

The A.S.H.E. SCANNER

VOLUME XI, NO. III

THE AMERICAN SOCIETY OF HIGHWAY ENGINEERS

FEBRUARY 1975

New Officers Are Nominated For Next Year

New Officers and four new Directors were nominated by the National Nominating Committee at a meeting held in Harrisburg on December 13, 1974.

Present were Committee members James M. Weaver, Chairman, Robert M. Sherr, Secretary, George K. Hart, Treasurer, Robert E. Yeager, President, Donald C. Rimmer and representatives John Leapson, Delaware Valley Section, Robert Brown, East Penn Section, and J. Dixon Early, Harrisburg Section.

Chairman James M. Weaver reported the following nominations for the Society year beginning June 1, 1975:

President, Atwood L. Welker, Jr., P.E., Williamsport Section; First Vice President, John F. DeRoss, Pittsburgh Section; Second Vice President, Harold C. Poulson, P.E., Harrisburg Section; Secretary, Robert M. Sherr, P.E., East Penn Section; Treasurer, George K. Hart, Williamsport Section.

Nominated for three year terms as directors were: Lawrence P. Opalisky, P.E., Clearfield Section; Warren A. Miller, Altoona Section; Rudolph Melani, Pittsburgh Section and Neal R. Smith, Williamsport Section.

National President Robert E. Yeager will automatically serve on the Board of Directors in his capacity as Immediate Past President of the Society for a one year term.

National Directors who will continue in office are: Two years — Gene G. Smith, P.E., Franklin Section; Joseph C. Martinelli, Southwestern Pennsylvania Section and Albert Stallknecht, P.E., Harrisburg Section. For one year — 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. of North East Penn Section.

The new Board of Directors will name a successor to fill a vacancy for a two year term at its first meeting in June 1975.

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

McLaughlin Retires

On December 31st, 1974, Mr. Tom McLaughlin, P.E., District Maintenance Engineer retired from the Pennsylvania



Tom McLaughlin

Department of Transportation after 28 years of selfless dedicated service. More than one-half of those years were dedicated to Engineering District 8-0, Harrisburg, as Maintenance Engineer.

Mr. McLaughlin is a native of Indiana County, Pennsylvania, where he began his career with the Department of Highways in 1947. He and Mrs. McLaughlin reside at 3535 Schoolhouse Lane, Harrisburg. They have one daughter Coleen, who is married and has two sons. They also reside in the Harrisburg area.

Mr. McLaughlin, a registered Professional Engineer, was a member of "American Society of Highway Engineers," "Pennsylvania Society of Professional Engineers, Harrisburg Chapter," "American Society of Civil Engineers," "National Society of Professional Engineers."

On January 6, 1975, a retirement banquet was held for Mr. McLaughlin. It snowed! To those of us who worked with Mr. McLaughlin, that snow was the most appropriate "final tribute" to a fierce snow-fighter. (He no longer has to be concerned.)

Continued on Page 4.



President's Message

Robert E. Yeager
Hollidaysburg, Pa.

In the December issue of The Scanner, the question was asked, "What Does ASHE Mean To You?". I would like to express my feelings at this time.

The American Society of Highway Engineers is one of the few, if not the only, societies with a diversified membership available to our industry. Our Society offers a common vehicle for construction, consultant, contracting agency and supply personnel to meet together in an informal atmosphere and discuss the problems and goals of the industry. Through the regular attendance of your section's monthly meeting, you have the opportunity to "put things on a first name basis" with many people who would be a "Mr." or only a name on a set of plans. Questions asked and answered in this informal atmosphere may not change the course of the highway program — BUT — could lead to a cost saving design, a labor saving approach on the next section of roadway, or a better understanding of an existing problem. Through the varied programs offered throughout the year, an insight is given to each member of the scope of the related fields in which our fellow members labor. Our Society has fostered a more common bond between the contracting agencies, contractors, and consultants. I feel it has been instrumental in erasing the old commandment of "Thou shall speak only to me" once prevalent in some contracting agencies and replacing it with "We have a problem, let US discuss it".

A good healthy section is one in which the membership represents all facets of our industry. The members discuss the problems and the goals of our entire transportation system freely with great exchange of thoughts and ideas.

Robert E. Yeager †

TECHNICAL CROSS SECTION*John H. Leapson, P.E.***MILESTONES AND MILEPOSTS:
HIGHWAY LOCATION
REFERENCE METHODS**

The use of milestones and similar devices to help travelers determine how far they are from their destinations goes back as far as the days of the Roman Empire. As the size and complexity of highway networks increased, the importance of highway markers grew, and numerous innovative marking methods have been tried with varying degrees of success. Synthesis of Highway Practice 21, Highway Location Reference Methods, describes the methods that have been used and are in use today and cites the advantages and disadvantages of each.

The milestones installed on Roman roads both in Italy and in Britain fell into disuse after the fall of the Empire, and official distance markers did not appear again in England until the eighteenth century, when milestones on the Cambridge-Barkway Road created a great sensation and were highly praised by travelers. By the late eighteenth century milestones were seen in America, the first being erected on the Boston Post Road in 1763 by Benjamin Franklin. Their widespread use did not begin until the early 1920's, when markers known as mileposts appeared on the roads of a few states, initially in the form of concrete pillars.

The rapid expansion and drastic changes in the nation's highway system beginning around 1916 were reflected in significant modifications in highway markings. The realignment and abandonment of roads and the construction of many new highways made many of the old mileage signs virtually useless. They were gradually replaced by signs displaying point-to-point distances and route numbers based on the uniform highway numbering system. In addition, travelers were greatly aided by the widespread production and distribution of tourist maps that made use of readily identifiable landmarks as well as mileage markers and signs.

This increased availability of other devices for the guidance of travelers resulted in a marked decline in the use of mileposts except in a few states and on turnpikes. However, with the passage of the Federal-Aid Highway Act of 1956, which required that mileposts be installed on the Interstate System, fewer markers became more significant, representing a basic element in

the planning, construction, and administration of the nation's highway system.

Since 1966, the prevailing attitude toward mileposts has been to consider them for use in location referencing and not necessarily as a convenience to travelers. This attitude, which appears to be gaining support, considers the milepost to be a reference post; that is, the number on the post is not necessarily considered to be an accurate mileage figure. This particular approach was generated as an attempt to resolve the problem that arises when construction changes the length of a route and makes milepost numbers invalid.

Other location reference methods have been developed to combat this problem. Some states have employed such methods as mileposts on paper and the referencing of locations to landmarks such as inter-sections. Other states have changed the 0 points for their mileposts to county lines and to the beginning of control sections in an effort to reduce the impact of construction changes on their mile markers.

