

Soviet Believed Testing Rocket Able to Guide Bomb From Orbit

By **EVERT CLARK**
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WASHINGTON, April 2 — flight-testing in secret a maneuverable rocket stage that could be used to guide bombs down from orbit or to send instruments to the moon.

Three Russian space payloads launched in recent months have performed maneuvers not seen before. They were the Cosmos 185 on Oct. 27 and Cosmos 198 on Dec. 27, 1967, and the Cosmos 209, flown on March 22 this year.

All were launched from Tyuratam into orbits inclined at 65 degrees from the Equator. American tracking networks observed that all three went first into low orbits, then climbed to near-circular orbits about 500 miles above the earth.

Observers here are paying close attention to the three flights. The memory is fresh here of Moscow's clandestine development in 1966 and 1967 of a so-called fractional orbital bombardment system.

The system uses a missile to put a warhead into a very low earth orbit from which it can be ordered down onto enemy territory before it completes one circuit of the earth.

Intercontinental missile warheads usually are lobbed high into space, like a mortar shell, and defensive radars can spot

them as much as 15 minutes before they are due to strike a target.

On the other hand, the warhead on the bombardment system comes in so low that the warning time is only about one-third that long.

Some observers here fear that the recent Russian shots may represent a step upward from this FOBS system to the so-called MOBS — multiple-orbit bombardment system — that Soviet officials have discussed publicly since 1961.

A multiple-orbit system would station the warhead in orbit for a time, rather than have it travel only part-way around the earth. The weapon could be left in space for many months — or sent up during a time of crisis, for psychological purposes or for use. It could be recalled safely to earth later if not used during the crisis.

It is understood that there is no strong evidence now to link the recent launchings to the development of the fractional orbit system. On the other hand, Government analysts argued among themselves for some months before they accepted the system for what it was. Former Secretary of Defense Robert E. McNamara

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finally confirmed the existence of the system in a news conference last fall.

The stationing of warheads in orbit would violate the treaty on outer space, whereas the FOBS does not because its payload—technically at least—does not remain aloft long enough to be considered in outer space.

But the treaty does not preclude the development of the techniques for either a FOBS or a MOBS system.

All Passed Over U.S.

None of the FOBS flights—two successful ones late in 1966 and nine successful ones last year—passed over the United States. Some officials believed that the Russians deliberately chose launching trajectories that would keep the satellites from passing over

American territory to avoid any irritation.

The paths of the three recent flights, however, did pass over the United States. In fact they covered almost every inhabited part of the globe, passing almost as far north as the Arctic Circle and almost as far south as the Antarctic Circle.

Some scientific observers here and abroad think it likely that the maneuvering stage is intended to insert instrumented spacecraft into orbits around the moon. Others think it will be used with some new, more versatile Soviet reconnaissance satellite.

But all agree that once the stage has been developed it could be used for any of these missions.

A maneuverable upper stage rocket would be useful for manned rendezvous flights. But observers here noted that the recent tests had been made at 65-degree inclinations, not at the 51 degrees now preferred by the Russians for manned flights. Accordingly, observers doubt that the recent tests are related to manned flights. The United States has raised

and lowered the altitudes of both manned and unmanned flight satellites by radio command or by piloting. American experts have assumed that the Soviet Union also has the ability to do this if it chose to. Sources here believe Russia is now testing out that capability.