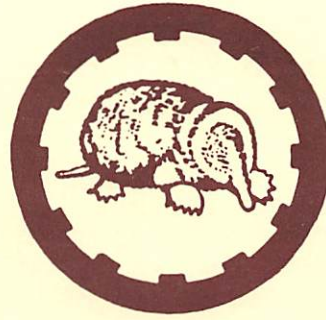


NEWS BULLETIN

AN ASSOCIATION OF INDIVIDUALS

HOLING



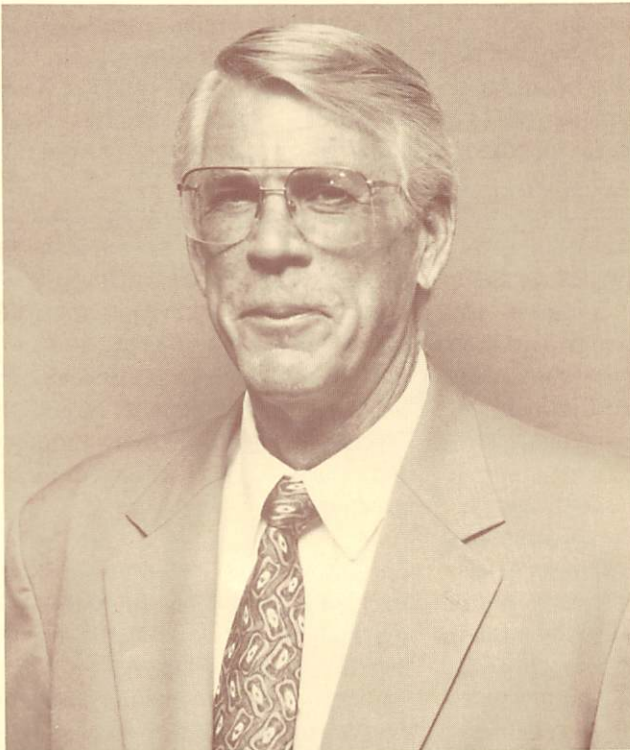
OF THE MOLES

ENGAGED IN HEAVY CONSTRUCTION

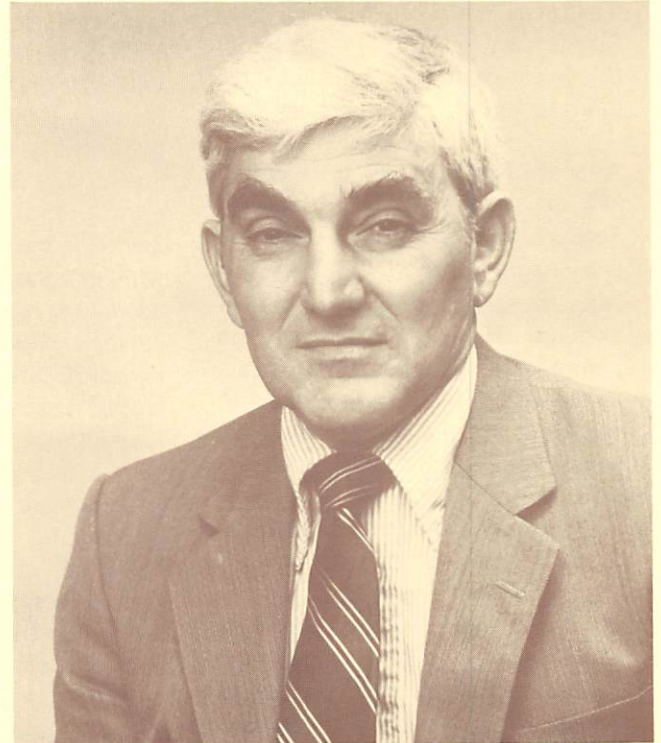
THROUGH

NOVEMBER, 1997

TOLL and RICHARDS Selected for 1998 Outstanding Achievement Awards



GEORGE B. TOLL, JR.



ELMER A. RICHARDS



GEORGE B. TOLL, JR., Executive Vice President of Peter Kiewit Sons, Inc. Omaha, Nebraska and Elmer A. Richards, Senior Partner, Mueser Rutledge Consulting Engineers, New York City, will receive The Moles Outstanding Achievement in Construction Awards at the Annual Award Dinner to be held on Wednesday evening, January 28, 1998 at the New York Hilton Hotel and Towers.

GEORGE B. TOLL, JR., known as Jerry, was born in Berkeley, California on September 6, 1936. He began his construction career as a laborer during summers while attending Vista High School. After three years service in the U.S. Army, he enrolled at California State University at Los Angeles. He completed his studies as a part time student, receiving his Civil Engineering degree in 1966. He also attended Loyola Law School for

ELMER A. RICHARDS was born on February 15, 1930 in Summerville, New Jersey. He earned his Civil Engineering Degree from Lehigh University in 1951 and a Master of Science Degree from Northwestern University in 1952. He is a registered Professional Engineer in many states.