The milepost system permits the user in the field to determine his or her location simply by adding or subtracting the distance to the milepost. A reference post ordinarily does not permit computation of a location in the field because the reference post does not provide location information in terms of miles. The milepoint must be computed in a central office by using a file that contains actual milepoints from each reference post. The necessity of this step and the existence of this file distinguish the reference post method from the milepost method. In most agencies the mileposts are, in fact, being used as reference posts. Even though there may not be a formal version of the file, the true locations of the mileposts are retained somewhere in the records of the highway agency.

Information for the report was obtained in discussions with representatives of the agencies in several states concerned with the use of location reference methods. Included were law enforcement personnel, maintenance personnel, traffic engineers, public utility engineers, highway planning personnel, and members of city engineering department. These discussions provided valuable information regarding the types of location reference methods used and the nature of problems encountered. A second source was a survey of location reference methods as used by the various states conducted in late 1971 by the Federal Highway Administration. †

Many a family is pressed by high prices today, but only a few are taken to the cleaners.

**COLOR AERIAL PHOTOGRAPHY
IN HIGHWAY ENGINEERING**

Donald E. Wilbur, R.S.
Photogrammetry and Surveys Division
Bureau of Design, PennDOT

The past ten years has seen a steady growth in the application of color aerial photography in highway engineering within the Pennsylvania Department of Transportation. From initial token experimental projects, its use has now expanded into many areas and is proving most beneficial to the Department.

Color photography is an ongoing in-house photogrammetric service that is finding widespread acceptance by the engineering staff for use in the phases of preliminary and final design such as; environmental impact statement; reports and visual aids for public hearings and meetings; inventorying coal refuse for use as possible embankment material; studying and measuring landslide areas; assisting in studying soils and locating sink holes; the study of diseased roadside plantings; monitoring construction progress; and documenting environmentally compatible construction practices. For certain applications, color infrared photography is also used for comparative analysis.

In addition to the above, the Department uses color aerial photography for producing large scale photogrammetric mapping on selected projects such as the recent Harrisburg International Airport project.

The use of color aerial photography for as-built cross sections that are obtained photogrammetrically has become standard procedure in the Department. Procedures and techniques using black and white photography were developed beginning in 1963. The use of color photography began in 1969 after earlier experience with black and white photography revealed difficulties in accurately reading ground surface elevations from the stereoscopic models in areas of white new concrete and bare ground.

As newer color film emulsions became available, they were used for final cross section projects. The film presently in use is an aero color negative film, type 2445. It has proven to be very satisfactory for accurate interpretation and measuring. Mulched and seeded areas in the right of way are now captured in their many varied tones of brown and green. The slight texture variations of the new concrete pavement and shoulders are evidenced on this color film where they were not recorded on black and white photography. It also is a faster film and can be exposed satisfac-

Continued on next page.

torily under the lower light conditions normally found in late fall at our latitude here in Pennsylvania.

This technique for obtaining cross section measurements of newly constructed roadways yields the greatest cost benefit over the conventional ground survey method in areas where the rugged terrain significantly impedes work progress by a ground survey crew. It has also proven to be a most viable method where traffic on recently opened roadways or sheer split rock cut areas presents unusually high safety risks to ground survey crew members.

Comparative studies have shown that the use of color photography rather than black and white photography for as-built cross sections, adds not more than 7 to 10 percent to the total cost. The advantages of using color more than compensate for this slightly higher cost. †

DETERMINING NO-PASSING ZONES IN ARIZONA WITH SAFETY AND ACCURACY

David R. Olivarez

Traffic control devices that adequately communicate with motorists on highways are a key factor in maintaining safety. As signs forewarn of potential hazards, the no-passing zone forewarns of stretches of highway that contain sight restrictions and therefore should not be used for passing. Surveying areas that require no-passing zones has been a difficult task because of the amount of time necessary to locate the zones and the hazard involved in working on the highway in the presence of moving traffic.

Various methods for measuring sight distances have been employed in Arizona. The original method involved "eye-balling" the distance with little, if any, measurement. Needless to say, this method resulted in gross inconsistencies in the placement of no-passing zone signs on the highways. Many places had too many restrictive signs, and a large number of curves where passing should have been prohibited were not marked at all.

A second method required a vehicle to tow a target on the end of a cable, which was the same length as the required minimum passing sight distance. When the target disappeared, the vehicle was stopped and a mark was placed on the road to indicate the beginning of a zone. The vehicle then continued through the curve until the target came into view. The vehicle was then stopped again, and a mark was placed on the pavement to indicate the end of a zone.

A third method involved 2 vehicles connected with a length of rope equal to the minimum passing sight distance. When one was out of sight from the other, a no-passing zone was established. This method is known as the target method.

A fourth method used during the late 1950s required 2 vehicles equipped with 2-way radios and calibrated odometers. The vehicles stopped at each potential sight restriction and measured backward and forward until the available sight distance was determined. Location marks were placed on the pavement, and the crew moved to the next curve. This method was quite time-consuming and somewhat dangerous to perform on the highway.

The latest method used from 1960 to 1973 was much more efficient and could be performed more safely than the methods noted above. This last method involved 2 vehicles using 2-way radios, calibrated odometers, a sight target mounted at proper height on the lead vehicle and a stamping odometer that was in the rear vehicle and used to record the location of each no-passing zone on a tape.

This method permitted measuring sight distances on the highway at speeds ranging from 20 to 40 mph and required stopping on or adjacent to the highway only to mark the beginning and ending of zones on the pavement. These marks are necessary for proper striping of no-passing zones by paint crews. Although this method was a substantial improvement with respect to accuracy, safety, and efficiency, some aspects still needed improvement. These included the following:

1. Two people must physically relocate and mark the new zones on the roadway. One person leans out of the car and paints arrows on the pavement with an aerosol can. This requires the vehicle to be stopped frequently in the middle of the road.

2. The survey procedure requires intense concentration, particularly by the drivers of the vehicles. The drivers must maintain a constant speed, which requires intense concentration on the speedometer, and listen to the clicking sound of the short-wave radio, which clicks every tenth of a mile. The driver of the front vehicle actuates the radio transmitter to create the clicking sound and must concentrate on the odometer to perform this function. The driver of the rear vehicle checks the odometer reading at reference points selected by the front vehicle driver. Both drivers must perform their driving tasks safely.

3. The recorder-operator in the rear vehicle not only must keep an eye on the lead vehicle to determine when the target disappears from view but also must record

various data on the stamping odometer tape. The writing of data, such as begin no-passing zone, end no-passing zone, and reference points, is necessary because the odometers only stamp the accumulated mileage reading.

