GENERAL SCIENCE

Squeezed Out of College

Colleges caught between reduction in aid to veterans and loss of draft deferment. Additional threat seen in proposed Universal Military Service plan.

➤ THE NATION'S colleges are being caught in a giant nutcracker which is squeezing thousands of students out of their new dormitories and classrooms. One arm of that nutcracker was revealed by figures from the U. S. Office of Education which shows a drop of 33% in the number of veterans attending college this year.

The figure has gone down from 856,000 veterans last year to 575,000 this year.

The other arm of the nutcracker will probably be brought to bear next June when this year's male freshman class members, numbering 319,000, face review of their draft deferment status.

Approximately 30%, or 95,000, will be exempted because of physieal or other reasons. If a plan supported by Draft Director Lewis B. Hershey to take away deferment from the bottom half of the freshman class is adopted, the nation's colleges will lose upward of 100,000 men from next year's sophomore class.

The large majority of them will be 19—lower draft age limit—next year.

The gradual but sure disappearance of G. I. Bill financial support as the veteran population uses up its rights contributed largely to this year's drop in total enrollment to 2,295,000 from 2,456,000 last year.

However this fall-off in the number of male students at the nation's colleges is a small threat to them compared to what will happen if Universal Military Service in its most drastic form is approved by the newly elected Congress.

Instead of approximately 300,000 male freshmen and 200,000 female freshmen expected next year, there would be only about 90,000 males—those who would be deferred from UMS for other reasons. This would occur if all physically qualified male 18-year-olds were required to enter military service for a period of one to two years as many officials are now suggesting.

All kinds of higher education institutions have smaller student bodies this year, except theological seminaries and Negro institutions. Negro colleges held their own in total student bodies and the entering freshman class was actually 3.1% larger than last year's.

Science News Letter, November 25, 1950

GENERAL SCIENCE

Registry of Scientists

Four leading scientific bodies agree on recommendations for compulsory registration and drafting if necessary. Would defer college students.

➤ FOUR of the nation's top scientific bodies, at the request of the National Security Resources Board, have agreed on recommendations which would provide for the compulsory registration and drafting, if needed, of up to 600,000 male scientists, technicians and engineers, Science Service has learned.

The scientific societies, which were asked last September to draw up recommendations on how to handle scarce scientific manpower, are the American Institute of Physics, the American Chemical Society, the Engineers Joint Council and the National Research Council.

The four societies, in their joint statement, strongly advocate deferring some men from service to go to college. They support the principles of a plan advocated by Selective Service Director Lewis B. Hershey which would have all high school seniors taking a college aptitude test. Only the 15% or 20% who achieved high marks on this test would receive deferments to go to college.

This puts the scientific groups in opposition to the principles of all-out Universal Military Service as advocated by President James B. Conant of Harvard and some officials of the Defense Department. However, the scientific groups recommend that those who do receive deferment for college training be among the first to be called into the Armed Forces when they have finished college, regardless of whether they have passed the draft age.

Under the plan, all male scientists, technicians and engineers would be required to register with a new agency—perhaps to be called the National Scientific Personnel Board. The board would have the power to fill the needs of the Armed Forces for scientific manpower from this registration list. Men would be called up on an individual basis to fill individual jobs in the Armed Forces. Also, the board would have the power to review requests from the Armed Forces to find out whether they were asking for the proper kind of people.

Science News Letter, November 25, 1950

GENERAL SCIENCE

NSRB Should Decide Deferment Policy

➤ THE National Security Resources Board, rather than the Defense Department or any other agency, should determine how many men should be deferred to go to college, Dr. Arthur S. Adams told Science Service.

Dr. Adams is president-elect of the American Council of Education, president of the Association of Land-Grant Colleges and Universities and president of the University of New Hampshire.

"There must be maintained a trickle of young men into the colleges and universities whatever system of induction into the armed forces is set up," Dr. Adams maintained. "The NSRB is the logical agency to decide how large a trickle is necessary to provide trained men for the defense of the country."

Dr. Adams, in Washington for the 64th annual convention of the land-grant colleges organization, thus put himself in direct opposition to Harvard President James B. Conant's program of universal military service for everybody—including the physically handicapped—at age 18.

Dr. Adams believes that every young man should serve at some time. He refused to be specific as to how this would be accomplished, pointing out that there is much confusion both in Washington and among educators on the subject.

Dr. Conant's proposal for "universal" Universal Military Service, shortly to be announced in a national magazine, was the subject of much discussion at the convention. Most college presidents present tended to look upon it with considerable skepticism, primarily because it makes no provision for the continuous college training of young men of draft age.

Science News Letter, November 25, 1950

GENERAL SCIENCE

Military Service Urged For All 18-Year-Olds

➤ DR. James B. Conant, president of Harvard University, will shortly advocate two years of Universal Military Service for every young man when he reaches 18—whether or not he is physically handicapped, Science Service has learned.

He further will recommend that the nation's young manhood perform this service "at a low rate of pay." Physically handicapped young men, he will say, should be enrolled to perform those services for the nation which it is possible for them to perform.