During his college years, Elmer worked summers on earth

(Continued on next page)

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Award Chairman



This year's Award Committee Chairman is Robert R. Buckley of Buckley & Company, Philadelphia, PA. The firm was founded by his father, John J. Buckley, in 1928.

After earning his Civil Engineering Degree from Drexel Institute of Technology in 1958, he served in the U.S. Army Corps of Engineers for two years, attaining the rank of Captain. In 1959 he joined the family company and in 1974 upon his father's death succeeded to President and CEO. Under his direction, the company has evolved from primarily a foundation contractor into a heavy and highway contractor. In addition to many projects in Philadelphia, the company has worked on the Lexington Avenue Subway in New York City, the Holland Tunnel, the New Jersey Turnpike, the Epcot Center and the San Francisco International Airport.

Bob has served as president of the Contractors Association of Eastern Pennsylvania and a President of the Associated Pennsylvania Contractors.

Bob has served on the Board of Directors of Drexel University and has been honored by the University with the A.J. Drexel Paul Award and the Drexel 100 Award for being one of the University's 100 most outstanding graduates.

GEORGE B. TOLL, JR.

(Continued from Page 1)

two years.

Jerry joined Kiewit as an estimator in the Southern California District Office, then served as Paving Engineer on the Pomona Freeway. He then moved on to serve as Project Engineer and Superintendent on the Foothill Bridges at Monrovia and as Superintendent of a job entailing grading, paving and construction of five bridges on the Arcadia Freeway.

In 1968 he was promoted to Area Manager, responsible for the company's work in the San Joaquin Valley. In 1970 he was promoted to District Manager for the company's Southern California operations. In his final year as manager, the Southern California District's revenues had grown to \$125 million Jerry was named Division Manager in 1992 with added responsibility for Kiewit's operations in Northern California and Arizona. He was elected to Kiewit's Board of Directors in 1993 and was elected Executive Vice President of Kiewit Construction Group in 1994.

As Executive Vice President, Jerry is responsible for the construction operations of seven Kiewit Districts that currently have projects in 21 states, the District of Columbia and Puerto Rico. Notable projects underway include the Central Artery Project in Boston, Rio Piedras Subway Project in Puerto Rico, Mars Hill Project in North Carolina and the Queensborough Bridge in New York City.

Mr. Toll was President of The Associated General Contractors of California in 1988 and was President of The Beavers in 1994. He also provided service to the construction industry serving on various other industry committees and funds.

He and his wife Roberta have two sons and three daughters.

ELMER A. RICHARDS

(Continued from Page 1)

dams for the Bureau of Reclamation and on the New Jersey Turnpike with Howard Needles Tammen & Bergendoff. He joined Mueser Rutledge in 1952 and has been a partner for the past twenty-five years. During his career he has served as a Consultant to Contractors, Architects, Engineers, Public Agencies and Corporations and has worked in thirty four states.

He has been active in the design and construction of foundations for industrial plants for the production of cement, aluminum, paper and chemicals; for bridges, railroads, water supply and waste water treatment plants, landfills and buildings.

The foundations projects in which he has been involved are too numerous to list but notable among them are the following: the Empire State Plaza in Albany, New York, the Fort McHenry Tunnel in Baltimore, Maryland, the Department of Energy's Savannah River Plant in Aiken, South Carolina and the Merck Corporate Headquarters

Current projects include the design and construction of the perimeter embankment and deep cutoff wall for the Allied Signal Plant in the Inner Harbor in Baltimore and the design of the supports for the new ocean outfall extending to a water depth of four hundred feet in Ponce, Puerto Rico.

Elmer has served The Moles in many capacities over the years: as a Trustee, as Chairman of the Finance Committee, Chairman of the Award Committee and as President in 1993.

Elmer and his wife Susan are residents of Westchester County and have two grown sons, Andrew and Peter. When not in the office or at a construction site, he can usually be found on a "business" trip: racing his sailboat or canoeing in the Adirondacks.

KENNY AND STINSON
to present Awards

GERARD M. KENNY, President of Kenny Construction Company, Wheeling, Illinois, will present the Non-Member Award to George B. Toll, Jr. and KENNETH E. STINSON, President and CEO of Kiewit Construction Group will present the Member Award to Elmer Richards.

EVENTS TO BE CONTINUED AT AWARD DINNER

There will be an afternoon reception in the Rendezvous Room of The New York Hilton Hotel from 2:00 P.M. to 4:30 P.M. preceding the Award Dinner on January 28, 1998. This presents another opportunity to meet and share time with your friends. There will be a cash bar for those who may want to enjoy a beverage.