4. The size, location, and weight of the stamping odometer are awkward and pose a hazard to vehicle occupants in case of an accident.

Because of these deficiencies and our desire to develop a safe, reliable, and simple system, we arranged with an instrumentation company to develop a distance-measuring instrument (DMI), a range transmitter, and a pavement marker for use in establishing no-passing zones. The only apparatus needed that was not available at the time was a data printer that could print out various types of information such as the beginning and ending of no-passing zones.

The DMI is a computer-like measuring device that is more precise and efficient than the calibrated odometers that were used. The DMI can be adjusted to any type of measuring increment such as feet or miles; for our purpose, it was adjusted to increments of one-thousandth of a mile. This device operates from a 12-V dc power source. Distances are displayed by a digital readout on the face of the dashboard-mounted DMI unit. The digital readout is actuated by signals from a magnetic sensor mounted a fraction of an inch away from the tire rim. Eight beryllium ferrite magnets are attached to the lip of the wheel rim. Each time one of the magnets passes the sensor, the sensor signals the DMI, which converts the signals to a digital display of distance.

The range-tracking instrument takes a signal from the vehicle recording that has the DMI and one from the DMI in the front vehicle, compares them continually, and displays the distance between the 2 vehicles.

The printer has a keyboard with 12 different symbols, any one of which, when actuated, prints 4 columns of information on a tape. The first column is the reading of the DMI in the recording vehicle, the second is the distance between the 2 vehicles, the third is a 3-digit number that can be used to code any information desired, and the fourth is the symbol as it appears on the button punched.

The pavement marker is used to mark the beginning and ending of zones merely by pushing a button that actuates a spray paint marker.

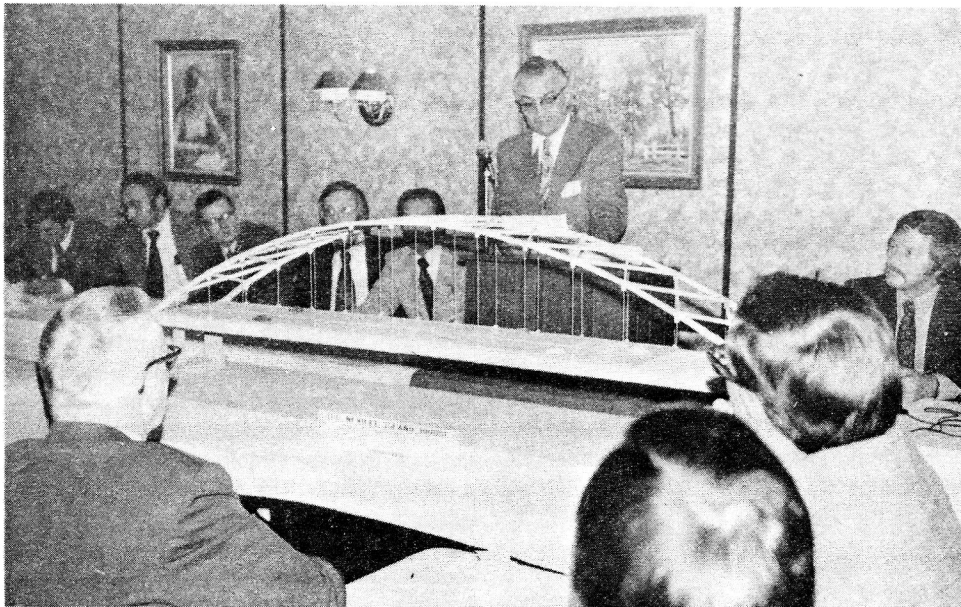
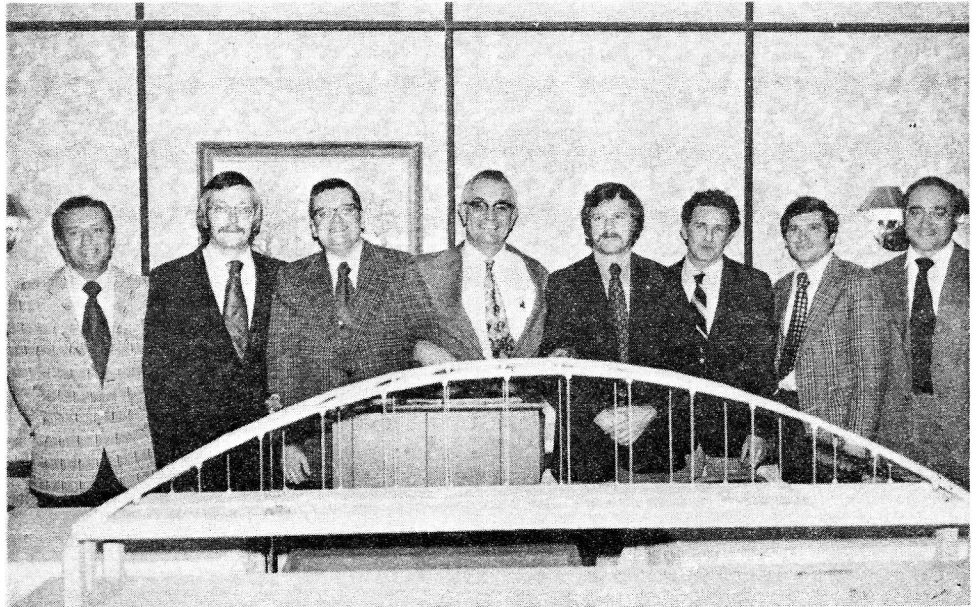
Some 5,000 miles of highways in Arizona are constantly reviewed for no-passing zones as conditions along these highways

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PITTSBURGH SECTION

Continued from Page 6.

Control Problems with the I-79 crossing of the Ohio River. He discussed the various types of erosion and sedimentation control facilities and techniques utilized on the Glenfield Interchange to minimize the accelerated erosion and subsequent sediment pollution of Kilbuck Run and the Ohio River. The project posed many problems due to the severe topography of the area, the large amount of earthmoving and wasting of material, and the restrictions imposed by the rules and regulations of the Pennsylvania Department of Environmental Resources. Bob Ward supplemented his presentation with illustrations of the critical erosion and sedimentation areas of



the project and the different types of control applications being used.

NEW MEMBERS

Gerald A. Costanzo, P.E., McKeesport, PennDOT.

Charles E. Schreiber, Pittsburgh,

Charles E. Schreiber, Pittsburgh, Contractor.

Michael J. Husarik, Russelton, PennDOT.

David W. Mittelburg, Pittsburgh, PennDOT.

