

Nuclear energy in space

Our rapidly advancing technology

It may not be many years before people anywhere on earth will be able to turn on their television sets and routinely view events taking place throughout the earth at that very moment. Among the programs already seen are direct coverage of Olympics contests being held on the other side of the globe and live telecasts of important political events taking place in foreign capitals. Worldwide weather forecasts might soon include as their weather map an actual color view of the continent showing cloud cover as it exists at that very time. Through such a television system, the surface of the moon might also be seen while two TV astronauts—possibly something akin to a lunar Huntley—Brinkley team—report on the scene of a new landing there or of a moon-based launch for a distant planet. All this would be made possible by the transmission of the television signal directly into the home from a system of communications satellites in orbit more than 22,000 miles above the earth. The operation of these satellites and the benefit of many more miracles of the Space Age may be realized through the use of the compact, long-lived sources of nuclear energy we are now developing in the concurrent Nuclear Age.

It is indeed of epochal significance that man has recently become space-borne after his long earthbound existence. No longer tied to this planet, he is now probing space with instrumented and unmanned vehicles and is planning manned exploration of the nearby planets. In this extra-terrestrial environment man's capabilities and his hopes for the future are being rapidly extended because of his successful exploitation of a rapidly advancing technology.

I believe it is providential that our advancing development of the atom and our entrance into space are currently taking place side by side in what might be called the Nuclear Space Age. I would like to tell you why I believe this is so and what we in the AEC are doing, in cooperation with the National Aeronautics and Space Administration and the De-