As in past years, there will a SPOUSES DINNER AND SHOW. Dinner will be in the Inner Circle Room of The New York Hilton Hotel followed by attendance at the Broadway hit musical "Chicago". Transportation by chartered bus will be provided from the hotel to the theater and return. This has been proven to be a very popular event. Tickets will be limited so please make your reservation early.

SCHOLARSHIP FUND

Progress continues to be made with the fund raising effort. However, when one is dependent on volunteers to do the work, things move along at a slower pace than normal. We thank all who have already contributed and will be reaching out over the next several months to those who have not yet been contacted. Please be generous.

NEWS OF MEMBERS

STAN ARONIN'S wife wrote to the Moles' office that Stan suffered a serious stroke while on vacation in Hawaii in February. He is in the Wartburgh Nursing Home (Wartburgh Place, Mount Vernon, NY 10552) and is having a difficult time making a recovery.....JOE DIEHL has been transferred from Grow Construction Company to the Kiewit main office engineering group in Omaha, Nebraska.....WILLIAM DURDEN recently joined the New York office of American Consulting Engineers as Chief Construction Engineer. The firm specializes in Engineering Heavy Construction Support Services for contractors and Design Services for Transportation Agencies.....JIM KELLEY has opened his own firm in Denver "Kelley Management Associates, LLC". He continues a working association with Joe Kellogg.....JOHN LOWE III presented the Seventh Annual Mueser Rutledge Lecture entitled "Lessons Learned From The Tarbella Dam Incidents" at the Met Section ASCE meeting in October.....PETER MC NULTY, who joined Modern Continental in 1993 as Project Executive, has been promoted to Vice President..... PETE NICHOLSON, of Geo-Con, was the featured luncheon speaker at the 16th Central PA Geotechnical Seminar. Subject of his talk was "Creating a Climate for Innovation. JOE WELSH, of Hayward Baker, also was on the program and spoke on "Ground Modification Milestones".....The Fall 1997 issue of "MetroWest", a Publication of the MWRA contained a profile of TOM PEYTON, Project Manager for the Authority of the Metro West Water Supply Tunnel,GERALD SHEA has been appointed Corporate Vice President of the Louis Berger Group, Inc. He has been with Berger since 1978 and had been serving as Vice President of Louis Berger International, Inc., one of the member firms of the Louis Berger Group.....TOM TREACY'S law firm, Treacy, Schaffel, Mackey & Moore, is celebrating the 125th year of the its founding in 1872 by Luther Laflin Kellogg.....DON WEISSTUCH is being honored on November 10th with the Science & Technology Award by the New York City Chapter of American ORT.

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 07675. Telephone: 201-930-1923 Fax: 201-930-8501 Executive Director: Gerard J. Carty, P.E.

25 YEAR MEMBERS

WILSON V. BINGER joined Tippetts-Abbett-McCarthy-Stratton (TAMS) in 1952 after having worked on the Caracas Aqueduct and Aqua Fria Dam in Venezuela in the early 1940's. He was a long time partner in TAMS and among his notable achievements was service as Partner in Charge of Supervision of the Tarbella Dam in West Pakistan. He served a Chairman of TAMS until his retirement in 1984 and he continues to live in New York City and is an active attendee at all Moles functions.

FRANCIS P. BYSTROWSKI wrote from his home in Walnut Creek, California that he continues to work for Bechtel in San Francisco. After working for Merritt Chapman & Scott on Oroville Dam and Spillway, he started his own consulting company. Subsequently, he worked for Dillingham prior to joining Bechtel. He has travelled extensively to all of the continents and many countries and did a great deal of vacation travel before his wife became handicapped. He is an avid sports fan and enjoys working around his home.

EUGENE F. CASEY spent his early career with the New York City Transit Authority where he was Supervising Engineer on a number of tunnel and underground projects, including the 63rd Street Tunnel Project. In 1978 he retired from the Transit Authority and joined Mason & Hangar-Silas Mason Company. He now has his own Construction Consultant practice and serves on several Dispute Review Boards around the country.

HENRY P. CERUTTI is a graduate of Carnegie Institute of Technology and spent his career with Blaw-Knox Company in Pittsburgh. The company was active in designing and furnishing forms for tunnels and

other heavy construction projects. "Pete" as he is known, continues to live in Seminole, PA.

JOHN G. DONARGO, now retired, looks back on a rewarding 36 year career in heavy construction with two class outfits, Spencer, White & Prentis and Spearin Preston and Burrows. John is enjoying not getting up in the middle of the night to go to work. He and his wife are doing a lot of travelling and John also finds time to do some consulting work.