William E. Kind, P.E., Pittsburgh, PennDOT.

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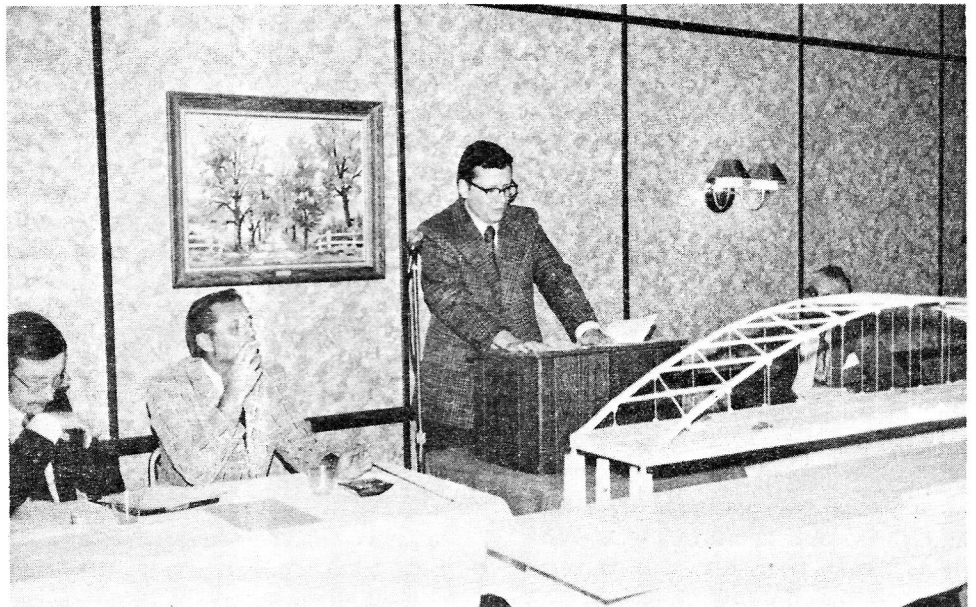
Left to right, L. O'Donnell, J. Lash, W. E. Kind, L. J. Jaroska, E. Kinter, Rod Elliott, R. Ward and D. Migliorato.

Center:

L. J. Jaroska, P.E., Assistant District Engineer, Pre-Constr., Program Chairman and Panel Moderator.

Bottom:

W. E. Kind, P.E., Assistant District Bridge Engineer, Panelist No. 3.



I-95 CONSTRUCTION ADVANCES NEAR 1975 CONVENTION HEADQUARTERS

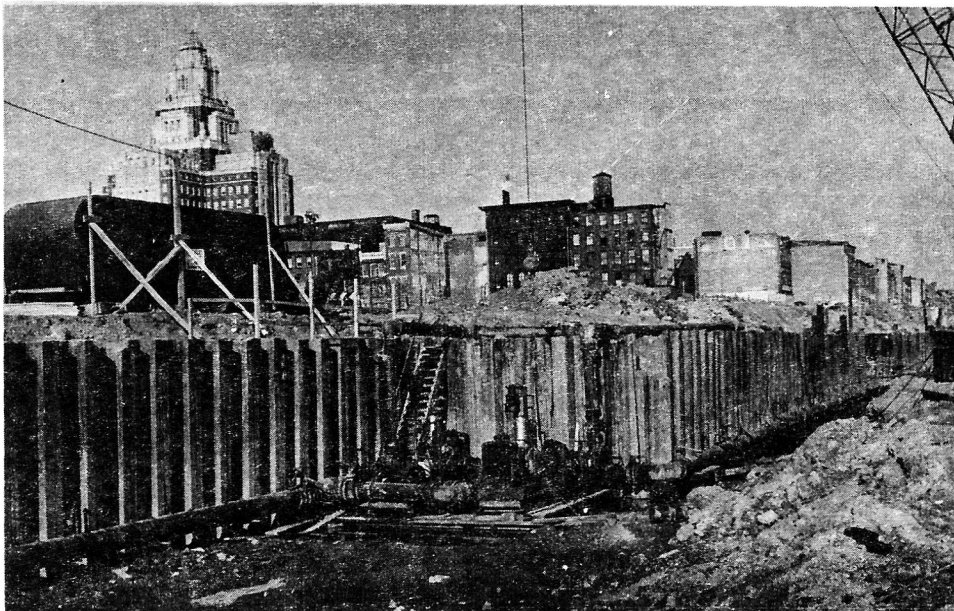
DELAWARE VALLEY SECTION

As a follow-up to the discussion in the last issue of the "Scanner", several progress photos are included in this issue. These photos relate to one section of I-95 being constructed by Conduit and Foundation Corporation and Buckley and Company, a joint venture.

Senior Delaware Valley Section Member Charles Larkin is in charge of the project for the joint venture. PennDOT's Resident Engineer is Vince Crawford, also a Senior Member of the Delaware Valley Section.



L.R. 1000 (B-52) T.R. I-95



As promised in the last issue of the "Scanner", more information on the thickness of the pavement is now available. The sub slab beneath the actual wearing course slab is FOURTEEN (14) FEET thick.

To learn more about this project and several other very challenging projects, plan to attend the 1975 Convention. The dates are May 15, 16, 17 and 18. Make your plans early to attend the convention.

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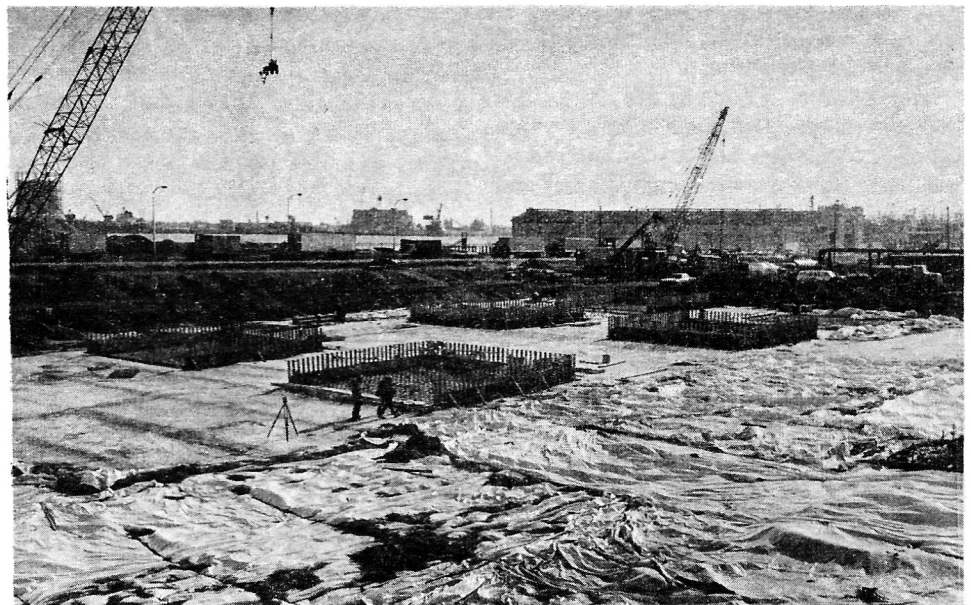
L.R. 1000 (B-52) T.R. I-95;
C & F & B & Co., a Jt. Venture.
Work Slab and Waterprofill,
Sta. 224 + 0 North; December
23, 1974.

