

# ***The A.S.H.E. SCANNER***

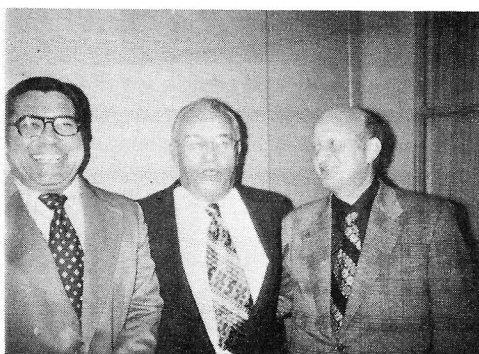
VOLUME X, NO. III

THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS

FEBRUARY 1974

## ***BOARD OF DIRECTORS MEET IN PHILADELPHIA***

Inaugurating a new policy which schedules on a broad geographic basis, President James Weaver called the Meeting of the Board of Directors to order on January 16, 1974 at the Airport Motel at Philadelphia. This was the first time that a National Board Meeting was held east of Harrisburg.



Joe Synkonis, center, welcomes Pittsburgh Director John DeRoss, left, and President Jim Weaver, right.

The Board Members were welcomed to Philadelphia by Joseph P. Synkonis, Delaware Valley Section Senior Member and District Engineer of PennDOT District 6-0. Past Delaware Valley Section President and PennDOT Deputy District Engineer Bud Humbert along with Past National President Jack Leapson joined Joe Synkonis in greeting their many friends on the Board.

President Weaver, Vice Presidents James Yeager and Atwood L. Welker, Treasurer George K. Hart, Secretary Robert Sherr, Immediate Past President Donald C. Rimmer, Directors William Boykas, John F. DeRoss, Lawrence P. Opalisky, George J. Parrs, Joseph Martinelli, Roswell E. Brown and Harold Poulson attended in their official capacities.

Also attending were Robert Martzall, Chairman of the Convention Committee, Robert Kepner, Chairman of the By-Laws Committee, and Paul Lucas of the Nomi-

nating Committee.

Society membership was reported as follows: PennDOT 634, 38.0%; Consultants 308, 18.4%; Contractors 378, 22.6%; Others 351, 21.0%; Total 1,671, 100%.

Membership is composed of the following professional members: Registered Engineers 352; Registered Surveyors 33; EIT 11; Total membership 396 or 23.7%.

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## ***Candidates Are Nominated***

The Nominating Committee, headed by Chairman Donald Rimmer, met on January 15th in Philadelphia.

At the January 16th Board of Directors meeting in Philadelphia, the Nominating Committee presented the following slate of Officers and Directors for consideration: President, Robert E. Yeager, R.S., Altoona Section; First Vice President, Atwood L. Welker, Jr., P.E., Williamsport Section; Second Vice President, John DeRoss, Pittsburgh Section; Secretary, Robert M. Sherr, P.E., East Penn Section; and Treasurer, George K. Hart, Williamsport Section.

Donald Rimmer, Chairman of the Nominating Committee made the following recommendation: That the Board of Directors be increased from the present nine member Board to twelve members. This change conforms to Article III, Management, Section 3. Upon motion of Mr. Rimmer, seconded by Joseph Marti-

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### ***President's Message***

JAMES M. WEAVER  
Gibsonia, Pa.

Here we are around to another issue of the Scanner and it seems hard to admit I am nearly at a loss for words. Sometimes I think our Secretary, Bob Sherr, moved the publication date up to avoid a possible increase in postage rates!

Having had a "sneak preview" of this issue, I think you will find it very interesting and full of Convention items and other news items from Sections that are of interest to all of the Sections.

The Scanner should be the official organ to give recognition to individual members who receive an award or accomplishment to their respective fields of endeavor. Keep flooding Secretary Bob with your Section news.

It may appear that I am rambling, and frankly, that is what I am doing. Just got back from vacation and find another issue is due.

All of the news out of Washington and particularly Harrisburg is very discouraging. It all boils down to NO MONEY for road repairs or improvements. Our Pennsylvania legislators have fooled around long enough and it is about time they think of the public and forget about their petty politics. They have killed enough time and now they think they have another excuse with the energy crisis.

I think it is time we run our government on a good sound business basis and not on a series of crises. Once again the State Department of Transportation is out of funds to pay even their current commitments for work already completed.

This is a sad but true situation. How long will the public put up with "do nothing" government? I think it is time

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## TECHNICAL CROSS SECTION

*John H. Leapson, P.E.*

The Highway Research Board's 53rd Annual Meeting was held during the week of January 21–25, 1974 at the Sheraton-Park Hotel in Washington, D.C.

Over 3,000 of the world's most distinguished highway transportation researchers, engineers and administrators attended and participated in sessions concerned with important new advancements in areas ranging from soils to safety, and from the energy crisis to driver behavior. †

### PURDUE RESEARCHERS REPORT INDIANA'S CONTINUOUSLY REINFORCED CONCRETE PAVEMENTS

Results of a 1972 statewide study of continuously reinforced concrete pavements in Indiana and a summary of factors affecting performance were reported by two Purdue University researchers at the 53rd Annual Meeting of the Highway Research Board at the Sheraton-Park Hotel.