BENJAMIN H. HARDAWAY III earned a Civil Engineering Degree from Virginia Military Institute in 1940. His family firm, The Hardaway Company, located in Columbus, Georgia, was founded in 1911 and Ben served for many years as its leader.

NEIL W. KRUMWIEDE spent much of his career with Phil Grove and his companies. He was active in overseas construction work as well as on domestic projects. He retired from the Grove organization in 1984 and moved to North San Diego County in California where he has since been very active and successful in the real estate business where he at one time had two offices and 32 agents. He and his wife Polly raised six children of which they are most proud. Writes "...I'm proud to be a "Mole" and regret I live on the opposite coast since I did enjoy many Mole gatherings."

JOHN J. LENNON began his career with Raymond Concrete Pile Company and spent several years with Poirier & McLane Corporation before joining the George W. Rogers Construction Corporation in 1963 where he remained for the next 30 years. He retired in 1992 as President and continues to live in Forest Hills Gardens where he enjoys the easy access to the good things Manhattan has to offer and to the Long Island shore.

H. EDGAR LORE spent his career with the Dravo Corporation, which was a major heavy construction contractor. He was named ENR "Man of the Year" in 1979 and retired from Dravo in 1978 as Vice Chairman of the Board. He lives in Sewickley, PA and spends his time walking, playing tennis and reading.

ALFRED MUSCARI writes to express his regrets about not being able to attend the November Dinner. He has a good reason; he will be on his honeymoon in Hawaii. Al worked for the Arthur A. Johnson Company and continued with its subsequent owner, Peter Kiewit Sons. He writes "I wish to express my gratitude and the privilege of being a Moles' member."

JAMES C. NELSON plans to be at the November 5th meeting to receive his 25 year certificate. He spent much of his career with Spencer White & Prentis, becoming President in 1974. He moved to the west coast in 1978 and has been there since. He had his own Geotechnical practice until recently and is now a full time "caregiver" for his wife, Mary. They have been blessed with six children and six grandchildren who keep them entertained and occupied.

STANLEY J. NORTON has spent his career as a Construction Contract Attorney. His early career was at Nevius Jarvis and Pilz, where he was a partner. Subsequently he founded the firm of Norton Sacks Molineaux and Pastore and since 1973 has been Senior Partner at Norton & Christensen, Goshen, New York. Stan continues to attend most Moles' functions and spends much of his time at his home in Naples, Florida.

ROBERT A. O'CALLAGHAN, known as Tony, regrets that he can't be present to receive his award at the November Dinner. He has spent his

25 YEAR MEMBERS - *continued*

career with Universal Builders Supply, Mount Vernon, New York. He is very proud of his five sons, two of whom work for the family owned company which, among other things, supplies and erects scaffolding on major projects around the country.

BERNARD RICHARDS assumed the Presidency of Slattery at the age of 41 and embarked on an acquisition program during which they acquired H. Sand & Co., Grow Tunneling Corp. and Underpinning & Foundation Corp. He long maintained a close personal relationship with Jim Slattery who "...was probably the greatest person I ever met...". Bernie loves to travel, play tennis, hike, swim and spend time with his daughters and grandchildren.

GEORGE B. SEARLE spent his early career with S. J. Groves & Sons Co. where he was Vice President and Area Manager for the Mid-Atlantic group. In 1980 he joined, what is now called I-A Construction Corporation, and in 1989 negotiated its sale to Colas, a major French construction company. He continued as President for six

years. He is now doing consulting work as Searle Associates. George was President of The Moles in 1992 and was recipient of the 1996 Moles' Member Award.

PETER H. SHANON served as President and Board Chairman of Linde-Griffith Construction Co., a Newark, New Jersey based foundation and pile driving company. His sons now run the company and three of his twenty grandchildren work there. He continues to live in Clifton, New Jersey with his wife, Virginia, of sixty years. He spends the winters in Hillsboro Beach, Florida and manages to play golf twice a week.

ROBERT M. SHARKEY served as Vice President and General Superintendent of Horn Construction Company. He has been living in Florida since 1981. The Moles office has not heard anything from Bob in sometime and trust everything is going well with him.

JACK SWOFFORD writes from Carthage, Missouri that he retired in 1992 after working in the "powder" business for 38 years. He plays golf at least once a week, shooting in the 80's, travels and is an avid gardener. "Enjoying having no alarm clocks and planes to catch".

FLORIDA WINTER MEETING

The Moles Winter Meeting was conceived as an opportunity for retired Moles' members living in Florida to come together with other retired members and active members wanting to get away from the cold weather up north. Three meetings were held at the Indian River Plantation in Stuart, Florida.

