

it. The clothing itself is made of vinyl-impregnated glass fiber.

Wearers of the clothing would suffer from heat if no cooling system was available. Two have been perfected. In one air is forced into the interior of the suit and distributed through plastic tubing. The circulating air within the hood prevents

toxic fumes from getting inside, thus eliminating the need for a respirator.

In the other air-cooling system, a cotton outer shell of the clothing is saturated with water. Evaporation does the cooling. With this system the wearer must use air breathing apparatus. The air supply is carried on the back, suspended by straps.

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#### RESOURCES

## Each Raindrop a Bikini

**Proper use of water resources would bring benefits equal to those of peaceful application of atomic energy. But, on bare ground, each drop is a bomb.**

► A BABY Bikini, this is the promise—and the threat—held out for every drop of water in our land by the seven members of the President's Water Resources Policy Commission in their report just made public.

Proper use of our water resources will bring us benefits at least equal to those from the peaceful application of atomic energy. On the other hand, improper use may bring about the decline and eventual fall of our civilization. Which of these two paths we follow will depend on our policy toward each potentially-explosive raindrop, the Commission concludes.

Soft as rain may sound, each drop can be a tiny bomb, smashing into bare ground. A violent rainstorm may splash into the air more than 100 tons of soil per acre. Best protection against splash erosion is shielding the soil with growing crops or with mulches. These are two of the many actions recommended to save our water from being rushed to the sea.

The Commission believes that water control is best attacked along nature's divisions, on a river-basin, multi-purpose basis. Each watershed has similar problems of flood control, recreation facilities, power supply, land management, stream pollution, irrigation, etc.

Major policy changes in planning, in evaluating and in financing are required to give us full benefits from our water.

The Commission assumes that ours is an expanding economy, that our growing population will reach 190 million in about 25 years. Merely to keep our present standard of living in the coming years will require careful control of water to irrigate fields and for power purposes. Wise conservation of this key resource, however, is needed for any expansion and economic progress, on which rests the main hope of achieving world peace.

Two possibilities are mentioned as now unexploited sources of water: the sea and the clouds. A boost in the money going into research on rainmaking is strongly urged. At the same time a national policy to control forcing rain from the clouds is needed.

Although admitting that the rainmakers had not yet proved many of their claims, the Commission nevertheless implied that the method showed sufficient promise to justify "substantial funds" for further research.

The possibilities of making rain were first announced after the war by Drs. Vincent J. Schaefer and Irving Langmuir of General Electric Co. They succeeded, first in the laboratory and then in clouds, in seeding air masses containing water vapor to make them produce more precipitation than would naturally occur. Dry ice was later replaced by silver iodide as the seeding material.

Another possible water-supply source that needs further research is sea water, the Commissioners conclude. Although it can now be converted into fresh water for ships at sea and for military occupation of islands with insufficient water supply, the methods are all very expensive. Some inexpensive way is needed to make sea water fit for use. The energy that pours down on us from the sun is suggested as a possible source to be harnessed for this job. Using the difference in temperature between water at great depths in the sea and that near the surface may also be a fruitful method to give us usable sea water, they suggest.

Seriously concerned over the water supply problem, vital to peacetime expansion as well as to wartime preparations, President Truman last January appointed the seven-member Commission to make recommendations concerning the proper use and conservation of our water.

The members are Chairman Morris L. Cooke, vice-chairman Gilbert F. White, Paul S. Burgess, Lewis Webster Jones, Samuel B. Morris, Leland Olds and Roland R. Renne.

This report will be followed by a second volume containing details of the study made of ten river basins and a third volume summarizing the laws applying to water resources. Changes that are required in the present laws to back up the recommendations as well as new legislation will also be submitted later.

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#### EDUCATION

## Colleges on Accelerated Basis by Next Fall

► UP TO 85% of the 800 to 900 substantial, degree-granting colleges and universities in the country will be on a three-year speed-up basis by next September. This move will affect more than 1,500,000 students.

Defense Department officials and the U. S. Office of Education already are making plans to educate college presidents to the need of this step in the interests of national defense. Officials of most technical and engineering schools don't need this education. At least one top engineering college has already definitely decided, although not publicly, to institute acceleration next June.

The Defense Department will shortly announce formation of a committee on educational planning, headed by Navy Capt. J. J. O'Donnell, whose regular job is chief of Information and Education for the department. Its function will be to plan the tasks of the nation's colleges in training for defense. The first job it will tackle will be that of selling the idea of the need for acceleration.

U. S. Commissioner of Education Earl J. McGrath is considering calling a conference of outstanding college presidents to discuss the need for acceleration.

It is the thinking in the Office of Education that it will take the month of January to bring home to those colleges not yet planning acceleration that the manpower programs of the Armed Forces will require such a step. About Feb. 1, therefore, planning for acceleration will become general.

Most state universities are on a sort of accelerated program right now. A student, by attending summer school, can receive his degree in three years instead of four. It is some of the private colleges and universities, especially the liberal arts institutions, who will be slowest in installing an acceleration program.

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#### MEDICINE

## Alcoholic Is Made By What He Eats

► IT IS what you eat, not primarily what you drink, that determines whether you become an alcoholic. Prof. Roger J. Williams, University of Texas biochemist, in receiving this year's Southwest award of the American Chemical Society, declared that it is probably the case for humans, although his detailed experiments were upon rats.

The differences between drunkard rats, moderate drinking rats and teetotaler rats have a genetic basis but also a nutritional basis. Rats, he found, can be made to drink or be abstainers, depending upon their diet.

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