Professor Eldon J. Yoder and Asif Faiz, graduate instructor, presented results of a comprehensive performance survey conducted by a Purdue study group assisted by personnel of the Indiana State Highway Commission. A sampling procedure was used to design the field survey and statistical methods used for analysis.

The first experimental continuously reinforced concrete pavement in the U.S. was built in 1938 on U.S. 40 in Indiana. In the next 20 years, a number of research-oriented CRCP projects were built in several states. By the end of 1971, more than 10,000 miles of equivalent two-lane pavements were in service or under contract, with 700 equivalent two-lane miles in Indiana.

The Indiana study reported at the HRB meeting showed that subbase type was found to be a significant factor in performance, with gravel subbases having the poorest record. Crushed stone and slag subbases generally have performed well and, at the time of the survey, bituminous stabilized subbases showed little or no distress. The latter were used primarily in 1972 and have not been exposed to the full range of environmental and traffic conditions. Since the survey, at least one bituminous subbase project

has encountered some breakup, the authors reported.

With all other factors constant, loose bars and welded wire fabric showed good performance. Bar mats, used mainly on some of the earlier projects, showed the poorest performance. However, pavements reinforced with bar mats have been exposed to a wider range of environmental and traffic conditions. Depressed steel had significantly better performance than pre-set steel used on chairs.

The survey showed that concrete slump has a significant effect on pavement performance. The optimum slump range was between 2.0 and 2.5 in.

The data showed little difference between performance of pavements that were constructed with side forms compared to slipformed pavements.

The researchers pointed out that much of the distress takes place during winter, suggesting that extreme temperature drops have a major effect on performance. Distress is also associated with traffic, they reported.

Edge pumping was observed to be the primary pumping mode. The highest incidence of pumping occurred where gravel subbases were used, and no pumping was indicated on sections with slag subbases. Slight pumping was observed on sections with crushed stone and bituminous stabilized subbases.

The survey results indicated that subgrade parent material type (granular or fine-grained) was not significant to performance. †

### THREE-BEAM VEHICLE HEADLIGHTING SYSTEM EXAMINED FOR SAFETY

Accident records show that 53% of highway fatalities occur at night. Although many factors have been cited as contributing to this higher nighttime fatality rate, one obvious factor is the reduced visibility inherent in nighttime driving.

In order to help alleviate the problem, two researchers, Bernard Adler of Cutler-Hammer, Inc., of Deer Park, New York and Harold Lunenfeld of the U.S. Department of Transportation's Federal Highway Administration, undertook an evaluation of a three-beam vehicle lighting system. They reported their findings here at the 53rd Annual Meeting of the Highway Research Board.

The researchers described a system which includes a high and low beam with increased intensities, and a moderately high intensity mid-beam. The paper they

presented described the results of a three-phase evaluation of various combinations of beam usages.

The first part of the evaluation used a computer program which calculated the glare in the rear-view mirror as a following vehicle with different headlighting systems approached from the rear.

The second phase of the study used average drivers to evaluate the system. Thus, vehicles equipped with the three-beam systems were driven by a sample of drivers under a representative sample of road and traffic conditions. In the course of these drives, an evaluation of the subjective responses of the drivers to the system was made and objective measures of the traffic stream's responses through dimming requests were recorded.

The last phase of the program was an empirical determination of seeing distances.

The conclusions reached from the total analysis indicated that the high-beam mode using all four headlamps appears as the best configuration of those tested because it does not cause extensive glare nor cause greater dimming requests, but does provide greater seeing distances. †

### SWALE TYPE OF MEDIAN DESIGN FOUND TO BE SAFEST FOR STRAYING VEHICLES

Washington, D.C., January 24 — What is the safest type of median design for the motorist who accidentally strays off the highway? The mound (raised) or the swale (depressed) design?

This was the basic question two engineers from the Ohio Department of Transportation, Division of Highways set out to answer in 1969. Nearly three years later, and after studying accident experience along 260 miles of Interstate highway in Ohio, they came up with this conclusion: While the 84-foot wide median of either cross-sectional design provides a generally adequate recovery area, the use of the swale design provides more opportunity for encroaching vehicles to regain control and return to the roadway.

The full results of the Ohio median design study were presented by research engineers Thomas J. Foody and Thomas B. Culp at the 53rd Annual Meeting of the Highway Research Board.

Foody and Culp went about their study by first conducting field inventories of five sections of Ohio Interstate highway to determine location of all interchanges, structures and median abnormalities. They then established finite roadway lengths

("all roadway 100th of a mile either side of a structure," etc.) and matched these with computerized accident records to determine the accident frequency.

The study included three types of accidents: median-involved single vehicle accidents, non-median-involved single vehicle accidents, and all multi-vehicle accidents.

In their analysis, Foody and Culp assumed that the frequency of vehicle leaving the roadway was primarily proportional to the volume of traffic since all other design features were similar, excepting the median design. It was also assumed that any difference in the reported accident frequency, after taking volume into account, would be the result of the median design.