The Indian River Plantation was a fine location enjoyed by everybody who attended the meetings there. However, the Committee formed to select a location for the 1998 Meeting, felt that a change was in order. After considerable deliberation and inspection, the Committee has selected the Registry Resort in Naples, Florida as the location for the 1998 Winter Meeting. The dates will be February 26 to March 1. The Registry is a luxury hotel with all of the facilities associated with a hotel of its caliber. The accommodations are very comfortable and the facility is spacious. It has its own beach and there are a number of championship golf courses only minutes away. There is an abundance of fine shops close by.

A brochure will be distributed to those who have expressed interest in the past. If The Moles office is not aware of your interest, please call the office (201-930-1923) and a brochure and reservation form will be sent to you.

50 YEAR MEMBERS

It was recently brought to the attention of the Executive Committee that there are several Moles' members who have been members 50 years or more. With this information, the Executive Committee decided to recognize such members in a way similar to the manner in which 25 year and 40 year members are recognized.

Since this was not done in the past, there is a certain amount of catching up to do. A review of the membership records found that there are eight Moles' members who have been members at least fifty years. They are the following.

JOHN J. MURPHY - Member 54 Years. Jack Murphy worked almost his entire career with Walsh Construction Company, starting in the late 1930's under the guidance of Jack McDonald (see article on Queens Midtown Tunnel). Jack rose to become President of Walsh, retiring in 1973. He served as President of The Moles in 1970 and was the Member Award Recipient in 1973. He continues to live in Purchase, New York.

JOHN J. DI MEMMA - Member 54 years. John and his brother, Frank (now deceased) became members of The Moles together in 1943 and worked for the company founded by their father, Nicholas DiMenna. Their sons, Frank and Nick are members of the Moles.

EDWARD W. FOLEY, JR. - Member 54 Years. Shortly after becoming a member of The Moles, Ed joined the Army Engineers and spent 3 years in the India-China Theater. he returned home to work on the continuation of the construction of the Brooklyn Battery

(Continued on page 6)

A MOMENT OF SILENCE



Frank Catapano

FRANK CATAPANO died on August 2, 1997 after a long and valiant battle with cancer. Frank became a member of The Moles in 1969 and led Andrew Catapano Company for many years. He was known by his business colleagues and friends as a gentleman and was admired and respected by everyone who knew him. He is survived by three children, including Moles member, Andrew, who succeeded his father as head of the company.

EUGENE J. FULLAM died on September 9, 1997 at the age of 69. He was a Civil Engineering graduate of Manhattan College and was admitted to membership in The Moles in 1958 while serving as superintendent on the construction of the foundations for the Chase Manhattan Building in lower Manhattan. He served on the Board of Trustees of Manhattan College and was President and Owner of Twin County Steel Service, Inc. on Long Island.

Past Moles' President MILTON A. HENDRICKSON died on August 25, 1997 at the age of 81. He started working for Hendrickson Brothers at the age of 12 and spent his entire working life with the company except for service as a Captain with the Air Force during World War II. He became President of Hendrickson Brothers in 1953 and remained active with the company until the time of his death.



Milton A. Hendrickson

WILLIAM T. MAHOOD died on July 16, 1997 in Rehoboth Beach, Delaware at the age of 90. He graduated from Bucknell University in 1929. He spent his career with the Atlas Powder Company a divisions Atlas Chemical Industries, Inc., and its successor company, ICI Americas, Inc. from which he retired in an executive position. In Bill Mahoods time, "powder salesmen" were important players in the construction industry and very active members of the Moles of which he was a Life Member.

Another Life Member of The Moles, EDMUND A. PRENTIS III, died at the age of 73 in Delray Beach, Florida. Ed was a graduate of Yale University and was Treasurer and Director of Spencer, White and Prentis, which specialized in underpinning and foundation construction. Many current and past members of the Moles received their training and experience at this outstanding company. Ed Prentis was a champion croquet player and was admitted into the United States Croquet Association's Hall of Fame in 1982.

***REMEMBER ANNUAL AWARD
DINNER
NEW YORK HILTON HOTEL
JANUARY 28, 1998***

50 YEAR MEMBERS continued

(Foley continued)

Tunnel, being built by his family owned company. Ed continues to live in New City, New York.

S. JAY WINTERBERG 53 Years. Sam Winterberg worked for Felhaber Corporation which for many years was a General Contractor. Sam wrote a nice letter "Thanks for your invitation to the 50 year dinner but at 95 years of age I no longer attend functions".

DANIEL M. LAZAR 53 Years. Dan Lazar founded and lead Cayuga Construction Company for many years. He was President of The Moles in 1977 and Award Recipient in 1972. Dan is a person we all want to emulate. He enjoys good health, his mind is as inquisitive as ever and he attends all Moles' functions. Dan, of course, was present at the November 5th Dinner to receive his 50 year certificate.

