GENERAL SCIENCE

New Data Due at Geneva

Most intense bombardment of atomic information world has yet seen is taking place at Geneva. Suggest replacing the atomic peace ship with practical atomic reactors.

See Front Cover

Science News Letter will cover the Geneva conference. Staff members Watson and Helen M. Davis are in Geneva.

➤ THE WORLD'S most intense bombardment of atomic information is taking place at Geneva.

The possibility of really putting atoms to work for the good of the world will go "critical," to use a term applicable to the atomic reactor, swimming in a purple glow, that the United States flew to Switzerland and installed in the Palace of Nations.

The accent is upon the good, the true and the beautiful, about atomic energy. The conversion of mass into energy is being viewed as an energy source, bringing comfort and riches to lands bereft of such fuels as conventional coal, oil and gas. Exploding atoms are beneficently used to cure disease, create new kinds of crops, preserve food without refrigeration or canning, or trace out mysteries of nature.

The most remarkable thing about the sessions as programmed is the lack of such bad and naughty atomic words, as bomb, either fission (A) or fusion (H), radiation, fallout, secrecy, counter-secrecy, etc. The hopeful design is for peace among the atoms. And for peace among the human controllers of the atoms.

Much is known about the application of atomic energy to the generation of power, uses in research and medicine and the world's stores of raw materials. There are hints of the dawning age of energy resources even beyond what is broadly called atomic

Nevertheless the facts freely discussed at Geneva are about a decade old. The Smyth report is still the classic. It was issued just after the dropping of atomic bombs on Hiroshima on Aug. 6, 1945, and on Nagasaki on Aug. 9, 1945. Upon the world then there burst a whole new chapter of chemistry, physics and energy. Details have been added since then but actually very few broad fundamentals.

Fear Limits U.S., U.S.S.R.

Fear that other nations will learn what the United States has discovered in the first atomic decade is limiting the U.S. contributions. The Soviet seem to have a reciprocal attitude. Declassification by the Atomic Energy Commission has been proceeding slowly and methodically, with no sudden spurt for the Geneva conference.

Although the formal papers do not appear to afford extremely good prospecting,

there are discussion periods that may allow new information to appear. There may be new atomic trump cards up the sleeves of some of the atomic experts.

The world does not know, exactly, what happens in a hydrogen bomb. Suppose the Soviets decide to tell the world. They do know, we are given to understand. Of course, H-bombs are not peaceful and not therefore within the scope of the Geneva conference. But the fusion reactions are basic and highly pertinent.

Send Atom Plants

➤ WITH PRESIDENT EISENHOWER'S atomic peace ship sunk by Congress before its keel was laid, other methods of impressing the world with American development of atomic energy for peaceful purposes will undoubtedly be considered.

Why should not Uncle Sam send a score or two of practical atomic power plants to remote world areas, generating energy badly needed?

The Geneva atoms-for-peace conference, which the United States proposed to the United Nations, is a major effort for U.S. atoms. The swimming pool nuclear reactor operating in the Palace of Nations grounds demonstrates peaceful use of exploding atoms.

The Atomic Energy Commission is making arrangements to provide about 20 governments with other atomic reactors for research purposes. This will be an important atomic shot-in-the-arm for research in parts of the world where peaceful atoms have not yet flourished.

The great popular promise of atomic energy is new and plentiful energy. In the United States, with relatively ample and low-cost energy from water power, coal, oil and gas, this boon of energy can be overlooked. But in the middle of a desert, or a polar waste, or a teeming, overcrowded Asiatic country, or a tropical jungle—there atomic energy could make life more possible and more pleasant.

A baby atomic power reactor is being born among the more ambitious atomic power plants fashioned to light cities, run submarines and compete with power plants using coal. It is a package power reactor for the Army, a portable reactor that can be hitched to a steam generating plant.



"FLYING BEDSTEAD"—Britain's experimental aircraft, built by Rolls Royce for studying the control of jets entirely by their jet thrust, can go straight up in the air from a horizontal position. The weird-looking plane was shown at the golden jubilee celebrations of the Royal Aircraft Establishment at Farnborough, Britain's main aircraft research center.