

GENERAL SCIENCE

# Science Talent Institute

Winners of nation-wide Science Talent Search, picked from among outstanding high school seniors, are addressed by leading scientists.

➤ A FIVE-DAY Science Talent Institute in Washington (Feb. 26-March 2) was the culminating event of the Second Annual Science Talent Search, conducted by the Science Clubs of America and made possible financially by the Westinghouse Electric & Manufacturing Company. This issue of SCIENCE NEWS LETTER reports some of the highlights of the sessions attended in Washington by the youthful winners. The next issue will continue this report.

## Prepare to Serve

➤ PREPARE TO SERVE the nation technically in war and peace. This was the advice given to youthful scientists by leaders in science and engineering in the occupational opportunities session of the Science Talent Institute at Washington attended by the 40 winners of the Science Talent Search for the Westinghouse science scholarships. Excerpts from some of the discussions follow:

*Dr. Leonard Carmichael, president of Tufts College and Director of the National Roster of Scientific and Specialized Personnel:*

There never has been a period in the history of America, when the possession of scientific ability was more important for the national welfare than it is today. Because you have early displayed a talent for science you are in an enviable position in being able to start your advanced education in science before you become old enough to be directly available for military service.

It is your patriotic duty to advance as rapidly as possible in scientific proficiency so that you may gain in professional knowledge in science and engineering and thus be able to serve the nation through your specialized skills.

The war in which our nation is now totally engaged is peculiarly a war of scientists and technologists. It would be a mistake to underestimate the scientific and engineering skill of our armies in this war. The victory of the United Nations can only come if every resource

of the free peoples be placed at the service of the Army and Navy in this war.

When the present war is at length over you will then also, as scientifically trained Americans, have skills which will be valuable to your nation in solving the many new problems which will arise at the conclusion of hostilities. Scientists and engineers must cooperate with other skilled Americans in producing the new world that must emerge after the present conflict.

*Dr. J. W. Barker, Dean of Engineering, Columbia University, and Special Assistant to the Secretary of Navy:*

Never before in recorded history has any war approached this World War II in the extent to which science and engineering applications have been utilized. Even if one rates the various wars of the past in terms of the percentage application of the then known scientific and engineering apparatus, this present war would still rate "tops." Therefore the Navy is vitally interested in developing all those who possess scientific and engineering aptitudes to the very highest possible extent. We applaud this Science Talent Institute on its work and we congratulate all of you in being selected for these honors.

To conduct this war our country has converted from its normal peace-time production a very large proportion (higher than in any previous time) of our industries to building instruments of war. From the little 10-pound "walkie-talkie" transceiver to the 16"-gun turrets of our mighty battleships all these are being made where automobiles, washing machines, electric refrigerators and radios were being made.

From the many new and startling developments researched, pioneered and produced for war there will inevitably be some that will have vast post-war peace-time applications. Whole new industries developed in these war years will continue into the post-war period to supply entirely new consumer demands. There will be challenging opportunities for con-

structive service to our civilization. There will be enormous areas of war destruction which will have to be rehabilitated. There will be new homes and factories to be built to replace those bombed out of existence. There will be famine and pestilence in the devastated areas calling for the highest type of public health service and relief. There will be war casualties to be cared for and retrained to usefulness. There will be perplexing problems of a social, economic and political nature for which we must find solutions if our civilization is to endure, let alone progress to the higher levels which science and engineering will open up. There will be immense realms of scientific exploration opened because every time we push outwards the radii of scientific investigation we increase the perimeter of the circle by that well-known "pi" relationship.

*George W. Bailey, president of the American Radio Relay League:*

Some day this war will end; then many radio men and women will return to their peace-time pursuits, and continue amateur radio as a hobby. Others who became professional radio engineers through their interests in amateur radio will continue in the radio profession. War has developed the most extraordinary devices which will find immediate use in commercial life. I wish that I might tell you about some of them, but that must wait until the war ends. Everyone knows that television was nearly ready for commercial use when the war broke out. I expect that when peace comes we shall find that wartime developments have made extraordinary strides in television and other devices using the same principle.

Radio communication and radio devices are absolutely vital to our fighting forces. Our country needs skilled radio operators, technicians and engineers. There is no better way to devote your talents to the service of your country than by starting now to prepare for such a career.

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Shipping cases for military, lend-lease, and home supplies and materials will require more than 11 billion board feet of *lumber* this year, nearly three times the average amount used in the pre-war period.