GERARD A. NEUMANN 53 Years. Jerry Neumann, like Dan Lazar, is person we want to be like. Jerry is healthy and very active, living in Naples, Florida in the winter and the Pocono Mountains in the summer. His career was with Spearin, Preston and Burrows, where his two sons, Jerry and Gorge, continue to lead the company. Jerry will receive his 50 year certificate at the Winter Meeting in Naples, Florida.

A. HOLMES CRIMMINS - 50 Years. Holmes Crimmins is another former Moles' President (1955) and Member Award Recipient (1966). His company, Thomas Crimmins Contracting Company, was an active New York City foundation contractor for many years. Holmes continues to live in Noroton, CT.

(continued on page 7)

50 YEAR MEMBERS *continued*

FRANCIS THOMAS - 50 Years. Francis Thomas started his career in 1951 working on the construction of Ft. Tryon Park in upper Manhattan. Thereafter he worked for S.J. Groves before becoming involved with the U.S. Steel Corporation in developing the Cerro Bolivar Iron Ore mine in Venezuela. Subsequently he became President and CEO of Orinoco Mining Company and in 1965 moved to Perth, Australia to develop the Mt. Newman Iron Ore deposits. Francis lives in Brielle, New Jersey and was present on November 5th to receive his 50 year certificate.

AMONG THE MISSING

From time to time, we lose track of some of our members. Mail is returned without any forwarding address. Right now we are trying to locate three members:

ANDREW GULL - his last address was in New York City. He had a company, Gull, Contracting Company, which was very active in New York City for many years.

JACK LAWENDA - his last address was Ft. Lee, New Jersey. He was a salesman of construction equipment.

CLAYTON MULLINS - his last address was Columbus, Ohio. He worked for Atlantic Refining Company.

If any member knows anything about these members, please contact The Moles office.

NEXT MEMBERS MEETING WEDNESDAY MAY 6, 1998

A FOLKTALE

One of the purposes of The Moles is to raise business ethics. From time to time an article will appear in *Holing Through* with the purpose of offering some thought on this subject. This folktale, taken from William Bennett's book "The Book of Virtues", reminds us that an act of dishonesty is never truly hidden.

Once upon a time a man decided to sneak into his neighbor's fields and steal some wheat. "If I take just a little from each field, no one will notice," he told himself, "but it will all add up to a nice pile of wheat for me." So he waited for the darkest night, when thick clouds lay over the moon, and he crept out of his house. He took his youngest daughter with him.

"Daughter," he whispered, you must stand guard, and call out if anyone sees me."

The man stole into the field to begin reaping, and before long the child called out, "Father, someone sees you!"

The man looked all around, but he saw no one, so he gathered his stolen wheat and moved on to a second field.

"Father, someone sees you!" the child cried again.

The man stopped and looked all around, but once again he saw no one. He gathered more wheat, and moved to third field.

A little while passed, and the daughter cried out, "Father, someone sees you.

Once more the man stopped his work and looked in every direction, but he saw no one at all, so he bundled his wheat and crept into the last field.

"Father someone sees you!" the child called again.

The man stopped his reaping, looked all around, and once again saw no one. "Why in the world do you keep saying someone sees me?" he angrily asked his daughter. "I've looked everywhere and I don't see anyone."

"Father," murmured the child, "Someone sees you from above."

THE MOLES MEMBERSHIP PROCESS

One becomes a member of The Moles by being nominated by a current member of the organization. Four other members must then write letters supporting the nomination. The Membership Committee rates each nominee on a scale of 1 to 10. Those receiving the highest rating in each category of membership are then sent to the Executive Committee for rating by that body.

The desirable number of members in each category of membership is as follows: Heavy Construction - 397; Engineering - 78; Sales Representative - 44; and Associated Occupation - 19. Vacancies are occasioned by a member's resignation; by a member being delinquent in the payment of dues; by death; or by a member receiving Emeritus Status. At its April meeting, the Executive Committee determines the number of vacancies in each category and those with the highest Executive Committee rating are admitted to membership. One may apply for Emeritus status if one is retired from active participation in the construction industry and is a member of long standing. The Membership Committee has defined long standing as membership for at least ten years.

All Moles' members may nominate candidates for membership. Contact The Moles' office for the proper form and instructions.

FROM THE ARCHIVES

THE CONSTRUCTION OF THE QUEENS MIDTOWN TUNNEL

This article about the construction of the Queens Midtown Tunnel has been assembled from a scrapbook found in the archives of Walsh Construction Company.

BACKGROUND

Before getting into the tunnel itself, a little background about the construction of tunnels and bridges in New York City might be of interest to the readers. The following is from the Compressed Air Magazine of May 1939 which had a very well written article about the construction of the Queens Midtown Tunnel.