The two researchers found that the Average Daily Traffic (ADT) for the two types of median designs studied differed by approximately 1,600 vehicles (11%) with the higher volume being carried by the section with the swale type of design. And while noting that the accident rate for the swale design is higher for total accidents, they concluded "when considering median-involved single vehicle accidents, the accident rate is higher for the mound design." †

## **SURVEY SHOWS MOTORISTS FEEL LOST IN URBAN AREAS**

It's easy for a "stranger" and a "local stranger" to get lost in urban areas, a survey on direction finding has revealed.

Conducted by Gerhart F. King of KLD Associates, Inc. and Harold Lunenfeld, Federal Highway Administration Office of Traffic Operations, and presented at the 53rd Annual Meeting of the Highway Research Board, the survey showed that almost half of the 727 respondents reported "feeling lost" at some stage of their most recent trip.

Only half of these, however, were actually lost.

The survey questionnaire was designed to fill a research gap connected with "Urban Guide Signs," a National Cooperative Highway Research Program project aimed at correcting deficiencies in existing urban guidance systems. The agency conducting this research could find no data on road user experience, although significant improvements in present urban directional guidance systems must be based, in part, on such data, the report said.

Technical discussions with signing officials indicated problems in providing

information for "strangers" unfamiliar with the area and for "local strangers," broadly familiar with the area, making trips for the first time or repeating occasional trips.

Most "strangers" made written trip plans and many "local strangers" memorized route based on information from others, the survey showed. Map availability and usability were the most important element in written trip plans. For "strangers" route numbers and street names and numbers ranked high as needed information. Types of information sought were almost identical for both parties. Route numbers came first, route names sixth. Seventh rank for compass directions was reported as surprising, since 30.9% of the respondents were college graduates.

Some problems cited in order of importance were: city directional signs not providing expected information; entrance ramp to freeway and expressway hard to find from local city streets; finding best exit off ramp in city hard to do; driver making wrong turn or lost found it hard to get back on right route; following route through local city streets too difficult. †

## **CRASH CUSHION TRAILER PROVIDES PROTECTION FOR MAINTENANCE PERSONNEL**

The Texas Transportation Institute, College Station, Texas has reported the design of a new "crash cushion" trailer to protect highway maintenance workers, vehicles, and equipment if an errant vehicle hits them. The specially-designed trailer is intended to alleviate a common traffic safety problem in highway construction and maintenance operations.

The new crash trailer was described in a presentation before the 53rd Annual Meeting of the Highway Research Board. It was based on a report prepared by Eugene L. Marquis and T. J. Hirsch, research engineers at the Texas Transportation Institute of Texas A & M University and by J. F. Nixon, Engineer of Research for the Texas Highway Department.

The Texas Crash Cushion Trailer (TCCT) resulted from an investigation as to the possibility of adapting the multi-barrel energy-absorbing barriers used for road hazards to a portable or mobile trailer system that would protect slowly-moving or stopped maintenance vehicles. It is constructed of thirty 20-gauge 55-gallon steel drums having eight-inch holes in the top and bottom, a pair of trailer wheels, and a truck-trailer hitch. It differs

from the highway crash cushion mainly in that the barrel support is movable rather than fixed, which reduces the number of steel drums required but also results in movement of the cushion upon impact.

Results of the Texas Transportation Institute tests enabled the development of graphs that can be used to determine the number of barrels required for crash cushions and to establish desirable minimum distances between cushion trailers and the vehicle, personnel, or equipment it is to protect. Crashes of standard-size automobiles into cushion trailers, both moving and parked, caused minimal damage to the automobile and trailer. The research also led to recommendations on the design of structural connections between the crash trailer and the truck.

The Texas Transportation Institute researchers have concluded that the crash cushion trailer is a practical, valuable unit for alleviating the seriousness of certain types of highway accidents involving maintenance vehicles, equipment and personnel. They cited three basic possible uses for the trailer in maintenance or construction operations:

- Protection of maintenance workers and motorists at detour locations, where the crash cushion trailer could be stationed beyond the detour sign on a temporary basis.

- Protection of workers performing routine maintenance on traffic lanes or shoulders — as in mowing, guardrail repair, chuck-hole filling, or trash collection.

- Protection during maintenance operations in traffic, as for lane-striping, placement of pavement "buttons," etc.

It was noted that a crash trailer for local street operations can be much smaller than that which is needed on highways of greater vehicle speeds. †

## **NEW SECTION EXPECTED IN NEW JERSEY**

The New Sections Committee reported they are working with a group from New Jersey to form a Section in that State. Several interested persons attended the meeting held on January 16, 1974 at the Philadelphia International Airport Motel at which details were presented so this matter can be followed through. We are hopeful a new Section will result from this activity. †

## **FRANKLIN SECTION NEW MEMBERS**

Ronald A. Rizzo, New Castle, PennDOT



## BOARD OF DIRECTORS

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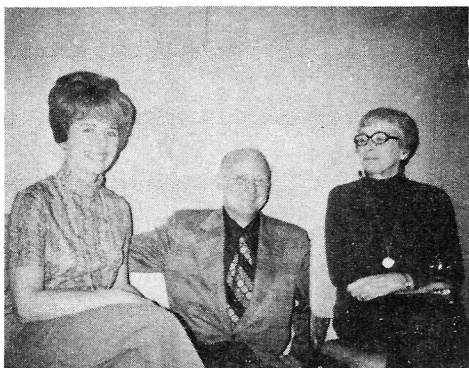
George Parrs of the New Section Committee introduced Messrs. Albert Brocovich and George Gianforaro who attended the meeting as guests of National. These men are anxious to get a Section started in the State of New Jersey. Quite some time was spent in explaining the aims and workings of our Society. In accordance with procedures, a meeting will be set up at a place and time arrived at by the New Sections Committee and representatives of the proposed new Section, at which time further action will be planned.