Center:

L.R. 1000 (B-52) T.R. I-95;
C & F & B & Co., a Jt. Venture.
Wellpoint Pump Station, Decem-
ber 23, 1974.

Bottom:

L.R. 1000 (B-52) T.R. I-95;
C & F & B & Co., a Jt. Venture.
S. Approach 210 + 50 E., De-
cember 23, 1974.



PITTSBURGH SECTION

H. J. Kuczynski

The Pittsburgh Section November meeting was jointly cosponsored with the Southwest Chapter of the Pennsylvania Society of Land Surveyors. One hundred twenty five (125) persons, 90 ASHE members and 35 Land Surveyors, were recorded as attending the meeting held at the Parkway Terrace, Green Tree, Pennsylvania.

The Pennsylvania Society of Land Surveyors were pleased to be represented by their State President, Howard G. Hartman and Southwest Chapter President, Rod Elliott.

L. J. Jaroska, P.E., Assistant District Engineer, PennDOT, was the Program Chairman and Moderator for five (5) PennDOT Panelists. Each gave presentations dealing with the survey layout, design, construction and environmental controls employed in the I-79 Bridge Complex which crosses the Ohio River at Neville Island.

The bridge was designed for PennDOT by Richardson Gordon and Associates and involves many exceptional design features. The structure includes a 750 feet long through steel tied arch span comprising high grade steel plate girder box sections. It is considered to be the largest of this type ever to be built in Pennsylvania.

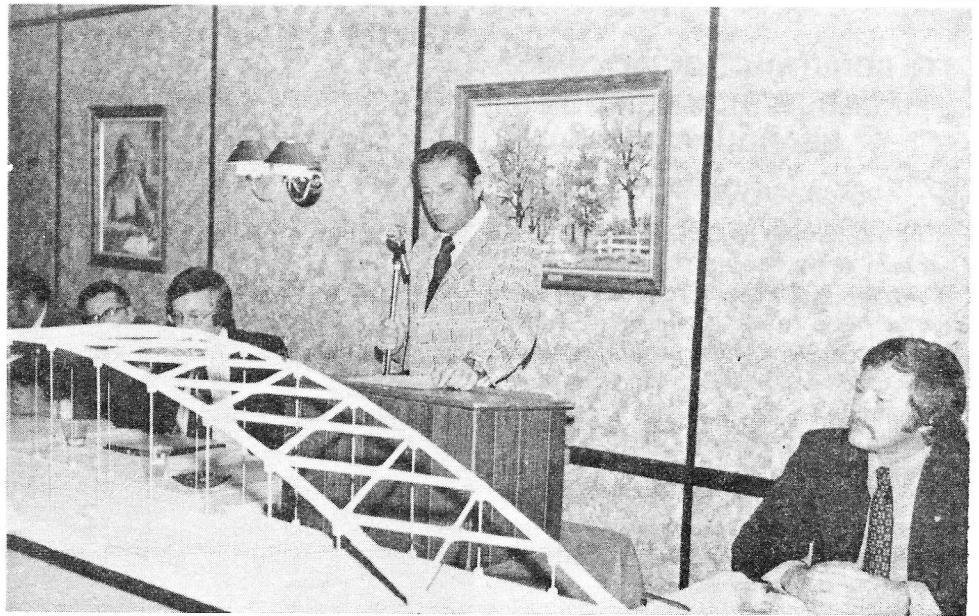
The bridge features the latest safety concepts such as new safety concrete median barrier and attenuators for collision protection. Prolonging the life of the bridge was given every consideration. To guard against corrosion, arch tie members are made of A588 Steel; the re-bars for deck, median barrier and parapets, pier nosing plates, inspection walkway and cable suspenders are galvanized.

An azure blue finish coat of paint was specified to enhance the appearance of the imposing superstructure.

The Neville Island Bridge is a new landmark in the Pittsburgh vicinity which not only traverses a broad river and valley, but also traverses past engineering and construction innovations.

A capsule review of each panelist and his individual presentation is given below. Their combined knowledge and experience covers a broad spectrum of highway and bridge engineering and construction. A special thanks is extended to these gentlemen for their fine contribution to the program.

This meeting also had the unique pleasure of having the following four young ladies in attendance: Sandra Ahearn, Secretary, and Joanne Bruscu, Assistant Secretary, both of P.S.L.S.; Phyllis Opfer-



Standing, L. O'Donnell, Assistant Chief of Surveys, Panelist No. 1; Seated right, E. Kinter, Pittsburgh Section President.

(See more photos on Page 7.)

man, Bierwerth, McCombs, Barton and Associates; and Victoria Lynn DeFrank, Secretary, PennDOT and President of Local 2576 of American Federation of State, County and Municipal Employees Union.

Panelists No. 1 and 2: Leo G. O'Donnell, Assistant Chief of Surveys and J. Lash, Survey Stakeout Engineer, PennDOT, District 11-0.

Mr. O'Donnell's topic involved the surveyor's role in the I-79 crossing of the Ohio River. He discussed alignment and vertical control established by the consultant which were checked and referenced by the Department Survey Corps. He gave an illustration of the unique method used by the Department to sound the Ohio River and back channel river beds. Included in his presentation was the process of transforming of elevations from shore to shore of the Ohio River and back channel. Various slides of the project were then shown to point out the dense brush and steep terrain encountered by the surveyors while staking out this project. Views of river banks and side roads and ramps were included.

J. Lash supplemented Leo O'Donnell's presentation with a description of the intricate stakeout diagrams required for layout and construction of the complex substructure of the bridge.

Panelist No. 3: William E. Kind, an Assistant District Bridge Engineer, PennDOT, District 11-0.

Mr. Kind's topic pertained to the design of the I-79 crossing of the Ohio River. He related unusual features of the design

including a description of the principal methods employed and the basic stress limitations of the high grade steels involved. He also discussed design techniques used to prolong the service life of the bridge.