"In the early days, travel from Manhattan to either the Jersey shore or to Long Island was solely by ferry. With the appearance of electric railroad, the demand for quicker transportation led to the construction of the Brooklyn Bridge, which was opened in 1883 and was the first of the three suspension spans which link Manhattan and Brooklyn. Williamsburg Bridge was completed in 1904, and Manhattan Bridge in 1909. In the latter year the Queensborough Bridge from Manhattan to Queens also was placed in service. These structures were all built long before automobile traffic had become the problem that it is today and until the opening of the Triborough Bridge in 1936 offered the only vehicular roadways across the East River. For several years there has been an increasing need for another transriver artery for auto traffic. The decision to construct this new crossing in the form of a tunnel was a logical one, considering the great success of the now famous Holland tunnel, which was completed in 1927.

Now to some more specific information about the Queens Midtown Tunnel.

BIDDING

N.Y. Times - 5-26-37: "Bids for the complete under-river construction of the \$58,000,000 PWA- financed Queens Midtown Tunnel were opened yesterday by The New York City Tunnel Authority. The Walsh Construction Company bid \$24,763,515 and the Mason Hangar Co., Inc., \$27,787,535. The bids were referred to the Chief Engineer Ole Singstad for study. " (It should be noted that on May 13, 1937 the name Moles was suggested and on May 28, 1937 membership was officially opened in this new organization called The Moles. Ole Singstad was an outstanding tunnel engineer and subsequently became a member of The Moles)

A subsequent issue of the N.Y. Times reported that "Jack McDonald, chief engineer of Patrick McGovern, Inc., builders of the Holland Tunnel, will have charge of construction (for Walsh)". Jack McDonald was a charter member of The Moles and its President in 1943 and 1944

SUBSURFACE CONDITIONS

Also from Compressed Air Magazine of May 1939.. " Through more than half of their length, the Queens Midtown tubes cut through rock reefs which lie below the glacial material. Much of this rock does not extend to the roof of the tunnel, necessitating mixed face excavating, a very slow and tedious operation. Near the Manhattan shore, the tubes pass through a pocket filled with man-dumped debris, including a miscellaneous assortment of riprap, bottles, ancient marine hardware, animal skeletons, and other refuse of former days. All the material encountered is of such a nature as to require its removal through the tunnel as the shield progresses. On the other hand, in driving tunnels beneath the Hudson River, the soft silt can be pushed aside."

EARLY CONSTRUCTION

Labor disputes delayed the initial work on the tunnel, The N.Y. Times of April 11, 1938 carried the following: "Work on the under-river sections of the twin tubes will start tomorrow at 2:30 P.M., when Mayor LaGuardia turns the valve that will let into the bulkheads of the boring shields the compressed air required to hold back the waters of the East River".

FIRE IN THE TUNNEL

On June 26, 1937 a fire broke out in the north tube of the tunnel and the tunnel had to be flooded to extinguish the fire. After 11 days the tube was pumped out and work resumed. Upon the death of Jack McDonald in December 1953, Holing Through paid this tribute to him: "None of us will ever forget Jack's setting out in a rowboat in the partially flooded tunnel to survey the damage following the disastrous fire which occurred while the tunnel was under construction."

LABOR PROBLEMS

While the Queens Midtown tunnel was under construction in New York City, work was also underway on the Delaware Aqueduct project by the Board of Water Supply. Local 147 of the Compressed Air Workers Union represented the sandhogs working on the Queens Midtown project while a new union,

QUEENS MID TOWN TUNNEL - CONTINUED

Local 60 had only recently been organized to represent the Aqueduct workers. The sandhogs called a strike because they felt the Aqueduct workers were working at sub-standard wages (\$10.00 per day versus the sandhogs basic wage of \$12. The sandhogs in actuality worked only a four hour day because of the 37 pounds per square inch pressure to which they were subjected. The strike began on July 3, 1937 and lasted 2 1/2 weeks until the matter was referred to arbitration (sorry, records do not indicate final resolution of union dispute).

The Magazine Section of the Sunday Mirror of January 15, 1939 had an article "*Men Who Live on Danger*". The article described the work of the sandhogs and their constant battle with the bends. "Sometimes there are serious accidents in the tunnel. There was the incident of the "blowing" of the tunnel's head, when three men shot up through the river bed. One man was propelled with terrific force against the bottom of a passing barge. The second workman was blown far above the river's surface, and his friends had to tell him later what had happened. The third man was found, days later, wavering upright, his feet embedded in the river mud".

In order to reduce the tendency of the water to enter the excavation and of the air to escape, the normal thickness of the river bed was increased. Floating cranes placed more than 250,000 cubic yards of clay over the projected alignment of the tunnel.