The matter of Annual Assessments was discussed and upon review it was decided there will be no change in these assessments.

Dues assessments will remain at: Senior Members - \$7.50; Life Members - \$2.50; Members - \$5.00; Associate Members - \$5.00; Junior Members - \$4.00; Affiliate Members \$4.00.

Upon motion of Robert Yeager, seconded by Roswell Brown and properly carried, this action was approved.

There was a discussion regarding the charge of \$2.50 per Life Member to the Sections. It was pointed out that a Life Member has all the privileges of a paying member, including The Scanner, the privilege of attending the Convention, and other matters of importance; this is the basis for the charge. This should clear up any questions as to the reason for charging Sections for their Life Members. †



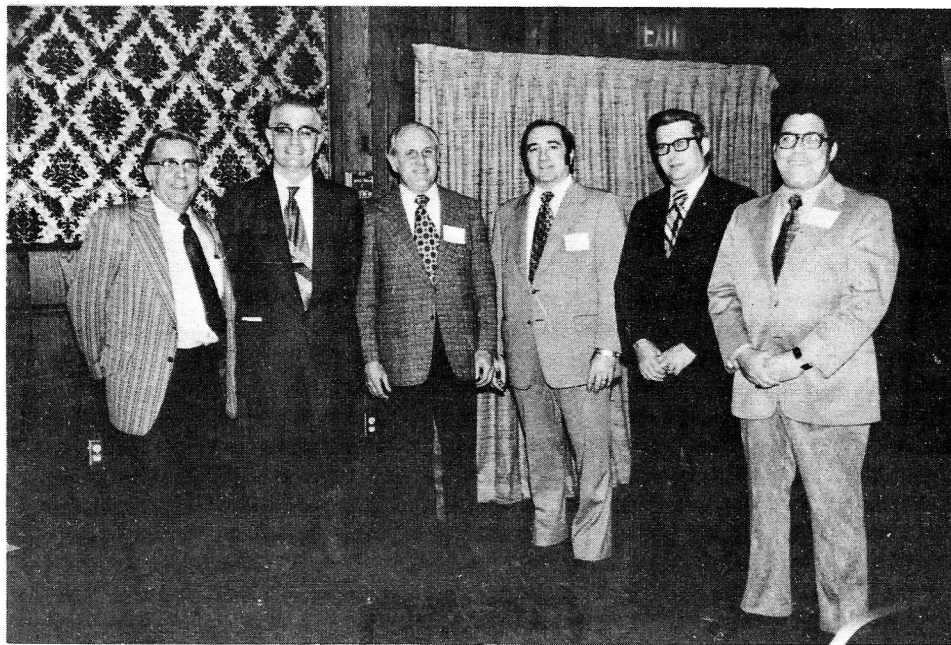
At the January Board of Director's Meeting in Philadelphia, President Jim Weaver with Vice President Bob Yeager's wife (left) and Secretary Bob Sherr's wife.

## CLEARFIELD SECTION

### NEW MEMBERS

John M. Ogorchok, Clearfield, Materials Producer  
Edward S. Nasuti, Clearfield, Consultant

## PITTSBURGH SECTION



At the December meeting of the Pittsburgh Section, left to right, S. C. Livingston, L. J. Jaroska, Dr. L. C. Reese, Dr. J. I. Abrams, R. Mellani, and J. F. DeRoss.

The special joint meeting of the American Society of Civil Engineers and the American Society of Highway Engineers held on December 3, 1973 at the Holiday Inn in Greentree Borough in which the Association of Drilled Shaft Contractors presented a seminar on design and construction of drilled shaft caissons was an overwhelming success. Approximately 270 members of the two societies were in attendance.

Dr. Lyman C. Reese, Consultant to the Association of Drilled Shaft Contractors, the Texas Highway Department and Chairman of the Department of Civil Engineering at the University of Texas, delivered a slide based design theory exposition on point bearing, skin friction and lateral loading on drilled shaft caissons followed with a discussion of construction implementation practices in the field. The total program extended over five and one half hours, not including an hour and one half intermission period for dinner.

The seminar was the sixth given in the forty-eight contiguous states and the Pittsburgh program was the eastern-most site to date. Several more similar programs by the Associated Drilled Shaft Contractors are planned in other parts of the nation before next summer after which the seminar series will be discontinued. In view of the fact that less than a dozen such seminars throughout the nation are planned, the local chapters of the two societies feel extremely fortunate to have been successful in bringing one of these

programs to the Pittsburgh area.

