GENERAL SCIENCE

Westinghouse Science Scholarship Winners

GRAND SCHOLARSHIPS OF $2,400

Prajmovsky, Marina, Farmingdale, N. Y.
Teschan, Paul Erhard, Shorewood, Wis.

ALTERNATES

Meirowitz, Beatrice, New York, N. Y.
Smith, Harlan James, Wheeling, W. Va.

SCHOLARSHIPS OF $200

Jacobson, Janet Mary, Oak Park. Ill.
Meirowitz, Beatrice, New York, N. Y.
Ross, Jean Carol, Hammond, Ind.
Borgeson, Warren Thomas, Park River, N. D.
Brown, Barton, Sea Cliff, N. Y.
Cranefield, Paul Frederic, Lakemills, Wis.
Davis, Homer Frederick, Frewsburg, N. Y.
Halberstadt, Nathaniel Herbert, Floral Park, N. Y.
Larimore, Wayne Homer, St. Paul, Minn.
Michener, John William, Pittsburgh, Pa.
Newell, James, Salem, N. J.
Ousley, Joseph Livingstone, Freeport, Ill.
Presberg, Jack Eugene, Rochester, N. Y.
Smith, Harlan James, Wheeling, W. Va.
Swartz, Clifford Edward, Niagara Falls, N. Y.
White, Donald Robertson, Schenectady, N. Y.
Winsor, Paul, III, Boonton, N. J.
Worthington, William Dorrance, Camden, N. Y.

ALTERNATES

1st—Williams, Mary Ann, Troy, N. Y.
2nd—Pike, Carol Ruth, New York, N. Y.
1st—Hoover, Richard M., Kansas City, Kan.
2nd—Voigt, Allan Earl, Salem, Ore.
3rd—Avallone, Eugene Attilio, New York, N. Y.
4th—Phillips, Robert Edward, Glendale, Calif.
5th—Barthel, Paul Joseph, Evansville, Ind.

(For school affiliation, see SNL, June 27)

GENERAL SCIENCE

Top Winners of Search Shown on Front Cover

See Front Cover

THE FRONT cover of the SCIENCE NEWS LETTER this week shows the top winners of the first Science Talent Search. Top row: Paul Erhard Teschan and Marina Prajmovsky, winners of Grand Scholarships of $2,400. Lower: Beatrice Meirowitz and Harlan James Smith, alternates for the Grand Scholarships.

In case the winners, through illness or other cause cannot use the grand scholarships, they will be given to the alternates. Otherwise the alternates receive the $200 scholarships.

Science News Letter, July 25, 1942

PSYCHOLOGY

How Science Talent Winners Were Chosen Told by Judge

Aptitude Test, Recommendations, Scholarship, Essay, and Interviews Were Hurdles Used

By DR. HAROLD A. EDGERTON

Director, Occupational Opportunities Service, The Ohio State University

IN SETTING up the procedure for selecting the winners in the First Annual Science Talent Search, several questions needed to be considered: What kind of people should be selected? Were the techniques such as could be administered in the local schools? Would they lend themselves to fairly objective treatment? Were they such that the cost of dealing with the materials would not be prohibitive in terms either of time or labor?

In order to accomplish this, the kinds of people who should have the scholarships were considered. While there has been the classic picture of the scientist as a "lone wolf," a modern version is an individual able to think for himself, to lead others, and to work cooperatively. A scientist must be a well-rounded human being.

Well-Rounded Scientist

First, boys and girls capable of going ahead in science should be very bright. They should have some background in science. There should be evidence of strong interest in science, in terms of their hobbies and out-of-school activities. They should be socially competent.

For administrative purposes, it was decided to use the successive hurdles technique. By this is meant that all candidates would expose themselves to the first hurdle. Some would survive this hurdle and some would not. Those who survived the first hurdle would then expose themselves to the second hurdle. Those who survived the second hurdle would then go on to the third hurdle, and so on until only the scholarship winners remained. Such a method has its maximum validity only when the successive hurdles are applied in decreasing order of validity.

The successive hurdles were as follows:

(1) A science aptitude test. This test was a paragraph reading test, materials for which were drawn entirely from fields of science. Such a test should select those who have the aptitude to study science in colleges and universities, but does not place a heavy premium on previous knowledge of science.

(2) High school record. The high school furnished a transcript of his high school record for each contestant, including a statement of his rank in the senior class and the number in the senior class.

(3) A recommendation blank for every contestant was filled out by members of the high school faculty. This record blank asked for information in regard to various traits: attitude, purpose, ambition, science aptitude, work habits, resourcefulness, social skills, cooperativeness, initiative, responsibility, mechanical ability, special abilities, and others. The recommendations gave specific evidence of what the contestant had done or failed to do by which his competence in the trait had been judged.

(4) Each contestant was required to submit an essay of not more than 1000 words on the subject "How Science Can Help Win the War."

Use of Hurdles

These hurdles were used in the order listed above. The science aptitude test was scored on the basis of the number of items correct. Each question was so arranged that only one answer could be considered the best or correct answer. It was agreed that the ratio of boys and girls throughout the contest would remain constant and equal to the ratio of boys and girls who entered the contest. This essentially made two contests.

The 600 boys and girls obtaining the highest scores on the aptitude test were the survivors of the first hurdle. These 600 were then exposed to the second hurdle.

The second hurdle was a combination of rank in high school class and amount of science taken, weighting the quality of work done (rank in class) five and amount of science taken, one. On the basis of this combined score, 300 were retained, still keeping the ratio of boys