GENERAL SCIENCE

# Science Scholarships

## Third Annual Science Talent Search announced; $11,000 in educational awards and trips to Washington will be given to winning boys and girls.

➤ ANOTHER nation-wide search for young scientists is on.

Fifty thousand high school principals and science teachers have been asked to help locate the 40 boys and girls in the United States who show most promise of becoming scientists.

Westinghouse Science Scholarships totaling $11,000 and all-expense trips to the Nation's Capital are waiting for the 40 boys and girls who can meet the stiff requirements of the Third Annual Science Talent Search, conducted by Science Clubs of America.

"You have in your classes boys and girls who must, in coming years, play important roles in applying science and technology to our civilization in war and peace," the announcement by Science Service tells teachers. "We want to cooperate with you in the discovery and development of this important ability. Within the next five years, either in war or peace, boys and girls now in high school must begin to take leadership in scientific research and engineering."

More than 15,000 high school seniors in private, public and parochial schools are expected to enter. Right now they are busy writing their essays on the subject "My Scientific Project." On or after Dec. 3 they will take a two-hour Science Aptitude Examination, administered by their home-town principal or science teacher, who may obtain examination blanks from Science Clubs of America, 1719 N Street N. W., Washington 6, D. C.

After Dec. 27, when all entries must be in the offices of Science Clubs of America, a board of judges will consider carefully the records of thousands of would-be scientists. Each contestant will have submitted through his teachers, answers to a science aptitude examination; a personal data blank on which he and his faculty have listed his scholastic and extra-curricular achievements as well as his personality traits, work habits, initiative, and other qualities; and an essay of about 1,000 words on "My Scientific Project."

The 40 boys and girls who survive this gruelling competition will be invited to Washington for all-expense trips to attend the 5-day session of the Science Talent Institute. At the end of this thrill-packed week of study, fun and companionship with others from all over the country, the winners of the Westinghouse Science Scholarships will be named.

The need for developing the talents of scientifically-minded boys and girls is so great that the Annual Science Talent Search has rapidly become an institution and a tradition. It has been instrumental in locating and developing talent which might otherwise have been lost forever to our country.

The Westinghouse Science Scholarships make it possible each year for 40 top-flight students to attend colleges, universities and technical schools of their own choice. A total of 260 other boys and girls are named by the judges to receive honorable mention. As a result of this distinction these fortunate ones are the recipients of many scholarship opportunities offered to them directly by colleges, universities and technical schools.

The objectives of the Science Talent Search are stated as follows:

1. To discover and foster the education of boys and girls whose scientific skill, talent and ability indicate potential creative originality and warrant scholarships for their development.

2. To focus the attention of large numbers of scientifically gifted youth on the need for perfecting scientific and research skill and knowledge so that they can increase their capacity for contributing to the task of winning the war and the peace to follow.

3. To help make the American public aware of the role of science in war and in the post-war reconstruction.

Both boys and girls are eligible to enter the Third Annual Science Talent Search. The ratio of girls to boys among the 40 finalists invited to Washington for the Science Talent Institute will be the same as that of the boys and girls completing all requirements of the competition.

Two four-year Westinghouse Grand Science Scholarships of $2,400 each will be awarded—one to a boy and one to a girl. Eight four-year Westinghouse Science Scholarships of $400 each and additional scholarships totaling $3,000 more will be awarded at the discretion of the judges. During their visit to Washington each of the 40 boys and girls will be awarded the gold emblem of Science Clubs of America.

The ratio of the girls named to honorable mention will also be in proportion to the number of girls finishing all requirements of the competition.

Those nearing military service age are urged to compete in the Third Annual Science Talent Search. Boys winning scholarships will have their awards held for them until they return from war service if they are called to active duty before their college courses are completed. Many of the winners of previous years are now in the Army and Navy college programs and their awards are being held for their return to civilian life.

The distinction of being named a winner or awarded honorable mention in the Science Talent Search has made it possible for many to enter specialized training of a scientific nature upon induction into the armed services.

The examination designed especially for the Third Annual Science Talent Search is intended to test capacity for orderly thinking and other attributes necessary to scientific work rather than book learning in science.

The Science Talent Search is conducted by Science Clubs of America as one of the activities of Science Service. Awards are provided and the Science Talent Search made financially possible by the Westinghouse Electric and Manufacturing Company, a leader in scientific research, engineering and manufacture in the electrical industry, as a contribution to the advancement of science in America.

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AERONAUTICS

## Post-War Family Airplane For Over 300,000 in U. S.

➤ONE OUT of every 500 persons in this country will have his own airplane within three years after the end of the war.

This is indicated by estimates presented to the Institute of Aeronautical Sciences by Charles B. Donaldson, CAA director of airports, who predicted that over 300,000 privately owned planes will be taking to the air at that time.

In 1941 there were only 25,000 such

airplanes. The number of automobiles licensed in the same year was over 29,000,000.