### NEW MEMBERS

Robert H. Barrett, P.E., Corapolis, Construction  
James H. McGlothlin, Greensburg, Construction  
John J. Palmiere, Pittsburgh, Construction  
Richard S. Cover, Port Vue, PennDOT  
Charles L. Miller, Pittsburgh, PennDOT  
Robert S. Niedzielka, Pittsburgh, PennDOT  
Roy L. Guenther, P.E., Pittsburgh, Consultant  
George M. Milantoni, Greensburg, Contractor  
James Cahall, Zelienople, Contractor  
Norman Herman, Normalville, Contractor  
Lawrence L. Boice, Evans City, Contractor  
Paul E. Yeckley, Jr., Pittsburgh, Utility

## CONVENTION FLYERS AVAILABLE SOON

National Convention plans are coming along in good shape and the general membership should receive their first notice by the end of February, if not sooner. Keep on the alert for this flyer and plan to attend — will be held May 23 thru 26, 1974 at Seven Springs. †

## SOUTHWESTERN PENNSYLVANIA

### NEW MEMBERS

Robert G. Zele, Uniontown, Construction Contractor †



## NOMINATIONS

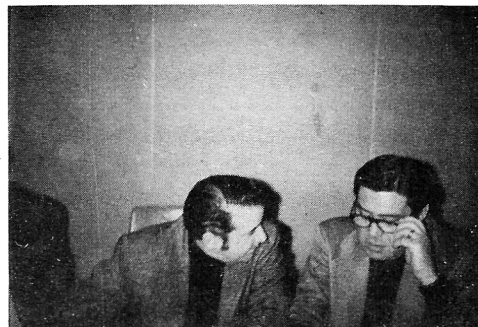
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nelly, the recommendation of the Nominating Committee was adopted.

In line with this recommendation the following members were nominated to serve on the expanded Board of Directors: Three Years - Gene G. Smith, P.E., Franklin Section, Harold C. Poulson, P.E. Harrisburg Section\*, Joseph Martinelli, Southwestern Penn Section\*, and Albert Stallknecht, P.E., Harrisburg Section. Two Years - William Boykas, P.E., East Penn Section\*; Charles J. Allison, P.E., Altoona Section\*, John V. Rignani, P.E., Harrisburg Section; and Joseph C. Ostroski, P.E., North East Penn Section. One Year - Lawrence P. Opalisky, P.E., Clearfield Section\*, George J. Parrs, P.E., North East Penn Section\*, John M. Townes, III, Delaware Valley Section\*; and Rudolph Melani, Pittsburgh Section. (\*Presently



Nominating Committee Chairman Don Rimmer, right, reviews list of candidates with Secretary Bob Sherr, left.



Nominating Committee members, Joe Martinelli, Southwestern Penna., left, and John DeRoss, Pittsburgh, right, scrutinize a recommendation.

on the Board of Directors.)

In addition to the Nominations presented by the Nominating Committee, nominations may be submitted by petition as outlined in the By-Laws.

The Nominating Committee also rec-

ommended we consider changing Article III, Section 4, of the By-Laws to read, "The Executive Committee shall consist of the five principal officers - President, First and Second Vice Presidents, Secretary, Treasurer and four members chosen from its membership." This recommendation will be presented to the Executive Committee for consideration and action.

A further recommendation by the Nominating Committee was that the Board give serious consideration to appointing an Assistant Secretary and an Assistant Treasurer. Upon motion of Harold Poulson, seconded by Joseph Martinelli, and properly carried, this recommendation was accepted and action will be taken on this at a future meeting of the Board.

President Weaver extended his thanks to the Nominating Committee for their work in preparing the slate of candidates and for their serious efforts in preparing the various recommendations. †

## PRESIDENT'S MESSAGE

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the Governor and legislative branch of government start taking an interest in the Commonwealth and not just their pay checks.

*THINK – THINK – THINK*

*Jim*

## DELAWARE VALLEY SECTION

Jack Seber & Harvey Knauer, Public Relations

"Crisis – too strong a word" stated Mr. Robert Custer, a Civil Engineer with Sun Oil Company, at the January ASHE meeting of the Delaware Valley Section. Mr. Custer answered numerous energy related questions generated by the 111 members in attendance.

According to Mr. Custer, immediately following World War II, the oil companies were encouraged by the government to increase their refining capacities. To operate efficiently, refineries must operate at or near capacity. The result was an expanded market and the appearance of "independents," who bought gasoline weekly from the supplier charging the lowest price. The oil companies supplied gasoline to these independents at "discount" prices in order to maintain full capacity refining efficiency. Independents were supplied gasoline at lower prices than company stations under the theory that the independents were not "full service" stations and as such would not seriously harm the operation of company

stations. In retrospect, Mr. Custer stated that he believed such a theory was a mistake, resulting in a period in which the public was buying gasoline at "gift" prices and gasoline useage was being encouraged.

Mr. Custer admitted that the oil industry has been responsible, in part, for the encouragement of gasoline useage via its advertising campaigns of past years. He also stated that the oil industry has done an inadequate job of conveying its position and the facts relating to the oil and gasoline supply and demand situation.