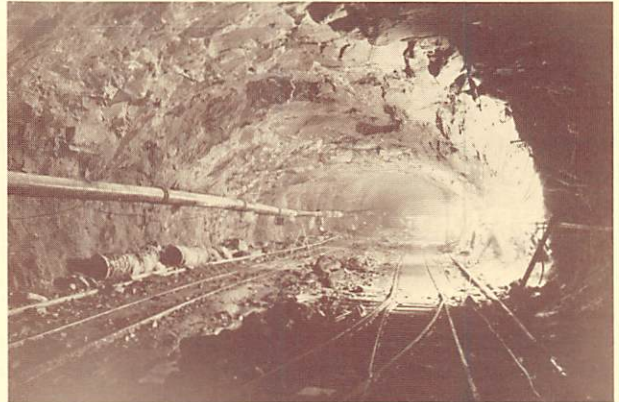
PROGRESS AND COMPLETION

The final tunnel work (holing through) occurred on November 8, 1939. "Mayor LaGuardia set off the dynamite blasts in the tunnel in the presence of 200 persons, including Postmaster General James A. Farley, United States Senator Robert F. Wagner...Mr. Farley congratulated the engineers and laborers on the project and Senator Wagner cited the tunnel as an example of the construction work that can be done by a nation, peaceful at a time when other nations are engaged in war".

"The engineers found that the twin tubes did not go exactly where they had planned. The shield was diverted from time to time by the river bottom pressure and although this was compensated for the tunnel does not actually follow the lines laid out on the drawings. The westbound tube was 7,865 feet long instead of the scheduled 7,785 feet; the eastbound shrank from 7,500 feet to 7,400 feet".

The interior finish work of the tunnel was completed in the latter part of 1940 and the tunnel was officially opened on November 15, 1940.

The successful completion of the Queens Midtown Tunnel led to plans for the construction of the Brooklyn Battery Tunnel, work on which commenced prior to World War II and was suspended during the war years.



Section of tunnel through rock with only the upper half blasted - 3/31/38.



Sand Hogs tightening a bolt in cast iron lining with 5 foot ratchet wrench - 2/26/39.



Cast iron tunnel lining with concrete lined tunnel in background - 2/21/40.

The editor wishes to thank Michael Ascher of the TBTA for providing the above photographs from the TBTA's Special Archives.

1997 MARKED 50TH YEAR SINCE MOLES FIRST CLAMBAKE AT TRAVERS ISLAND

We must be doing something right. Attendance at this year's Clambake was up over 10% from last year's event. Upon reflection, this is not really a surprise as the Program Committee provides something of interest and enjoyment for every one.

The weather was marvelous. Moles golfers, 72 strong, teed off early at the Leewood Golf Club in Eastchester. Those arriving at Travers Island were greeted by some large banners proclaiming 50 years since the first Moles' Clambake there.

The first event for everyone was lunch and the Travers Island staff provided their usual delectable selection of hot and cold foods, including steamer clams. This is a particularly enjoyable time of the day for a relaxed repast and good conversation.

After lunch one must make some choices: play in or attend the softball game; compete in the tennis tournament; go swimming in the magnificent Olympic pool; attend the first of the two wheel of fortune drawings; play volleyball; cruise on the sound aboard the Tugboat George Burrows; make the rounds of the pitch and putt, nail driving and horseshoes; or just sit in the grove overlooking the softball field and enjoy some refreshment and conversation.

The softball game was another squeaker with the Contractors prevailing in an extra inning by an 8 to 6 margin. There were some great plays both in the field and at bat by both sides. Steve Greenfield called balls and strikes from behind home plate. Remember when this game was a run a way by the Contractors - no more.

Dinner, featuring lobster and filet mignon, was excellent as usual. The round tables introduced in recent years made seating comfortable and allowed for good conversation. The awarding of prizes followed.

Congratulations are due to Program Committee Chairman Al Brand and his Committee and to the Travers Island staff for a job well done. The Committee is again grateful to the Neumann family for providing the tugboat, George Burrows, for excursions on the Long Island Sound. This has proved to be a very popular feature of the Clambake for the past three years. Thank you, Jerry, Sr., Jerry, Jr. and George and may your generosity to The Moles bring you success in your endeavors.



CONTRACTORS

Front Row: Jim McErlean, Leo Pflug, Gerry Brady, Tony Tirro
Back Row: Gene Merlisso, Steve Polair, Howard Mager, Scott Shylanski, Marc Beljan



ENGINEERS

Front Row: Paul Smith, Ben Brungraber, William Meakin, Gary Mueller, Brian Schmeltz
Back Row: Rich Hinkson, Tony DePasquale, Roy Durig, Osama Ahmed, Mark Riley, Paul Martin

MARK YOUR CALENDAR
FOR 1998 CLAMBAKE
TUESDAY, AUGUST 4, 1998
TRAVERS ISLAND