

EDUCATION

Peace Corps Set Up

➤ A DOZEN nations already have inquired about the Peace Corps, Sargent Shriver, chairman-designate of the newly established Peace Corps Agency, reported in Washington, D. C.

Minimum age for volunteers will be 18, but "there will be no upper limit," Mr. Shriver said. He doubted, however, that there would be many volunteers selected beyond 60 years of age because of the "practical limits" imposed by rigors of service.

Volunteers will be expected to serve at least one year. A service requirement will be that the volunteer live at the level of those in the country he will assist.

"This means that a Peace Corps teacher will be expected to live at the level of a native teacher of the country to which he has been assigned," Mr. Shriver explained.

The Corps will give a new dimension to American education—in our tradition of learning by doing. Volunteers "will probably learn even more than they teach," he predicted.

Inquiries about the Peace Corps are pouring in. Since the announcement by President Kennedy that the Agency was officially established, there have been from 3,500 to 4,000 letters of inquiry daily.

Training will be done at various universities and colleges throughout the country, with persons from the countries that will be served participating in instruction. Instruction of selectees is expected to take place from June to the middle of September.

This instruction will include such basic courses as studies on American democratic institutions, the customs and history of the country for which preparation is being made, and an intensified crash course on language requiring three to four hours of study and practice daily.

Programs of instruction will be under the direction of Dr. A. Sims, president of the Institute for International Education. He discussed proposed instruction with the Universities of Notre Dame, Stanford, Cornell and Michigan.

One aim of the Peace Corps will be to emphasize the great value and need for vocational skills and "give the farmer, the carpenter, the bricklayer and plumber a chance at international service as official representatives of the United States," Dr. Thomas Quimby of Michigan, in charge of recruitment, said.

The Corps presently is aimed at aiding in satisfying the most basic needs of those countries most in need, he emphasized.

The hope is that 500 to 1,000 trained Peace Corps volunteers will be in the field before the end of 1961, Mr. Shriver said.

They will work through existing international private service groups as well as through agencies of Government, universities and colleges, the United Nations and special agencies abroad, and under direct "government-to-government" relationships, he said.

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ASTRONOMY

Star's Mistaken Identity

➤ A STAR suffering from a case of mistaken identity is being investigated by astronomers.

The star, classified as a very hot blue star, has proved to be of a much "cooler" variety with a peculiar spectrum of unknown type.

This was discovered when the star was observed spectrographically at Mt. Stromlo Observatory, Canberra, Australia. The spectral type of the star indicated from these studies, later confirmed by three-color photometry done by J. B. Whiteoak, is of a much "cooler" orange-yellow type star.

The star's spectrum shows strong hydrogen lines corresponding to yellow and yellow-white stars. Six-color photometry by Dr. G. E. Kron indicates it is not a double star.

Instead it has the characteristics of a dwarf star with a higher abundance of metals in its atmosphere than dwarf stars ordinarily have. Dr. Antoni Przybylski of Mt. Stromlo reports in *Nature*, 189:739, 1961, that he expects metallic elements to be many times higher than normally found.

The star is known to astronomers as HD 101065. It is located in the constellation of Centaurus, the centaur, which is

visible from the Southern Hemisphere. Dr. Przybylski said its spectral lines showing what elements are present, indicate the star is very rich in barium, strontium and rare earths. This confirms that the star is in a late state of stellar evolution and has passed through the stages in which heavy elements build up by capturing slow neutrons.

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SEISMOLOGY

Earth's Core Probed by Earthquake Vibrations

➤ EARTHQUAKE VIBRATIONS deep within the earth are telling scientists more about the earth's interior.

Studies of the earth's vibrations triggered by the Chilean earthquake, May 22, 1960, may have confirmed what scientists had previously believed about the earth's interior—that it has a solid inner core surrounded by an elastic outer core.

Sensitive seismic instruments detecting the earthquake unexpectedly recorded free vibrations of the earth's inner core. This was registered as a high energy level that

persisted for one and a half hours on a gravimeter, geophysicist Dr. Louis B. Slichter of the University of California at Los Angeles reported in the Proceedings of the National Academy of Sciences.

The UCLA scientist believes that the reading probably indicates a solid inner core encased in an elastic shell. A core that reacts like a solid yet has an "elastic bounce" when seismic waves pass through would give a high energy reading, the scientist theorized.

The amplitude of the core's vibration was about 19 inches. The inner core vibrates for the same reason that a piano string vibrates when a piano key is struck.

Some seismic waves set off by an earthquake shoot toward the earth's center striking the inner core and causing it to vibrate.

The Chile earthquake provided the first fully convincing observational evidence of the free vibrations of the earth, Dr. Slichter said. The earthquake was one of the severest recorded in many years. Tremendous energies released provided the strength needed to vibrate the earth's core.

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GEOPHYSICS

Core Drill Probes Two Miles Into Ice

➤ A CORE DRILL that can probe more than two miles into polar ice caps actually melts its way through 12,000 feet of glacial



DRILL PROBES TWO MILES

ice. It was built by Pollak and Skan, Inc., Chicago, for the U. S. Army Corps of Engineers.

The Corps is using the drill to obtain ice cores for military and scientific study as a follow-up to the International Geophysical Year.

Until the thermal drill was developed, mechanical drilling methods limited ice coring to a depth of 1,300 feet.

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