Dr. Conant's statement—to appear as an article in a forthcoming issue of a national magazine—is expected to raise a storm of controversy in scientific, educational and government manpower circles. Copies have been circulated among some of these people already and discussion is widespread.

It is in direct conflict with a plan sponsored by Selective Service Director Lewis B. Hershey for deferment of some college students. This plan, which has received much support from scientists and educators, would establish a nationwide college aptitude test. Young men who received high marks on this test would be permitted to enter college. They could stay there so long as they remained in the upper portion of their class.

Another college president, Dr. Leonard Carmichael of Tufts, Medford, Mass., told Science Service that he could not approve Universal Military Service at 18 for everybody. Dr. Carmichael was in charge of the National Scientific Roster during the war, and thus kept track of all scientific, technical and engineering personnel.

"If we have UMS," said Dr. Carmichael, "all individuals should serve at some one time in their lives. However, a certain segment of young men, chosen on the basis of a test and state quotas, should be given the option of going to college to receive training.

"If everybody is drafted at 18," he went on, "the men who go to college afterwards may be subject to a second draft and a second period of service. This is likely because the Armed Forces will need college-trained men such as doctors, scientists and engineers."

Science News Letter, November 25, 1950

ANTHROPOLOGY

How Ancient Is American?

Tools found in gravel pit with 750,000-year-old fossils but scientists are divided in opinion as to whether human artifacts are equally old.

➤ DID man first reach America from Asia 750,000 years ago, instead of a mere 10,000 to 12,000 years ago?

Scientists disagree vehemently on the evidence of a sand and gravel pit near Frederick, Okla. There, amidst the remains of long-extinct animals, ancient flint and stone artifacts, tools of human habitation, have been found.

There is sharply divided opinion on whether the tools and animal fossils come from the same geologic age, Dr. Grayson E. Meade of Texas Technological College said in a paper before the Paleontological Society of America meeting in Washington.

Without entering the controversy, Dr. Meade described fossil animal remains found in the Holloman sand pit. During Aftonian time, close to the beginning of the Ice Age, the area was the home of elephants, wild camels, and lions found today only in Africa and Asia.

The age of these fossils has been definitely established as about 750,000 years.

The Texas geologist claimed no knowledge of the authenticity of the human evidence in the Holloman pit.

However, he said that those who believe the artifacts and animal fossils were buried in the same dim age consider the Holloman site "by far the oldest known evidence of man in North America."

It has been generally accepted by anthropologists that North and South America were peopled by migrants from Asia who arrived about 10,000 years ago, Dr. E. H. Sellards, director of the Texas Memorial Museum, said in another paper.

Excavations during the past two years in an ancient New Mexico lake bed have turned up a new plains culture even older than the shadowy "Folsom Man" discovered in the 1920's, Dr. Sellards said. To this new culture has been given the name Llano. Implements and weapons made of bone and stone have been found, he said, which suggest that these people hunted elephants.

The geologic layer in which these artifacts were found suggests that the Llano culture is approximately 10,000 years old, dating from the retreat of the last North American ice cap.

Science News Letter, November 25, 1950

MINERALOGY

Petalite Is Promising For Rocket Engines

➤ A MINERAL called petalite is producing new industrial ceramics able to stand up under temperatures as high as 2192 degrees Fahrenheit.

Studies of the quartz-like material, known for over a century but never utilized, have been accelerated with the advent of jet and rocket engines, John D. Clark, a Philadelphia engineer, reported.

Such engines, which must withstand towering temperatures, brought a bottleneck in materials able to shrug off a phenomenon known as "heat shock." Petalite, containing lithium, aluminum and silicates, was discovered to be even tougher than pure fused silica in its heat shock properties.

Mr. Clark predicts wide use of the long-neglected mineral, ranging from heat-resistant cooking dishes to the fittings used in ceramic firing kilns.

Lithium was discovered from petalite in 1818. There are deposits in Sweden but they are not extensively worked. In the late 1930's and early 1940's, huge blocks of petalite were found in quarries in South West Africa. There are no commercial deposits in the United States, and the mineral has to be shipped in from Africa.

Science News Letter, November 25, 1950

MINERALOGY

Big Sparkling Stones No Good for Necklace

➤ LARGE, sparkling stones—false gems that rival emeralds or sapphires in their color and luster, are now on exhibit at the U. S. National Museum.

The collection was gathered over many years from the copper-mining district of the former German southwest African region. Except for their softness, these crystals might well become supergems for decorative necklaces and pins.

The crystals, of lead or copper mixed with carbon or sulfur, are formed from such minerals as lead carbonate, carbonated copper and copper silicate. The minerals are formed by percolating waters and occur in cavities in the upper layers of copper deposits.

Science News Letter, November 25, 1950

ROYAL TOMB—Burial palace of the Prince of Thebes as it looks today. Openings on right and left lead down to the burial chambers of the "Mentemhet family." Note how covering layers have accumulated above. The finding was made near the famous Valley of the Kings near Luxor, Egypt.