Mr. Custer drew a more encouraging picture than that being portrayed by the news media. He believes that prices are beginning to stabilize and expects the maximum price per gallon to reach about sixty cents when the complex supply-demand system reaches a realistic balance.

In addressing the long-range energy situation, Mr. Custer stated that sufficient supplies exist in the ground for many years, although not necessarily retrievable by present well and pumping methods. He believes that other methods such as extraction of oil from shale will become more feasible with the increased price. He added that the Alaskan Pipeline is five years away, and while a help, will not in itself be a significant aid to the overall energy situation.

## NEW MEMBERS

John M. Evans, Trenton, New Jersey, Contractor Association

John Filler, Philadelphia, Consultant

Gary J. Bellotti, Philadelphia, Consultant

James C. Druecker, P.E., Glenolden, Consultant †

## NORTH EAST PENN SECTION

Leonard Gallucci, Public Relations

The January meeting of the North East Penn Section was held January 8th at the After Five Supper Club, 280 Main Street, Dickson City.

The guest speaker for the evening was Mr. Joseph C. Ostrowski, P.E., Bellente, Clauss, Miller, & Nolan, Inc. His topic was "New Jersey Sports Complex."

Plans were also made for our annual Valentine Dinner-Dance, which will be held on Saturday, February 16, at the After Five Supper Club. There will be around 125 guests attending the affair. The guest for the evening will be Mr. James M. Weaver, President of ASHE.

## NEW MEMBERS

Thomas A. Medico, Swoyersville, Construction Equipment

Kenneth M. Paulino, Taylor, Consultant

## JOHN DeROSS RELEASES INFORMATION ON MAIN SPEAKER FOR '74 CONVENTION

**The Horror Story of  
William H. (Bill) Currie**



William H. (Bill) Currie

Born: December 6, 1924. Died: March 12, 1950 (The day I got married). Education: Finally graduated from high school at age 16. Flunked out of Catawba College, Syracuse University and High Point College. Majored in English and after five years, gave up trying to get a degree.

### BUSINESS BACKGROUND:

1938 — Police reporter, then sports writer in High Point, North Carolina on "The Enterprise," the only daily paper in the world which is also weekly.

1945 — After the war (The big one; World War II, it was in all the papers at the time) rejoined "The Enterprise" as Sports Editor. Fired.

1951 — WAIR Radio, Winston-Salem. Sports Announcer, hillbilly disc jockey, salesman, and collection agent in charge of making the Sunday gospel preachers pay in advance for their programs. (Note: In radio, never sell a preacher or a traveling show on credit.) Fired.

1953 — Organized a company and built WNOS Radio in High Point. Served as General Manager, salesman, copy writer, morning announcer, reporter, janitor, and sang in a gospel quartet at noon for the

benefit of the sick and shut-in. Gave up and sold out after three years.

1957 — Bought two weekly newspapers and managed to go stone broke in less than six months, losing all profit from radio station sale. Got out of town in the middle of the night, and went to Raleigh.

1957 — Became General and National Sales Manager for WRAL-Radio. Also did the morning show (Top rated in market for five years) sports, held rap sessions for weeping employees, developed an ulcer, and made the company a pot full of money. Made none myself. Fired over selling toilet paper for Civitan Club.

1962 — Formed the Tar Heel sports network in association with WVOT, Wilson, North Carolina. (The station put up the money.) Did (as I had been for years, but now I owned it), the University of North Carolina football and basketball games, and also other collegiate games as the schedule would permit. Fed 69 radio stations in four states.

1964 — Moved the network, and went to WSOC-TV in Charlotte as sports director. Developed the largest sports staff of any local TV station in the country with seven full timers. Was named outstanding sportscaster in North Carolina seven times in eight years.

1969 — Appointed operations manager of WSOC-TV responsible for total operation with direct control of news and sports. Soon ran into serious problems because the general manager didn't want to use any news reflecting unfavorably on his golf and drinking buddies at country club. Escaped to KDKA-TV just before the big ax fell on me again.

In 1943 summered in Ft. McLellan, Alabama garden spot of Dixie. Just before the group went overseas, managed to escape into Air Force Cadet program. Graduated from Bombardier School at Roswell, New Mexico in November, 1944. Completed training on B-17 and B-29 Bombers, and managed to stall around until the war was over. As a coward, was mighty happy not to serve overseas. Came out a captain.

In 1972 was named Outstanding Television Performer in the Greater Pittsburgh area by the American Federation of Radio and Television Artists.

IN GENERAL: Spent five years on the head shrinker's couch to find out what makes me tick. After I found out, it wasn't worth the \$10,000 it cost to know.

MARITAL STATUS: Divorced. (Joined the women's lib to campaign against alimony.)

DISPOSITION: Laughs all the time to keep from crying.