During his presentation, Bill referred to a model of the main river span to illustrate the function and design characteristics of each element used.

Panelist No. 4: Donald Migliorato, Assistant Construction Engineer, PennDOT, District 11-0.

Mr. Migliorato's presentation was on the construction aspects of the bridge. He discussed various construction problems encountered in the construction of three (3) sections of the I-79 Bridge complex which crosses the Ohio River in the vicinity of Neville Island. His slide presentation highlighted the extensive flood damage to the Bridge Pier Cofferdams caused by Hurricane Agnes in June, 1972. Some of the unique construction techniques used to accelerate the project were viewed and discussed, such as concrete pumps and elaborate conveyor systems for placing concrete for pier footers in the cofferdams. Don's slide presentation included views taken from atop the main bridge arch, giving a dramatic over-all concept of the interchange on Neville Island and the now completed steel superstructure for the main River Bridge.

Panelist No. 5: Robert S. Ward, Environmental Manager, PennDOT, District 11-0.

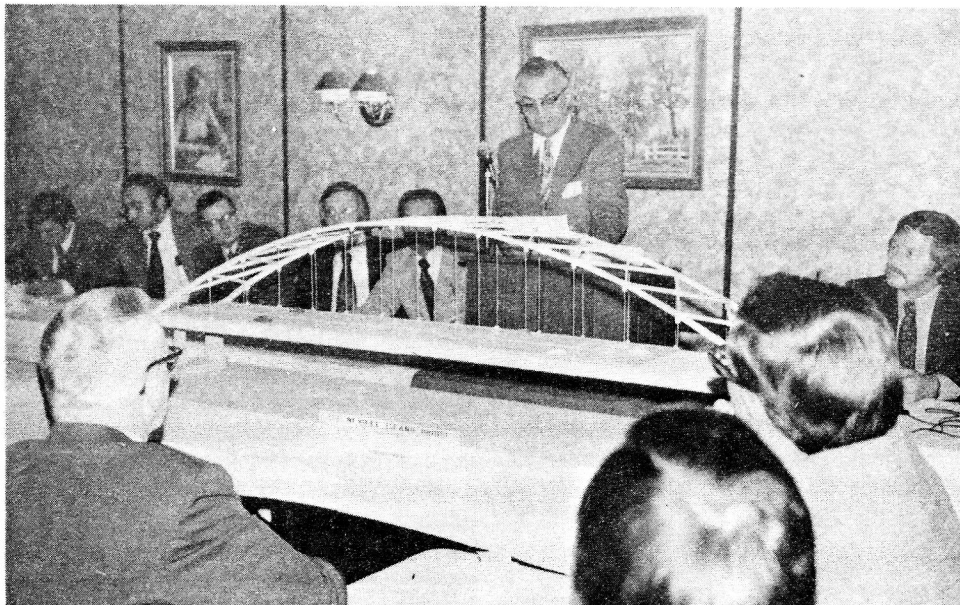
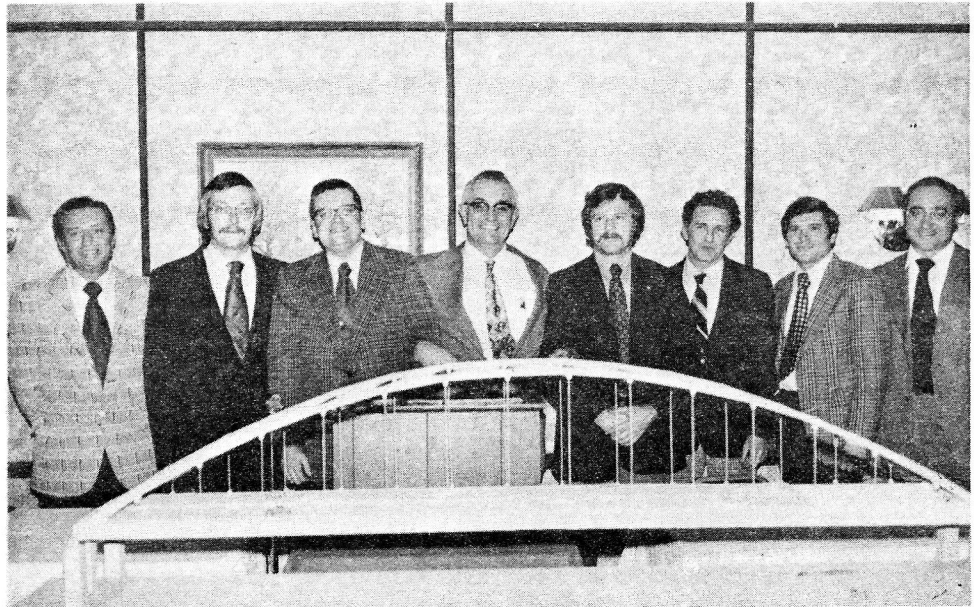
Mr. Ward's topic involved Environmental

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PITTSBURGH SECTION

Continued from Page 6.

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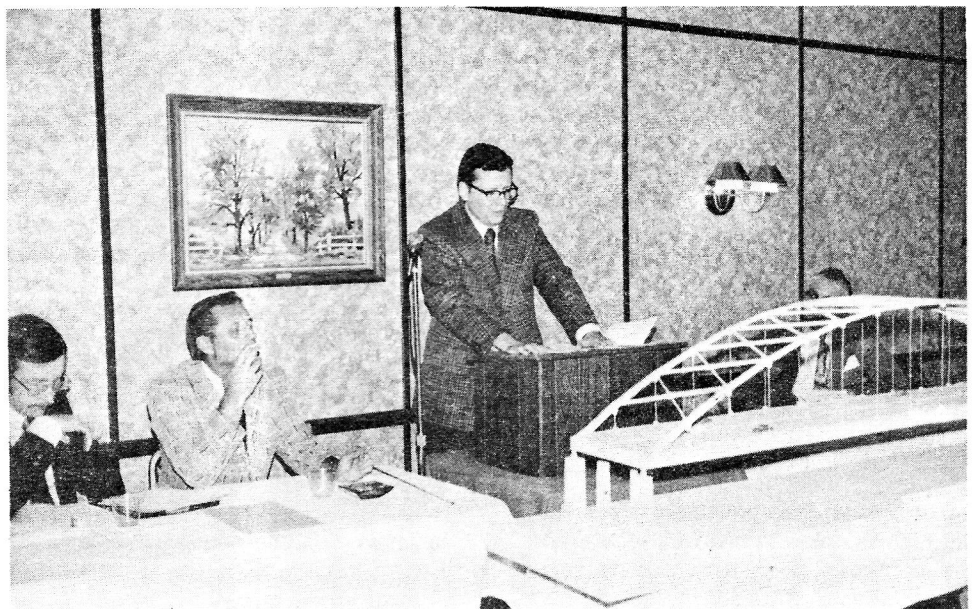
Left to right, L. O'Donnell, J. Lash, W. E. Kind, L. J. Jaroska, E. Kinter, Rod Elliott, R. Ward and D. Migliorato.