Aircraft manufacturers are planning production-line manufacture of private aircraft as their mainstay after the war, Mr. Donaldson said. Hundreds of thousands of skilled airmen are now being trained by the Army and Navy, including pilots, radiomen, mechanics, navigators, meteorologists, traffic controllers and others. After the war this huge reservoir of skilled manpower will return to civil life and a great majority of them will continue in the aviation field, where they can utilize their training and experience.

Mr. Donaldson believes that the family plane after the war is assured, as it can be small, safe and inexpensive—in the cost range of the medium-priced automobile.

Citing the profound influence of the motor car upon the American way of life, upon our institutions, points of view, modes of recreation, business habits, city planning and our general pattern of living, Mr. Donaldson pointed out that the airplane will very likely exert another strong influence upon our future way of living in America.

To serve these private planes and the greatly increased commercial air traffic, Mr. Donaldson estimates that there will be 6,000 airports needed in this country —double the number now in existence.

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MEDICINE

# Egg-Nog for Wounds

**Ten per cent of Russian soldiers with belly wounds saved by milk-egg-alcohol mixture given directly into the wound. Relieves general weakness.**

➤ LIVES of about 10 out of every 100 Russian soldiers with belly wounds have been saved by feeding a rich egg-nog through the wound while the patient was on the operating table at the battalion field hospital, P. A. Panikov, surgeon - in - chief of a medico - sanitary battalion of the Red Army, reports.

Details of the method, originally reported in the Soviet medical journal, *Khirurgia,* will be available to American doctors through a translation appearing in the first issue of a new journal, *American Review of Soviet Medicine* (Oct).

The practice of feeding through the wound was adopted to fight the general weakness which often proved fatal to these wounded soldiers on the second or third day after operation. They had survived the shock of the injury and surgical treatment. Peritonitis, a fundamental cause of death in such cases, had not set in or was developing unusually slowly.

The Soviet surgeons were forced to conclude, Dr. Panikov reports, that the weakened resistance of these wounded soldiers "was the result of the stubborn, unyielding battles of the time, battles which did not permit the organism (body) the required rest or allow the soldier to have sufficient nourishment on time. All this was aggravated by the soldier's prolonged stay on ice and in snow-covered trenches."

For some time after an abdominal wound and repair operation, the patient can eat little or nothing. So the Soviet surgeons decided to forestall the further weakening effect of this period of forced starvation or semi-starvation by putting some food into the intestines through the wound at the time of operation. The food consisted of almost 13 ounces of milk, about two ounces of sweet butter, two eggs, about two ounces of sugar, a little salt and about two ounces or more of distilled alcohol.

The good effect of this feeding sometimes could be seen before the patient left the operating table. Color returned to the cheeks, the lips became red and warm, and the patients generally fell asleep at the end of the operation. There was much less pain following the operation and the patients usually wanted to eat by the third or fifth day. On the ninth or tenth day, the patients could be evacuated in good condition to regimental field hospitals.

This method reduced the mortality from abdominal wounds to 40% or less, where previously it had never been below 50%. The extreme difficulties of transportation, both of wounded soldiers from the front to the battalion field hospitals and of plasma and other medical and surgical supplies from the rear to these hospitals, apparently account for some of the high mortality rate.

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PUBLIC SAFETY

## Two Main Reasons Given For Winter Car Accidents

➤ LOW VISIBILITY and slippery roads were the primary causes of the high mileage death rate last winter from automobile accidents on highways.

This is the conclusion of Prof. Amos E. Neyhart, of Pennsylvania State College faculty, who is administrative head of the Institute of Public Safety. He urges that proper protective steps be taken now as the primary use of cars and trucks today is directly or indirectly in war work.

The mileage death rate last winter was 24% greater than the summer toll, he finds from a study of road accidents and their causes. This figure applies only to the states in the snow-belt; in the snow-free southern states the winter mileage death rate exceeded the summer rate by only 5%.

The remedies suggested include proper headlights, necessary because of shorter days; clean, clear windshields equipped with efficient wipers and defrosters, and non-skid tires or tires equipped with non-skid devices. Careful driving at low speeds is also essential.

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PSYCHOLOGY

## Non-Artists Agree Well On Colors in Spectrum

➤ ORDINARY PERSONS who are not artists agree quite well on where one color in the rainbow begins and another ends, whereas artists and psychologists, more familiar with color, differ among themselves, Lieut. Dean Farnsworth, U.S.N., reported to the Optical Society of America meeting in Pittsburgh.

Four hundred persons of various ages, occupations and educational backgrounds were shown a continuous spectrum by Lieut. Farnsworth and asked to divide it into colors. Some saw three, some four, five or six colors in the spectrum, but their agreement on the boundaries between colors was astonishing. When the color experts took the same test the agreement was much poorer, probably because the experts had preconceived ideas on the subject and were more individualistic in their division of the colors. Lieut. Farnsworth suggested that for commercial, scientific and educational fields the spectral regions determined by this experiment should be used because they are generally acceptable to the layman.

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