KIDS: Bob, 25, married, henpecked, and poppa to my granddaughter, Elizabeth Anne. Susan, 18, tall, good looking, scholarly; the family brain. Malette Poole (foster-son) 23, in Pittsburgh with me, going to Point Park College, is lover-in-residence. A bright boy, combination of Errol Flynn and Tommy Manville. †

## EAST PENN SECTION

William Boykas, Public Relations

December meeting of the East Penn Section of ASHE was held at Danny's Restaurant and the subject was High Mast Lighting. The meeting was arranged through Buck Line Corporation of Reading, Leonard Blazes, Vice President. The speaker was Clarence Mabin from Valmont Industries, who presented a very informative talk and slide presentation on the use of this lighting.

The question and answer period brought out many interesting facets encountered in the early design of this type lighting which was used in some of the western states. Forty-nine members attended this meeting.

The January meeting of the section was held at Shankweilers. Mr. Robert C. Martin, Technical Sales Manager of the Southern Galvanizing of Baltimore, presented a very informative talk and slide presentation on the related uses of galvanizing with specific emphasis on rebars for bridge construction.

The question and answer period proved to be the most enlightening aspect of the presentation because specific questions by the members brought out various advantages and problems encountered in the fabrication and subsequent galvanizing of reinforcing bars. Twenty-eight members attended this meeting.

Mr. Joseph J. Stascavage, who was Assistant Construction Engineer in District 5-0 and a Senior Member of the East Penn Section, retired from the Department December 31, 1973, after 18 years service. A Retirement Dinner was held for Mr. Stascavage at the Fearless Fire Hall, Allentown. Over 100 people attended. †

The long-dreamed-of tunnel under the English Channel first proposed in 1751 may finally become a reality. Recently the British and French governments announced plans to begin construction in 1975. It will be a five-year project, estimated to cost \$2,100,000,000. Dozens of construction companies in both countries will get contracts. †

## DELAWARE VALLEY CONVENTION PLANS

Should the 1975 National Convention be held in downtown or in the suburbs? This question is giving Site Selection Chairman Joe Puchalski a real headache.

East Penn Senior Member John Hanosek's wife votes for the Marriott on City Avenue.

Members with feelings on this matter please contact Joe at 648 Grand Avenue, Havertown, Pennsylvania 19083. †

## ANYBODY FOR LAS VEGAS?

Any member interested in a group ASHE trip or the proposal that a future convention be held in Las Vegas, please contact George Parrs, Assistant District Engineer, Pre-Construction, PennDOT District 4-0, Dunmore, Pennsylvania, 18512, at your convenience. We're waiting to hear from you. †



George Parrs

## ALTOONA SECTION

Jack Stefanko, Public Relations

Our September dinner meeting was held at the Old Canal Inn, Hollidaysburg. Paul Johnson of the PennDOT District 9 Right of Way staff presented an interesting and entertaining talk which gave an insight into the problems associated with clearing Right of Way for Highway Construction.

Mr. Ken Mayer, Executive Secretary of the Pennsylvania Ready Mix Sand and Gravel Association was the speaker at the October meeting. His program was titled, "Dig, Show and Tell."

The November meeting was also held at the Old Canal Inn. Jack Hillman of the Sika Chemical Corporation presented a slide program on the "Uses of Epoxy in Highway Construction".

## NEW MEMBERS

Richard L. McEldowney, Altoona, Consultant.

Edgar W. Williams, Derry, Construction Roads

Larry Berringer, L. Robert Kimball Consulting Engineers

Paul F. McNulty, Vipond and Vipond Construction Company

Eugene Oberle, Vipond and Vipond Construction Company. †

## HARRISBURG SECTION

Bob Messner, P.E., Public Relations

The Board of Directors authorized a payment of \$250 to PHIA, \$50 as dues and \$200 as a contribution toward continuing efforts to improve the industry through public information.

The Harrisburg Section will hold their annual Ladies Night at the Carlisle Barracks, Army War College on June 1, 1974.

An excellent publication titled "Criteria for Axially Loaded Drilled Shafts," is available from the Association of Drilled Shaft Contractors, Inc., 4801 West Lovers Lane, P.O. Box 7412, Dallas, Texas, 75209, for \$1.00.

All involved in bridge painting for PennDOT should note C-Letter 409/73-2 requires that every square inch of steel to be painted must be cleaned. The acceptable methods are; blast cleaning, power tool cleaning or solvent cleaning.

## NEW MEMBERS

Brian A. McCoola, EIT, Camp Hill, PennDOT. †

## PROPERTIES AND PERFORMANCE OF CONCRETE

The wide variety of research currently being conducted on the use of concrete for highway applications is reflected in six papers recently published by the Highway Research Board as Highway Research Record No. 423, "Concrete Properties and Performance."

The majority of the six papers deal with concrete performance in bridge decks. One report by R. E. Carrier and P. D. Cady (Pennsylvania State University) covers a study of deterioration of 249 bridge decks in Pennsylvania, while a similar study in Virginia is reported on by Howard H. Newlon, Jr., James Davis, and Michael North (Virginia Highway Research Council). Additional information is supplied in a discussion of the Pennsylvania report by W. P. Chamberlin, D. E. Amsler, and J. K. Jaqueway (New York State Department of Transportation), who had themselves recently studied 716 bridge decks in New York State. Although the three surveys were completely independent, the results are complementary and agree basically on certain performance characteristics (both good and bad) and on possible causative factors. Although limited, the data relating to the influence of stay-in-place forms are of particular interest because of current questions related to their use, and because of a lack of

previously published information.