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L. J. Jaroska, P.E., Assistant District Engineer, Pre-Constr., Program Chairman and Panel Moderator.

Bottom:

W. E. Kind, P.E., Assistant District Bridge Engineer, Panelist No. 3.



NORTHEAST PENN SECTION

Scoop Morden and Snoop Kolander

Our November meeting was held at the Elks Club, Scranton-Pocono Highway. The guest speaker was Leo D. Sandvig, P.E., Director of Bureau of Materials and Research, Pennsylvania Department of Transportation. His topic of discussion was the statistical method for quality control of materials.

Our December meeting, our Annual Christmas Stag Party, was held at the Ern in Olyphant. The customary guest speaker was replaced by good booze, grab-bag gifts, a general gab session and some good old fashion singing. Song sheets were supplied for those who could see and everyone had a good time.

During this Christmas meeting, the members took time to reflect on sponsoring a non-profit charitable organization to broaden the benevolent impact of the American Society of Highway Engineers. Many well known organizations are associated with charities: The Lions — The Blind Association; U.S. Marine Corps — Toys for Tots; Restaurant Association — Brace-A-Child; National Football League — United Funds.

Specifically reviewed at this meeting was The United National Children Fund (UNICEF), its administration and service per dollar throughout the world.

More recommendations and suggestions will be reviewed at a future directors' meeting.

Jean Ann, you better watch yourself. Some of the girls are commenting on how sexy Jim is beginning to look since he found his youthful figure. I think we should fatten him up again. (Signed N.P.B.)

NEW MEMBERS

Robert Schneider, P.E., Consultant
Robert Ventre, Consultant
Frank Simpkins, Consultant
Anthony P. Marunicci, PennDOT. †

DELAWARE VALLEY SECTION

James C. McConnon, Chairman of the Board of the Southeastern Pennsylvania Transportation Authority (SEPTA), cited America's highway network as a great tribute to our society but emphasized the need for a "balanced" transportation system in a speech delivered to 115 members and guests of the Delaware Valley Section at their January meeting.

Public mass transportation is years behind highway development because proper funding has not been forthcoming, McConnon said. "In today's society, plan-

ners must look at the total transportation picture to insure that adequate mass transit facilities exist as well as good highways." McConnon cited last year's Arab oil embargo and its repercussions as an indication of the chaos which can result from reliance upon highways as the sole transportation mode. As evidence of the advantages of mass transit in fuel shortage situations, McConnon explained its capabilities to provide more than 300 passenger miles per gallon of fuel versus an average of 19 for automobiles.

In a question and answer period which followed his talk, McConnon contended that the Highway Trust could legitimately be used for mass transit since it is not a true "trust", but a special tax which could legally be earmarked for uses other than highways.

NEW MEMBERS

Andrew Jackson, III, P.E., Cherry Hill, New Jersey, Materials Producer
Kenneth W. Shaibley, P.E., Hatfield, Consultant.
Paul A. Zahn, P.E., Wayne, PennDOT. †

HARRISBURG SECTION

Bob Messner, P.E.

The Harrisburg Section of A.S.H.E. met jointly January 13th with the American Society of Civil Engineers, Geotechnical Group. The featured speaker was Dr. Alfred C. Ackenheil, President of A. C. Ackenheil of Pittsburgh. He spoke on "Geotechnical Engineering Applications on Highways Around the World." †

ALTOONA SECTION

NEW MEMBERS

David N. Culp, Hazleton, Contractor
James D. Bahrt, Hazleton, Contractor

CLEARFIELD SECTION

NEW MEMBERS

Alfred P. Hess, Jr., Clearfield, PennDOT.

SOUTHWESTERN PENNSYLVANIA

NEW MEMBERS

Roger E. Spahr, Clarksville, Materials Supplier.
Nick Encapera, California, PennDOT.

Benjamin Franklin may have discovered electricity, but the man who invented the meter made all the money.

WILLIAMSPORT SECTION

NEW MEMBERS

Joseph M. Kaeslin, Muncy Valley, Consultant.
Robert S. Knowlden, Ralston, Contractor.

NEWS OF MEMBERS

James Montgomery has retired after 21 years with the stone and slag division of Bethlehem Steel's Bethlehem Mines Corporation as a sales agent.

He has joined Joseph Ciccone & Sons Company, Bath, representing the construction firm as a sales agent.

Prior to joining Bethlehem, Montgomery had worked with the former Department of Highways, an equipment distributor and F. D. Kessler, Northumberland. †

ANONYMOUS ADAGE

Stages of a Major Project: Enthusiasm, Disenchantment, Panic, Search for the Guilty, Punishment of the Innocent, and Decoration for all Those Who Took No Part. †

SHOULDN'T STATE GOVERNMENT HAVE TO OBEY ITS OWN LAWS?

Just because the state Constitution stipulates something SHALL be done, does not mean it WILL be done. That precisely is the case with the state's highway program.

For instance, the Constitution of Pennsylvania specifically and clearly stipulates that the Governor shall submit a capital budget (for highway projects) for the ensuing year (Article VIII, Section 12,b) and that the General Assembly shall adopt a capital budget for the ensuing year (Article VIII, Section 13,b).

But that has never happened since the 1968 Constitution was adopted. Incredible but true. For clarification, two points are worth examining: first, the language of the Constitution is clearly a mandate, not an option. It says the Governor and The General Assembly SHALL do this. Second, the word "ensuing" means following; hence budgets are to be submitted and adopted for the FOLLOWING year — not THIS year, nor LAST year — but NEXT year.

The record however tells a far different story. Here is the history of highway capital budgets under the present Constitution:

Fiscal Year 1969-70: Budget introduced (SB-1105) October 20, 1969 (4th month into the fiscal year to which it applied).

Continued on next page.

Bad roads cost lives...



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PENNSYLVANIA HIGHWAY INFORMATION ASSOCIATION

Capital Outdoor

Budget enacted (Act 94) March 26, 1970 (9th month into the fiscal year to which it applied).

Fiscal Year 1970-71: Budget introduced — NONE. Budget enacted — NONE.

