

## ENGINEERING

# Modern Roads are Threat

MANY ROADS and highways traveled today by drivers of fashionable low-slung cars pose a safety threat in the form of reduced visibility.

Today the average driver's eyes are less than four feet above the pavement, Clyde E. Lee, assistant professor of civil engineering at the University of Texas, told the Highway Research Board meeting in Washington, D. C.

But many well-traveled roads have been designed by highway experts using the 4.5 feet previously recommended as the average height of the driver's eyes above the pavement.

The threat to motorist safety can be corrected through minor changes in road design if the designer recognizes that drivers' eyes are not as high as they used to be, Mr. Lee said.

K. A. Stonex, assistant director of General Motors Proving Grounds, Milford, Mich., suggested guard rails be eliminated where possible to improve new highway safety.

He also suggested the side slopes be gentle, smooth and clear of obstacles, and be built of firm material.

To cut down chances for bad skids, fine bituminous mixtures can be given a sand additive. Profs. Jack E. Stephens of the University of Connecticut and William H.

Goetz of Purdue University reported that mixtures made with sand having rounded particles gave the best overall anti-skid performances. Mixtures made with sand having particles with sharp points at first gave higher skid resistance, but these sharp edges soon wore off.

Science News Letter, February 20, 1960

## GENERAL SCIENCE

## Reference Citations In Science News Letter

MOST OF THE material in the articles in the SCIENCE NEWS LETTER is obtained by interview in person or by telephone, orally at meetings, and from other unpublished sources. This gives our readers access to new knowledge long before it appears in the conventional journals of original publication. But some of the articles are based on journals of original publication, whose editors most happily often cooperate with SCIENCE SERVICE by making available page proofs or early copies so that their articles are available for prompt reporting in the many newspapers served by SCIENCE SERVICE and in the SCIENCE NEWS LETTER.

Realizing that access to these original publications is important to our readers, SCIENCE NEWS LETTER has long given a citation to the original publication. Now

we are adopting the most logically accepted form of such citation. Literature citations appear in many forms. We shall use the name of the journal, abbreviated if the abbreviation is readily understood, followed by the volume number, followed by a colon, followed by the number of the first page on which the article appears (and the inclusive page number where it is available), followed by the year date. Roman, not italics, is used for simplicity. An article in this issue is cited as: Canadian Medical Association Journal, 82:315, 1960, as appears on page 121.

Science News Letter, February 20, 1960

## SCIENCE NEWS LETTER

VOL. 77 FEBRUARY 20, 1960 NO. 8

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., North 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

Change of address: Three weeks notice is required. When ordering a change please state exactly how magazine is now addressed. Your new address should include postal zone number if you have one.

Copyright © 1960 by Science Service, Inc. Reproduction of any portion of SCIENCE NEWS LETTER is strictly prohibited. Newspapers, magazines and other publications are invited to avail themselves of the numerous syndicated services issued by Science Service. Science Service also publishes CHEMISTRY (eight times a year) and THINGS of Science (monthly).

Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



### SCIENCE SERVICE

The Institution for the Popularization of Science organized 1921 as a non-profit corporation.

Board of Trustees—Nominated by the American Association for the Advancement of Science: William W. Rubey, U. S. Geological Survey; Wallace R. Brode, National Bureau of Standards; Douglas Whitaker, Rockefeller Institute for Medical Research. Nominated by the National Academy of Sciences: Harlow Shapley, Harvard College Observatory; Philip Bard, Johns Hopkins University; Henry Allen Moe, John Simon Guggenheim Memorial Foundation. Nominated by the National Research Council: Leonard Carmichael, Smithsonian Institution; John R. Dunning, Columbia University; Benjamin H. Willier, Johns Hopkins University. Nominated by the Journalistic Profession: Michael J. Ogden, Providence Journal-Bulletin; O. W. Riegel, Washington and Lee University; Lee Hills, Detroit Free Press. Nominated by the Scripps Estate: Edward J. Meeman, Memphis Press-Scimitar; Frank Ford, Washington, D. C.; Charles E. Scripps, Cincinnati, Ohio.

Officers—President: Leonard Carmichael; Vice President and Chairman of Executive Committee: Charles E. Scripps; Treasurer: Wallace R. Brode; Secretary: Watson Davis.

Staff—Director: Watson Davis. Writers: Helen Buechl, Ann Ewing, W. T. M. Grigg, Richard Litell, Allen Long, Jane Marye, Tove Neville, Gloria Tefft, Marjorie Van de Water. Science Youth Division: Joseph H. Kraus, Dorothy Schriver, Shirley Moore. Photography: Fremont Davis. Production: Priscilla Howe, Marcia Nelson. Syndicate Sales: Hallie Jenkins. Interlingua Division in New York: Alexander Gode, 80 E. 11th St., GRamercy 3-5410. Advertising Manager: Fred A. Moulton, METropolitan 8-2562.

## GENERAL SCIENCE

# New Schools Win in STS

EIGHTEEN high schools scattered across the country have joined the distinguished ranks of those that have produced top winners in the Science Talent Search.

First-time schools placing winners in the 19th Science Talent Search are: Hall High School, Little Rock, Ark.; Helix High School, La Mesa, Calif.; Stamford, Conn., High School; Coral Gables, Fla., High School; Gainesville, Fla., High School; Marywood School, Evanston, Ill.; Winchester, Mass., High School; St. James, Minn., High School; St. Louis Park, Minn., High School; Carthage, Mo., High School; A. L. Johnson Regional High School, Clark, N. J.; Lawrenceville, N. J., School; Patchogue, N. Y., Senior High School; Martin Van Buren High School, Queens Village, N. Y.; Kenmore East Senior High School, Tonawanda, N. Y.; Chapel Hill, N. C., High School; Central Catholic High School, Allentown, Pa.; Spring Branch Senior High School, Houston, Tex.

Among the schools producing winners this year, the leader in total winners during the 19 years of the Science Talent Search for the Westinghouse Science Scholarships and Awards is Bronx High School of Science, New York, with 22 top winners. Another New York school, Stuyvesant High School, is second with 20 winners.

Evanston Township High School, Evanston, Ill., and Erasmus Hall High School, Brooklyn, N. Y., are tied with totals of 14.

Midwood High School, Brooklyn, N. Y., now has placed 13. Six consecutive winners are credited to Columbus High School of Marshfield, Wis. Over the years, North Phoenix High School, Phoenix, Ariz., and Newton High School, Newtonville, Mass., have produced six winners each.

Tied with five each are Princeton, N. J., High School and University High School, Bloomington, Ind., followed closely by another tie between Tucson, Ariz., High School and Woodrow Wilson High School, Washington, D. C., which have had four winners each.

Benjamin Bosse High School of Evansville, Ind.; Classen High School, Oklahoma City, and Stonewall Jackson High School, Charleston, W. Va., each have three winners now. Two winners each have come from Fairfax High School, Los Angeles; East Senior High School, Rockford, Ill.; Technical High School, Springfield, Mass.; Croton-Harmon High School, Croton-on-Hudson, N. Y.; Newport News, Va., High School; and St. Mary High School, Cheyenne, Wyo.

See SNL, 77; 86, Feb. 6, 1960.

Science News Letter, February 20, 1960