Piggy-Back Satellites Hailed As Big Space Gain for U. S.

By Charles Corddry
United Press International

Two new American satellites circuited the earth today after a spectacular "double-header" launching with a single rocket. Officials hailed their success as proof that America is "moving into space for real."

The moonlets, launched piggy-back fashion from Cape Canaveral, Fla., at 1:54 a. m. EDT Tuesday, were sent aloft to provide the world a precise all-weather navigation system, to improve the accuracy of its clocks and to measure the sun's radiation.

The larger satellite also carried a space experiment for Canada—a receiver to study background radio noises from the galaxies.

America now has 11 satellites in orbit around the earth, compared with Russia's two.

New Space First

The feat of putting up a pair of sattellites simultaneously with a single booster was a new space 'first" for the United States. This has not been attempted, so far as is known, by Russia.

A two-stage, Thor-able-star, an Air Force rocket, accomplished the feat.

The Transit II-A sattellite, the navigational aide and time-measuring sphere, soared into a near-circular orbit that will carry it over all of the earth's land masses—including Russia—except certain arctic and antarctic points.

As soon as orbit was achieved, this 223-pound aluminum space probe gave birth to the smaller basketball-sized satellite, which checks on solar radiation. It was ejected by spring action.

Payloads Function

Rear Adm. T. F. Connolly, chief of the Navy Bureau of weapons, told a news conference here that the payloads of the two satellites were functioning properly.

"There are no problems," he said.

Cmdr. R. F. Freitag of the Weapons Bureau said Navy officials are confident now that a system of four Transit satellites, to be in operation by 1962, will be able to fix positions on land and sea within one-tenth of a mile.

The first Transit, launched last April, is giving fixes within a quarter of a mile, they said, and the one launched yesterday will do better.

When all four Transits are in orbit, ships at sea can interrogate them by radio at any time regardless of weather and the satellites will give them "fixes" in code that will tell them where they are.

Moving for Real

Connolly said the launching of a pair of satellites with a single rocket showed that space operations are becoming "something we can count on."

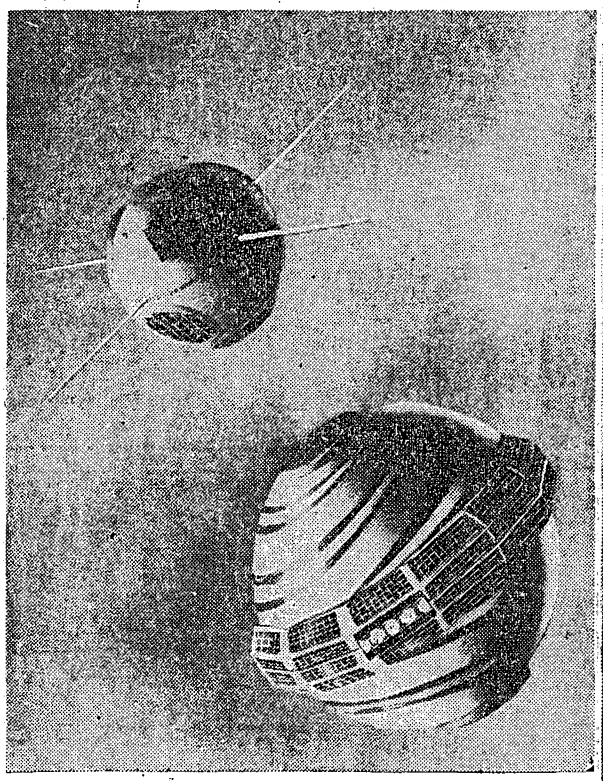
"We are rapidly moving into space for real," he said.

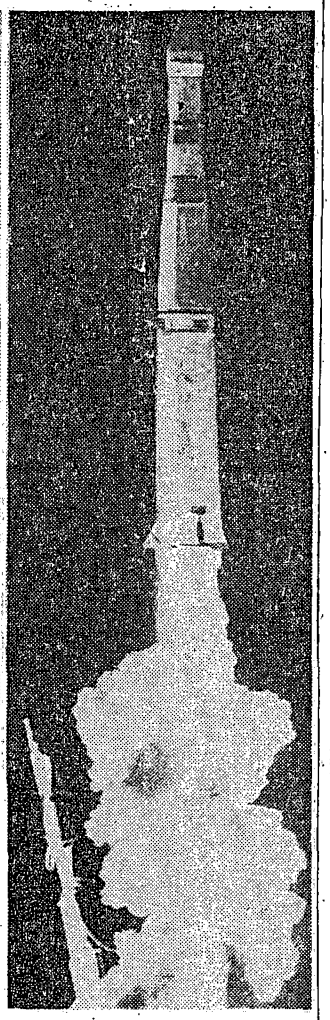
R. B. Kershner of the Johns Hopkins Applied Physics Laboratory said the navigation satellite's orbit was taking it to a maximum of 563 miles from earth and bringing it to within 460 miles.

Its orbiting time is 101.5 minutes. The orbit is inclined 65 degrees to the equator.

The smaller, 42-pound solar radiation sphere probably has fallen behind Transit II-A, Kershner said. It will settle into a somewhat larger orbit and circuit the earth more slowly.

The II-A, in addition to the Canadian experiment, carries a new feature not on the first Transit satellite—an electronic or "digital" clock which the Navy said could "lead to a new global time system."





Associated Press

The drawing above shows how the Transit II-A satellite and its "piggyback" package, a solar radiation measurement satellite, appeared just after saparation in outer space yesterday. The larger satellite was developed by the Applied Physics Laboratory of Johns Hopkins University at Silver Spring and the smaller vehicle by the Naval Research Laboratory here. At right: the double-header satellite rocket takes off at Cape Canaveral.