GENERAL SCIENCE

Truman Sees STS Group

President tells winners that they should prepare themselves to help in development of neglected areas. We need weapons, not for destruction, but for welfare.

See Front Cover

➤ PRESIDENT TRUMAN, in receiving the 40 winners of the Tenth Annual Science Talent Search, set a task for them. He told them that their job was to prepare themselves so as to help develop the potentialities of neglected areas of the world. He urged them to use their talents for peace.

President Truman's Remarks

Following is the text of Mr. Truman's extemporaneous remarks to the high school seniors:

It is a pleasure to me to welcome you here. I hope you will all go through with what you have started, and wind up just as Mr. Davis has said your predecessors have; because the power and welfare of this country is wrapped up in scientific research.

I just had the Atomic Energy Commission in to see me a few days ago, and it is remarkable what they are doing toward making that splintering of the atom eventually work for the peacetime welfare of the world.

You young ladies and gentlemen can make a great contribution to all those things that are associated with scientific research.

I was over at Aberdeen the other day, looking at tanks and weapons and guided missiles, and all the other things which you hear about. And when I got through I didn't then have any feeling of mystery about why the Chinese have not been able to push us out of Korea; because we have better equipment and better weapons.

But the weapons we want are not those for destruction, but weapons for the welfare of the world, and the improvement of all mankind so that we won't have to spend tremendous sums for destruction, but use those tremendous sums for the improvement of the welfare of all the races in the world.

If you will turn around there and look at that globe behind you, you will find that there are many, many places that need development, and that can be developed to make this world a much better place in which to live.

(The President walked over to the "Eisenhower globe" across his office from his desk.)

For instance, down here in the great river systems down here—(indicating the continent of South America)—they have more water than Niagara—a fall that is greater than Niagara. And then there are these lakes up here—(indicating)—whose waters now run out into the Amazon River, and they are going to be diverted for the cultivation of this part of the coast along in here, and give Bolivia a seaport.

And over here, on this plateau, there are 65 thousand square miles of black land, just like Illinois, Iowa and the lower Missouri, six to eight thousand feet above sea level, that will produce anything that can be raised in a temperate zone, although it is almost directly on the Equator. They can raise enough food on that—they don't have any cattle grazing there—to support 100 million people.

And in this place over here—(indicating the continent of Africa)—it can support another 100 million people with developments which have not been carried out. If they could be done in this valley—(indicating)—it will support 25 million people as it did when Babylon and Nineveh were great cities, if irrigation projects were installed.

And all the oil resources of this section here—(indicating)—are greater than any other place in the world. And this country right here—(indicating)—can produce food

enough for a hundred million people. Think what that will mean, when the resources up in here—(indicating)—have been developed. Alexander the Great was along in this river—(indicating)—and there are traces of him in Afghanistan. And if the resources of that section were properly developed, 300 million people could be supported.

Now, that is part of your job, to see whether we can get that done or not. And that is the reason I am glad to see you, and hope you will remember what I have told you about that globe when you go back to school, and see what kind of contribution you can make to carrying out the peace and welfare of the world. That is what we are after.

Science News Letter, March 10, 1951

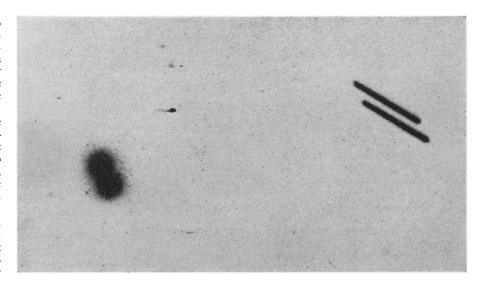
ASTRONOMY

Asteroid Spotted in Pleiades: Orbit Highly Eccentric

➤ A FAINT object, but bright for an asteroid, has been spotted by Dr. William Markowitz of the U. S. Naval Observatory. It was discovered speeding across the Pleiades, bright cluster of stars in the constellation of Taurus, the bull.

The tiny planet was found quite by accident as part of the study of the polarization of light in the Pleiades. Not one but two images of the asteroid appear on the photograph for its light had passed through calcite, a crystal which produces twin images, placed at the focal plane of the 26-inch refractor.

Three observations, enough to determine



TWIN TRAILS—The double image of the recently observed asteroid, Thalia, is due to the fact that it was photographed through calcite crystal which produces twin images. It was taken on the evening of Feb. 24. The double blob at the left is one of the faint stars of the Pleiades. The length of the trail is the result of an hour exposure.

the orbit, were made. The asteroid's path was found to be highly eccentric. The object, of 11th magnitude, was found in a position at right angles to the sun instead of directly opposite the sun, and was moving twice the average speed for that position.

Calculations of the orbit of this minor planet, which some people even guessed might crash into the earth, showed it to be not a new object after all.

It is one of the first asteroids ever dis-

covered, Thalia, Number 23 in the list of these heavenly bodies that now numbers over 1,600. To Dr. Leland Cunningham, of the University of California, goes credit for pinning on the once-puzzling object its true identity. Dr. Cunningham's calculations showing that the object was Thalia were confirmed by Dr. Paul Herget, director of the Cincinnati Observatory.

