SPACE-AGE PUNCH ON WALLOPS ISLAND

By E. JOHN LONG

WALLOPS ISLAND, Va.—Although its operations have been eclipsed by the larger and more spectacular rockets launched in Florida and California, Wallops Island's missile base has played an important supporting role in the successes of its bigger sisters, including the launching pads currently in use.

This Cinderella of Space Age installations also lies near one of the largest centers of population in the United States, and, therefore, is a handy vantage point for hundreds of modern "bird-watchers." Wallops Island is only a couple of miles south of Chincoteague Island, famous for its oyster and wild pony round-ups, on the Atlantic side of Virginia's portion of the Delmarva Peninsula. The firing range extends over a low, narrow sand spit that is normally protected from the sea by huge dunes and heavy bulkheads of steel pilings.

Although these were breached during a brawling storm in early March, thus suspending all activities on the half-dozed launch pads, and sometimes as often as six times a day, probing fingers of fire reach into the sky in exploratory investigations, testing prototypes and future missiles that will be used later in large satelites. However, not all of Wallops' missiles are small.

Awe-inspiring Show

For example, its seventy-two-foot Scout vehicle has put two satellites into orbit, including the Explorer IX, and Honest John and Nike boosters frequently dart up from Wallops in spectacular bursts of flame and fury. Argos D-4 may be known to few persons except officials of the National Aeronautics and Space Administration, which operates the station at Wallops, but it puts on one of the most awe-inspiring of space shows. The Nike-Cajun combination, used to launch sodium vapor experiments, hangs a huge sodium vapor cloud fifty to two hundred miles high. It glows long after sunset, and sometimes is whipped into fanciful patterns by upper air currents.

Japanese and American scientists, working jointly at Wallops, recently began a series of probes of the ionosphere, using the Nike-Cajun rocket.

Screaming Dive

In one odd re-entry study at Wallops, a seven-stage rocket was boosted by the first three stages to an altitude of about 180 miles. After a brief period of coasting, the rocket nosed downward, the four remaining stages cutting in one after another and sending the re-entry vehicle into a screaming, metal-consuming dive at 25,000 miles an hour. This created an artificial meteor that lighted the sea five miles around.

Although most of the launchings at Wallops can be seen from any of the surrounding communities and from U.S. 13, the main highway down the Delmarva Peninsula; the best and nearest spot to watch the operations on the pads is from outside the Launch Area gate. The gate stands on a slight rise, and provides an unobstructed view across a mile of marsh, to the gantries, concrete pili boxes and the rockets themselves. Visitors are barred from the launch area itself for reasons of safety rather than security.

There is no objection to the use of binoculars or of telephoto lenses outside the gate, and ample parking space is provided for visitors' cars. The guards are courteous, but no one else can guarantee the exact time of a launching. Announcements are made in the press a day or two ahead of the blast-off of major projects, such as the Scout or the sodium rockets, but the times given are approximations.

All are subject to delays in the countdown, weather vagaries and other factors. However, with an average of eleven launches a week, even the weather has a good chance of seeing at least one blast-off without undue waiting.

Sky trails of some of the big "birds" can be seen as far away as Washington.

The island's unusual name derives from John Wallop, a Briton who began to acquire land here in the Sixteen Sixties. Not only the island, but also a road a millpond, a marsh and a fishing and hunting club all have borne his name.

The present N.A.S.A. establishment was preceded by the Naval Air Ordnance Testing Station, known during World War II as the Chincoteague Naval Air Station, and by the aerodynamic research facilities of the National Advisory Committee on Aeronautics. From the Navy, the N.A.S.A. inherited two fine airstrips and a large number of administrative buildings and machine shops; from the N.A.S. A. came the original facilities on the firing range. The nearest sizable community is Chincoteague, a few of whose 4,000 inhabitants work at Wallops.

The station may be coming into the limelight before the launch vehicle is used for a variety of experiments, including tests of the earth-orbit of small satellite payloads. The N.A.S.A. now considers the Scout one of its four standardized units for space missions, the others being the Atlas Agena-B, the Centaur and the mighty Saturn.

Wallops and its Scout will also have the honor of launching the second of three satellites in the cooperative international program being conducted by the United Kingdom and the United States. The first spacecraft in the program, the S-51, is scheduled to be launched by a Delta vehicle at Cape Canaveral, Fla., by the end of next month. The S-52 will be sent off by a Scout rocket from the Wallops Station in 1965.

270 Miles Away

Wallops Island is about 270 miles from New York by way of the New Jersey Turnpike and U. S. 13 to Oak Hall, Va., the turn-off for Wallops, from Baltimore (143 miles) and Washington (130 miles), motorists can use the Chesapeake Bay Bridge and U. S. 50 to Salisbury, Md., and then U. S. 13 to Oak Hall.

At Oak Hall, State Routes 175 and 670 lead to the village of Assawoman. There, the turn is left on State Route 833 to the gate of Wallops Island. Although visitors are not permitted beyond this point, they are well within the sight and sound of the rockets taking off and yet safely out of range of any malfunctions.