

GENERAL SCIENCE

Compromise Draft Plan

Provision being considered for college training of 18- or 19-year-olds after they have been put into uniform. Would meet objections to Conant, Hershey-Trytten plans.

► THE preparedness subcommittee of the Senate Armed Services Committee may well write into the new draft law it is considering a provision for college training of 18- or 19-year-olds after they have been put into uniform.

The members are considering several compromises of the two extreme points of view on how to handle the college training problem, Science Service has learned. Harvard President James B. Conant's plan for two years' service, without any deferments, for all 18-year-olds is one extreme, the "Hershey-Trytten" plan for deferment each year of up to 100,000 high school seniors showing the greatest aptitude for college training, is the other.

The subcommittee—headed by Senator Lyndon B. Johnson, D. Tex.—will probably write into the new draft law a provision calling for putting all men who would otherwise be eligible to go to college into uniform and then either furloughing them or sending them in uniform to the college campuses.

Coupled with this idea are suggestions that a civilian board, rather than the Defense Department, decide what these soldier-students will study at college. Provision for such a board would either be written into the law or else the committee report on the new law would indicate that this was the intent of Congress.

Such a plan would get around the main objections to both the Conant and the Hershey-Trytten plans. Dr. Conant's plan, its detractors say, would cut off the continuous flow from the colleges of much-needed scientists, technicians and engineers. The Her-

shey-Trytten plan, its detractors say, would be politically impossible because the parents of boys who did not qualify for college deferment would object too strenuously.

More and more college educators are getting behind the compromise plan. And there are indications that this compromise is finding favor within the National Security Resources Board which formerly was partial to the Hershey-Trytten plan.

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ENGINEERING

Gas Turbine Locomotive Successful in Tests

► TEST running in regular freight service during the past 18 months of America's first gas-turbine electric locomotive proves the efficiency of this type of prime power in railroad work and 10 additional locomotives of this type are now under order.

The first gas-turbine locomotive, built by General Electric which will build the 10 under order, has been in use by Union Pacific railroad. It is this company that has ordered the additional railway tractors. Officials of the company state that, on a basis of results to date, the gas turbine electric locomotive looks promising as an addition to steam and diesel-electric power.

The new locomotive differs from the diesel-electric in that it uses a gas turbine engine instead of a diesel engine to generate electric energy for the driving power. Both use oil for fuel, but the gas turbine uses a cheaper oil.

Stationary gas turbine engines are already

in use in various parts of the country and in other nations. A gas turbine is under test by the U. S. Navy to determine its suitability for marine use. One is also under test in a highway truck. The engine is a favorite in areas where water is scarce because it uses no water.

In principle, it is like the power plant used in jet-propelled airplanes. However, all of the hot gases resulting from combustion expand against vanes on a rotary shaft, resulting in high-speed rotation. In application this high speed is geared down to operate machinery or electrical generators.

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