And Thalia, astronomers point out, is not expected to crash into the earth.

Science News Letter, March 10, 1951

GENERAL SCIENCE

STS Group Enrich Leisure

Small orchestra could be assembled from the 40 winners but there are not enough for a team in any one sport. Many have worked at serious scientific jobs.

➤ YOUNG scientists are busy people. The activity lists of the 40 who have been selected as this year's most promising, show dozens of hobbies and out-of-school interests.

Science, of course, is number one on their list. They do it individually in their own laboratories and collectively in science clubs. Most of them are affiliated with Science Clubs of America which conducts the Science Talent Search each year.

Almost all have worked in science far beyond the high school curriculum. A fair share have studied college courses in science on their own or with interested adults. They use after-school hours for experimentation but have to reserve extensive undertakings like building a TV set, qualifying for a radio license or collecting in the field to the summer months.

Young scientists are interested in more than science, however. They take part in activities common to all 'teen agers. Social and civic enterprises are listed by each and they have their share of memberships and offices, indicating leadership and popularity with fellow students.

For many of them athletics have been crowded out by music. A small orchestra could be assembled from the 40 but no varsity team of any one sport could be gathered.

Ten of the 40 play the piano with varying degrees of excellence. Wind instruments they can play include the cornet, three clarinets, saxaphone, flute, tuba and harmonica. For the string section they can provide a cello, string bass, three violins and a guitar. One plays all kinds of percussion instruments. Most of them sing and all profess a fondness for listening to music.

In sports most of the 10 girls and 30 boys enjoy games and athletics but usually on the intramural level. Very few have had time or inclination to practice to major team proficiency. Those who have made varsity teams are skilled in soft ball, table tennis, swimming, tennis, track and wrestling.

Like most scientists, the 40 winners are attracted to the precision as well as the beauty of music and generally approach athletics for the relaxation rather than the competition of it. They favor individual or small group sports.

A majority of the 40 have worked for pay during vacations and after school hours. Their jobs are similar to those held by other 'teen agers; they deliver papers, mow lawns, jerk sodas, baby sit, caddy, clerk, work on farms and assist in libraries.

A few of the winners have advanced to the stage in their careers when they can command and fill positions of real scientific importance. For example:

Miss Rhea Mendoza, 16, of Kew Garden Hills, N. Y., worked last summer with the New York Association for the Blind as a volunteer reader and research assistant. She was assigned to read to post graduate students in science.

Stephen Brush, 15, of Orono, Maine, spent last summer as a clerk with the Agricultural Economics Department of the University of Maine. His assignment required calculating and recording records of potato and milk production in that state.

John J. Demkovich, Jr., 17, of New Brunswick, N. J., is the junior assistant to the City Chemist of that city. John assists in milk testing, using chemical and bacteriological skills.

Miss Mary Helen Martin, 17, of College Park, Md., is a botany laboratory assistant at the University of Maryland. She germinates and checks pepper seeds for polyembryos (twins), takes chromosome counts, doubles haploids with colchicine and makes controlled crosses of plants.

Science News Letter, March 10, 1951

GENERAL SCIENCE

STS Winners Have Plan for National Service

THE FORTY top winners of the Tenth Annual Science Talent Search are generally agreed that it is in the best interests of national defense to utilize the talents of potential scientists at the highest levels possible.

All high school seniors, they expect to serve their country—both the young men and the young women—but they think they would be more useful to the Defense Department or to essential industry after they receive college degrees.

John J. Demkovich, Jr., 17, declared that: "All boys and girls who will graduate in June owe a debt to their country; this debt could be met by drafting all students into the armed forces for four months. After this training period is completed, all young people who wish to, could be offered a chance to take an aptitude test to determine whether or not they have special abilities which might be used in scientific or other essential occupations."

Mr. Demkovich saw this plan as providing an adequate number of scientists and professional men, as well as meeting the requirements of the armed forces.

These 40 were picked out of thousands of others in the Tenth Annual Science Talent Search administered by Science Service and supported by the Westinghouse Educational Foundation.

Donald Bruce Johnson, 17, El Cerrito, Calif., said: "Everyone must work where he is most needed whether he likes the job or not."

But he pointed out that the only way the United States can gain physical superiority in the present world conflict is through the use of superior methods and equipment. To do this, he declared, we must take the best advantage of our scientific talent. He suggested that those with scientific skills be given an opportunity to serve in a scientific capacity, but declared that they must be prepared to do jobs that are unpleasant or hazardous.

The young women have ideas of service, as well. Sixteen-year-old Rhea Mendoza, Kew Garden Hills, N. Y., said that all persons with scientific aptitudes and skills should sign up at a correlating center so that their special abilities may be directed where they are needed in an emergency. She too stressed the need to continue the education of younger scientists, "with an eye toward long-range need for trained personnel rather than the immediate desire for a large armed force."

Several of the students stressed the need for keeping a cool head during times of emergency and combatting hysteria.

Science News Letter, March 10, 1951