A critical influence on the performance of concrete in bridge decks is the moisture content of the concrete. Factors influencing this important parameter are discussed by Leonard L. Ingram and Howard L. Furr (Texas A & M University).

The paper by D. L. Spellman and R. F. Stratfull (California Division of Highways) supplements earlier work from their extensive and valuable studies of the corrosion of steel in bridge decks. The methods they have developed are being evaluated on a broad scale by highway departments and by national standardization bodies.

The fundamental materials behavior and mechanical properties of concrete must be appreciated before its observed performance can be properly understood. The paper by L. L. Palotas (Technical University, Budapest) presents an analytical method for quantifying the influence of non-load-induced factors on the stress and cracking of concrete. C. D. Johnston (University of Calgary, Alberta) relates anisotropy, a perplexing but somewhat conceptual characteristic of concrete, to a specific performance characteristic, strength.

Highway Research Record No. 423 is available for \$2.40 a copy from the Highway Research Board, Publications Department 805, 2101 Constitution Avenue, N.W., Washington, D.C. 20418. (Advance payment is required on orders of \$5.00 or less.) †

## ASPHALT SEAL COATS

Bob M. Gallaway, Research Engineer and Jon A. Epps, Associate Research Engineer of the TTT at Texas A & M University, presented an exhaustive study of chip seals, including their properties that are dependent on aggregate gradation, type, size, mineralogy, surface texture and source, and type of asphalt and its viscosity and amount.

Field experience involving durability of the seal coat under traffic (the authors do not recommend seal coats for moderate to heavy urban traffic) were discussed in the report, together with the relationships of factors associated with the seals' binder and aggregate. Also evaluated were design, construction, and the efficacy of chip seals in improving skid resistance under varying traffic and climatic conditions.

The performance of chip seals was described as depending on a great number of factors, all of which were detailed in the report and in the literature embraced by the report's 63 references. †



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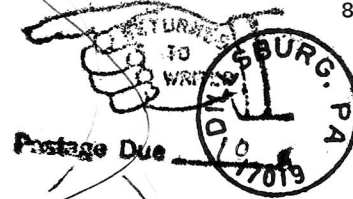
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North East Penn	104
Pittsburgh	246
Southwestern Pennsylvania	112
Williamsport	115
Total	1671

POLE MODIFICATION PROVIDES  
FOR SAFE BREAKAGE  
UPON IMPACT

A recent study has found that timber utility poles can be modified so that they will break away readily and safely if struck by an errant vehicle. The modification reduces the traffic safety hazard of such roadside obstacles by incorporating a "breakaway" feature as used in traffic signs and highway lighting supports.

The feasibility and desirable nature of utility pole safety modifications were ascertained through a study conducted by the Southwest Research Institute under sponsorship of the Insurance Institute for Highway Safety. Results of the research were reported in a paper presented at the 53rd Annual Meeting of the Highway Research Board in Washington, D.C. The paper was authored by Messrs. G. K. Wolfe, M. E. Bronstad, and J. D. Michie

of the Southwest Research Institute and by Mr. J. Wong of the Insurance Institute for Highway Safety.

In the pole modification study, various holes were drilled and groove patterns were cut at two selected places on the poles, which were then subjected to a series of pendulum impact tests. The procedure can be carried out by regular highway maintenance personnel using standard equipment. Although the process may adversely affect the preservative in poles, this probably can be overcome by applying preservative to the poles after their modification.

The tests involved thirteen pendulum strikings of full-size Class 4-40 poles with a 4,000 pound mass moving at 20 miles per hour. The holes and grooves were used to provide weakened pole areas at six inches above the ground and at six feet from the top, resulting in a 27-foot center section that would detach upon impact. This arrangement minimizes the weight that must be supported by adjacent, line-connected poles when a pole is struck, thereby reducing the possibility of broken communication lines or electrical service loss.

The pendulum tests produced the following findings and conclusions:

—It appears technically feasible to modify a timber utility pole so that it breaks away upon vehicle impact and without subjecting vehicle occupants to undue hazard.

—Pole modifications can be performed with standard equipment and regular maintenance.

## Secretary's Corner

Each Section Secretary will be receiving within a short time invoice forms and envelopes for billing their members for the 1974-75 Fiscal Year. Please be sure to return your pink (triplicate) copy with payment.

To All Section Public Relations Representatives: Please see that all items of interest from your section are sent to me in ample time to be included in the upcoming issues of The Scanner. We are interested in hearing what you are doing.

To All Members: Please advise me promptly of any change of address. This is the only way we can keep mail going to the proper address.

Thank you for your cooperation.

*Bob Sherr, Secretary*

—A typical, Class 4-40 timber utility pole can be converted to a break-away structure by drilling two holes at ninety degrees and cutting a one-half-inch perimeter groove. A center section of the pole can be made to detach upon impact by providing a second weakened zone just below the utility line connection, providing the utility lines are sufficiently taut.

—Since the break-away modification reduces the normal load capacity of a utility pole, it is suggested that only those poles most vulnerable to vehicle impact be modified.