Fiscal Year 1971-72: Budget introduced (HB-1590) October 12, 1971 (4th month into the fiscal year to which it applied). Budget enacted (Act 185) January 26, 1972 (7th month into fiscal year to which it applied).

Fiscal Year 1972-73: Budget introduced (HB-2638) November 20, 1972 (4th month into the fiscal year and only 10 days before the close of the session). No action; bill died with close of the session November 30.

Fiscal Year 1972-73: Budget introduced (SB-59) January 16, 1973 (7th month into fiscal year to which it applied). Budget enacted (Act 42) July 6, 1973 (first month AFTER fiscal year to which it applied).

Fiscal Year 1973-74: Budget introduced (SB-1807) July 8, 1974 (first month AFTER fiscal year to which it applied). Budget passed by the General Assembly and sent to Governor November 21, 1974. (fifth month AFTER fiscal year to which it applied).

Fiscal Year 1974-75: Budget introduced — NONE. Budget enacted — NONE.

Something is very wrong with a system that permits the state Government to flout its own Constitutional responsibilities and directives. The people, who after all are said to BE the Government, could never get away with it! People are the losers when vital highway programs are set aside and delayed by governmental irresponsibility; and the road building industry loses when projects are put off,

plans are shelved, and work is cut.

The system must be seriously examined for ways of improving it. It's probably more advisable to change the system than try to take the General Assembly or the state Administration to the courts for violating the Constitution. That certainly wouldn't work! †

TRAFFIC FATALITIES DECREASED LAST YEAR

State Transportation Secretary Jacob Kassab has reported that traffic fatalities in Pennsylvania declined more than 11 percent last year, the largest decrease since World War II.

Preliminary 1974 figures indicate total fatalities of 2,141 in 1,916 accidents including 141 motorcyclists, 56 bicyclists and 427 pedestrians. This compares with 1973 final figures of 2,444 killed in 2,183 accidents including 150 motorcyclists, 40 bicyclists and 500 pedestrians.

Only slight changes are expected between 1974 preliminary and final figures.

Kassab cited several reasons for the decline in fatalities: "It would be wrong to attribute the decline in fatalities just to the decreased speed limit. Other factors, particularly less travel and safer cars and roads, are also important."

Kassab said that since gasoline consumption was down five percent last year, travel, and therefore accidents, should also be down. He also noted that only 2,000 of the state's more than 100,000 miles of streets and highways were affected by the reduction in speed limit.

"Since only limited access expressway-

type highways were involved in the speed limit drop," Kassab said, "and since these roads have the lowest accident rate of all highway types, it would be wrong to attribute all of the reduction in fatalities to the 55 mile an hour speed limit.

"Pedestrian deaths also dropped, and pedestrians were never allowed on highways that had speed limits over 55.

"Rather than give all the credit to the lower speed limit, I think that some should be given to changed driving habits, safer cars and safer highways.

"PennDOT has already completed \$100 million in improvements to intersections on both state and local roads," Kassab added. "And it is well known that the highest accident areas are intersections.

"I would like to think that this effort is showing some results."

Kassab concluded: "While I believe the 55 mile an hour speed limit is saving fuel and saving some lives, I think it would be wrong to give it all the credit and not work for safer drivers, safer cars and safer highways." †

SORRY 'BOUT THAT

The crowd of urchins peered wide-eyed as they caught glimpses of the clowns inside the circus tent. A man who had been watching them walked up to the ticket taker and said, "Let those boys in and count them as they pass."

As the last one filed through the gate, the attendant looked at the man and reported, "Sixteen, sir."

"Shucks," said the other, as he started to walk away. "Guessed wrong again." †

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MEMBERSHIP FACTS

Secretary's Report on Membership as
 of January 15, 1975 reflects 1,720
 members.

Altoona	132
Clearfield	80
Delaware Valley	258
East Penn	146
Franklin	201
Harrisburg	294
North East Penn	115
Pittsburgh	252
Southwestern Penna.	117
Williamsport	125

Total 1,720 †

Secretary's Corner

Now that the Holiday Season is over, the time has come for me to send to Section Secretaries invoice forms, together with envelopes and dues cards, for 1975-76 fiscal year, due May 31, 1975. Your billing dates will cover the fiscal year 6/1/75 thru 5/31/76. Assessments are based on paid membership 6/1/74 thru 5/31/75; except no assessments will be made for new members admitted March 1, 1975 thru May 31, 1975.

I have been asked why the Pittsburgh Section received more publicity in the

Scanner than other Sections. The answer is simple — they send this information to me.

As stated before, your Section Public Relations representative is the reporter for your Section and all information, such as items, photographs, or what have you, will be published. The Scanner is your news media, covering the activities of the Society. Therefore, the more you send me, the more interesting the Scanner will be. The Scanner is published in September, December, February and May, and I should receive news items no later than the 15th of the month prior to publication date.

Please check your membership for correct addresses, as the postal department will no longer return incorrectly addressed Scanners to the Secretary. So, we have no way of knowing who has not been getting their copies.

Don't forget to make plans to attend the 13th Annual Convention to be held at the Benjamin Franklin Hotel, Philadelphia, Pa. May 15, 16, 17 and 18, 1975. †

ON THE LIGHT SIDE

A dyed-in-the-wool baseball fan was persuaded by friends to go to the horse races. Being a beginner, he picked a 50-to-1 long-shot and put \$2 on the nose.

Coming into the stretch, the long-shot horse was neck and neck with the favorite. As they neared the wire for a photo finish, the baseball man hollered, "Slide, you bum! Slide!"

ROADBUILDING A CHALLENGE
IN NORTHERN ALASKA

One of the most difficult tasks facing the oilmen building the Alaska pipeline is that of bringing in equipment to the construction area.

It will be done in large part via a 360-mile service road now being built from the Yukon River north to the Arctic Circle. As they build the road, workers are being extremely careful with the environment. For example:

—A number of temporary air strips along the road are being used to bring in supplies. Once the strips are no longer needed, they will be graded over and revegetated. Eventually they will return to their natural state.

—The gravel being used comes from former streambeds. It is removed only after appropriate governmental agencies are notified and specific permission granted.

—Vehicles are not permitted to travel on any unprotected surface in the area, such as an ungraded portion of the road.

—Bridges are designed to provide a clearance of at least three feet during periods of maximum flooding, and their construction is timed to avoid interference with spawning or fish runs.

Along the Yukon-North Slope road the watchword is: "Protect the Environment." For the pipeliners know the haul-road won't be a haul-road forever. One day it will become an Alaskan state highway. †

Editor: ROBERT M. SHERR, Box 14B1, Star Route, JIM THORPE, PA. 18229.

Notify us when you change your address!