GENERAL SCIENCE

School Rivalry in STS

The Bronx High School of Science, New York, with 29 winners in 22 years, leads the race among high schools producing top winners in the Science Talent Search.

➤ A RIVALRY akin to the space race continues unabated among schools producing winners in the Science Talent Search for the Westinghouse Science Scholarships and Awards. The rivalry may well be a prerequisite to the space race.

Student bodies, school officials, and even long-gone alumni cheer their favorite academic home team on to new successes and jealously guard the won-loss record of their favorite school as avidly as any baseball fan during a tight pennant race.

The top schools represent a cross-section of America. There are the specialized science and technical schools, schools situated in communities heavy on science and technology, and other schools where success can be traced to an especially talented and dedicated teacher or science department head. But schools appear on the list which seem to have no particular advantage, no nearby scientific facilities, no interested scientists to prod and encourage, no teachers with strings of graduate degrees.

Present in every case, however, is interest, ability, curiosity, determination, initiative, drive and dedication.

For every winner in the Science Talent Search there are dozens of contenders hard at his heels. For every school appearing on the select list, there are hundreds nearly as good. Every teacher proudly producing another score for his or her team's academic record is backed by hundreds just as dedicated, striving just as diligently.

This emphasis is not meant to belittle the victors, but rather to underline the struggle necessary to reach and maintain a place in the sun.

In all, 506 secondary schools in 46 states and the District of Columbia have placed winners in the 22 years of the Science Talent Search, which is administered by SCIENCE SERVICE.

This year's winners come from 35 schools in 19 states and the District of Columbia. Hawaii, this year, became the 46th state to produce a winner.

4 or More Winners in 22 Years

*Bronx High School of Science, New York, N. Y.	29
*Erasmus Hall High School, Brooklyn, N. Y.	26
*Stuyvesant High School, New York, N. Y.	22
Forest Hills High School, Forest Hills, N. Y.	21
Evanston Twp. High School, Evanston, Ill.	16
Midwood High School, Brooklyn, N. Y.	13
Brooklyn Technical High School, Brooklyn, N. Y.	9
Abraham Lincoln High School, Brooklyn, N. Y.	8
New Rochelle High School, New Rochelle, N. Y.	8
*North Phoenix High School, Phoenix, Ariz.	7
*Coral Gables Sr. High School, Coral Gables, Fla.	7
*Newton High School, Newtonville, Mass.	7
*Phillips Exeter Academy, Exeter, N. H.	7
Columbus High School, Marshfield, Wis.	7
Eugene High School, Eugene, Ore.	6
Herbert Hoover High School, Glendale, Calif.	5
Lyons Twp. High School, LaGrange, Ill.	5
University High School, Bloomington, Ind.	5
Central High School, South Bend, Ind.	5
New Brunswick High School, New Brunswick, N. J.	5
Princeton High School, Princeton, N. J.	5
*Jamaica High School, Jamaica, N. Y.	5
Kenmore Sr. High School, Kenmore, N. Y.	5
Walton High School, New York, N. Y.	5
Shorewood High School, Shorewood, Wis.	5
West Phoenix High School, Phoenix, Ariz.	4
Tucson High School, Tucson, Ariz.	4
Susan M. Dorsey High School, Los Angeles, Calif.	4
East High School, Denver, Colo.	4
Bassick High School, Bridgeport, Conn.	4
Woodrow Wilson High School, Washington, D. C.	4
Oak Park Twp. High School, Oak Park, Ill.	4
University High School, Urbana, Ill.	4
Phillips Academy, Andover, Mass.	4
Central High School, Omaha, Nebr.	4
Wm. Howard Taft High School, New York, N. Y.	4
Mont Pleasant High School, Schenectady, N. Y.	4
Central High School, Tulsa, Okla.	4
*Central High School, Philadelphia, Pa.	4
Mount Lebanon High School, Pittsburgh, Pa.	4
*Stephen F. Austin High School, Austin, Texas	4
West High School, Madison, Wis.	4

*Placed at least one winner in the 1963 Science Talent Search.

• Science News Letter, 83:133 March 2, 1963

PHYSICS

Laser Proves Useful for Long-Distance Measuring

➤ A LASER can now be used to make long-distance length measurements. Scientists at the National Bureau of Standards in Washington, D. C., have produced interference fringes over a 100-meter optical path using a helium-neon laser designed and constructed at NBS. Measurement of such long distances by light-wave techniques would represent a major breakthrough in this area.

The gas laser was one of four research projects shown to the national winners of the 22nd annual Science Talent Search during their tour of the Bureau.

These laser studies are part of a continuing effort by NBS to increase the accuracy of its measurements and calibrations. With this new scientific tool, length measurements can probably be made over very long distances with an accuracy of better than a part in 200 million.

The International Standard of Length, a wavelength of krypton-86, can be used with optimum accuracy only over a path of about one-fourth meter. Ideally, the laser could give measurements over several hundred kilometers.

NBS hopes to calibrate highly accurate surveying tapes by laser techniques. Formerly, these long tapes could be calibrated to a part in a million by mechanical means. With the advent of this application, the laser, which has been largely a laboratory curiosity, will achieve full status as a scientific measuring instrument.

Besides the laser project, the Science Talent Search winners were shown advanced NBS work in other areas of the physical sciences. They also met with Dr. Allen V. Astin, NBS director.

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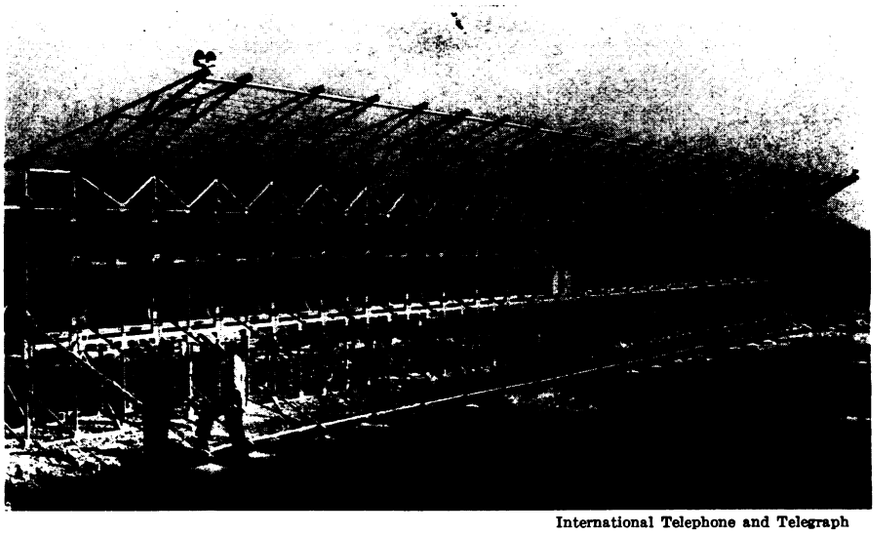

International Telephone and Telegraph

LOCALIZER ANTENNA—The instrument low-approach system localizer antenna, 160 feet wide and 18 feet high, is shown at Bournemouth Airport, England. It was installed by Standard Telephones and Cables Limited, associate of International Telephone and Telegraph Corporation.