

Aptitude Examination. He also is chairman of the Science Talent Search judging committee.

As one of the measuring devices of the Search, it is designed to test ability to think and reason in terms of scientific concepts and vocabulary. Most science-minded high school seniors find the examination challenging and enjoyable to take since it is much like the problems, puzzles and games so many of them delight in solving.

Scores on this test represent only one part in the judging procedures that select the students who seem most likely to become outstanding research scientists. There is no predetermined "passing" grade.

Detailed scholastic records of each "passing" contestant were evaluated. Information offered by the student and his faculty sponsor about his accomplishments, activities, traits and attitudes was weighed carefully to find any of a number of good combinations of achievement and promise.

Research Report Required

Each entrant was required to submit a written report of an individual research project, usually about a thousand words of text, plus relevant diagrams, graphs, theorems, pictures, etc.

The papers of all the students were read critically by a board of professional scientists which included specialists in the many fields explored by the student-scientists. This board studied and evaluated reports on computer methods, viruses, planet observations, lasers, complex mathematics, microorganisms and more than a thousand other subjects.

Correlating all of these evaluations, the board of judges selected an Honors Group of 327 students (10% of those with completely qualified entries). These students are being recommended to colleges and universities for admission and scholarship aid.

The Science Talent Search is supported by the Westinghouse Educational Foundation and is administered by SCIENCE SERVICE through its Science Clubs of America.

In the 22nd Science Talent Search, 22,477 sets of examination materials were requested. There were 3,274 completely qualified entries judged.

The 40 top winners from the Honors Group were selected to attend the Science Talent Institute, Feb. 27 through March 4, in Washington. Each will have interviews with the board of judges for the Westinghouse Science Scholarships and awards.

In addition to the mutually rewarding experience of learning to know each other, they will meet eminent scientists, visit scientific laboratories of national agencies, and keep their scheduled appointments for interviews with the judges. The Westinghouse scholarships and awards traditionally are announced at the banquet which closes the Institute.

The five scholarships of \$7,500, \$6,000, \$5,000, \$4,000 and \$3,000, and the 35 awards of \$250 each may be used at any accredited college or university and are intended to assure the professional training of these young pre-scientists.

Recognition in the Science Talent Search brings many thousands of dollars in other scholarship offers to the Honors Group. In addition, 41 states and the District of

Columbia conduct State Science Talent Searches in cooperation with Science Clubs of America, awarding more than half a million dollars in scholarships to students from their states who were qualified entrants in the national Search.

For a complete aptitude examination, send 15¢ in coins to Science Clubs of America, 1719 N St., N.W., Washington 6, D. C., and ask for the test.

• Science News Letter, 83:74 February 2, 1963

TECHNOLOGY

New NBS Facility for Better Time Broadcasts

See Front Cover

► THE GLOBAL network of missile and satellite stations will be better coordinated with the construction of the new facility for improved standard frequency and time broadcasts by the National Bureau of Standards.

On a carefully chosen site near Fort Collins, Colo., 400-foot antennas are being erected and 50-kilowatt transmitters are being built to increase the coverage of the standard frequency and time transmissions of NBS stations WWVB (60 kc/s) and WWVL (20 kc/s).

Seen on this week's front cover is a table model of the diamond-shaped antennas of the new facility. Each antenna will be about 900 feet long and 750 feet wide and will be supported by four 400-foot guyed masts.

Both WWVB and WWVL have been transmitting for several years from sites near the Boulder (Colo.) Laboratories of NBS and the high stability and long-range coverage of the lower frequencies have been established.

Low frequency transmissions follow the curvature of the earth and are not affected by the ionosphere which serves only as the upper boundary, not a reflector, for the signals. However, high frequency transmissions bounce between the earth and the ionosphere and are affected by the variations of the ionosphere.

With the new antennas and transmitters, the radiated power of WWVL will be increased to one kilowatt and of WWVB from two watts to seven kilowatts.

Signals from both these stations will be compared continuously with the U.S. frequency standard which is provided by atomic clocks at the NBS Radio Standards Laboratory.

Strong support is being given to this program by the National Aeronautics and Space Administration.

• Science News Letter, 83:75 February 2, 1963

TECHNOLOGY

Computer Tells Parts of Speech Faster Than Man

► A COMPUTER will be able to pick the subject and predicate of a sentence faster than a human being can read it. A computer program has been developed at the University of Wisconsin to parse written material at a speed of 1,380 words per minute with an accuracy of more than 90%.

• Science News Letter, 83:75 February 2, 1963

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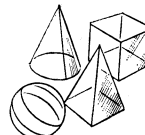
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