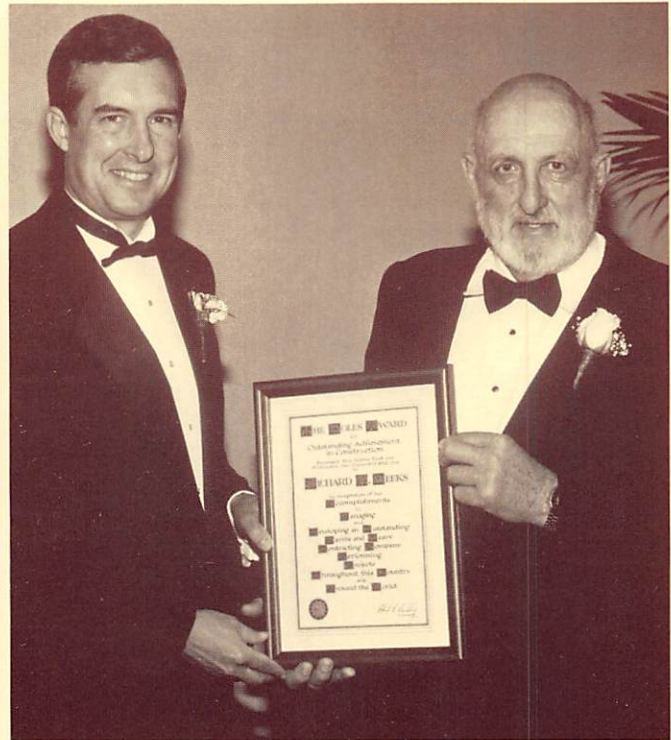
The Spouse's Dinner and Show continues to grow in attendance. This year 70 spouses had dinner in the Halcyon Restaurant and then proceeded to the Broadway show, MUSIC MAN.



Acting New Jersey Governor Donald Di Francesco



Dennis Washington (left) with Walter Scott, Jr.



Rich Weeks (left) with Richard N. Weeks



TONY MAZZO

**AN OPPORTUNITY
TO KEEP
LEARNING BY
ATTENDING
MOLES'
MEETINGS**



MARK APPEL

NOVEMBER MEETING: Moles member TONY MAZZO, with the able support of MEL FEBESH, both with Urban Substructures, Inc., presented a lecture on the moving of a landmark theater on 42nd Street in New York City. Tony was not only successful in presenting the technical details of the undertaking in a clear and understandable way, but also added humor, which made the lecture particularly enjoyable. In addition to about 150 members present for the lecture, there were also about 25 students and faculty representative who attended. After the lecture, the reception and dinner followed, and 25 Year Certificates were presented to the six members present to receive them (see photo below).

FLORIDA WINTER MEETING: The Annual Florida Winter meeting took place at the La Playa Beach Resort from March 1st to March 4th. MARK APPEL, Senior Vice President of the American Arbitration Association for Construction, presented a talk on Alternate Dispute Resolution. This was a broad subject encompassing Partnering, Dispute Review Boards, Mediation and Arbitration. Mark, a Manhattan College graduate, has a marvelous ability to present his subject matter clearly and also is able to interact with his listeners well. He did such an effective job that he was asked to return the following day for further discussion and questions.

Another way for Moles members to keep abreast of what is going on in the industry is to attend STUDENT'S DAY each year. Many members have been doing this for a long time. The projects selected are always interesting. This year's Student's Day was on April 6th and was at the Brooklyn Queens Expressway reconstruction being performed by Slattery/Skanska. More about this in the July issue of *Holing Through*.

STUDENTS AND 25 YEAR MEMBERS AT NOVEMBER DINNER



25 YEAR MEMBERS: From left to right: Hugh Cronin, Bob Brungraber, Johnny Chow, Ed Plotkin, Bill Kruse and Ed Burke.



MOLES SCHOLARSHIP WINNERS: Front row: Laura Barton, Natasha Smith, Tracy Midenbergger Back row: Lucian Spiteri, John Grillo, Scott Hagadorn, Manuel Rivera, Chris Stolicky