

# A new landmark on the

A NEW LANDMARK is rising on the Lizard peninsular in Cornwall. It is the second British Earth Station for the international communications service, which is being built by the Marconi Company for the British Post Office.

This station, near the existing Goonhilly I, is less than five miles from Poldhu where Marconi made his historic experiments in transmitting messages across the Atlantic in 1901. It will handle a thousand telephone conversations simultaneously, and communicate with any other ground terminal on the east coast of North or South America, West Africa and Europe.

The whole aerial structure weighing about 1,000 tons will revolve about a central pivot, the outer end mounted on two bogies running on rails in an arc of 270°.

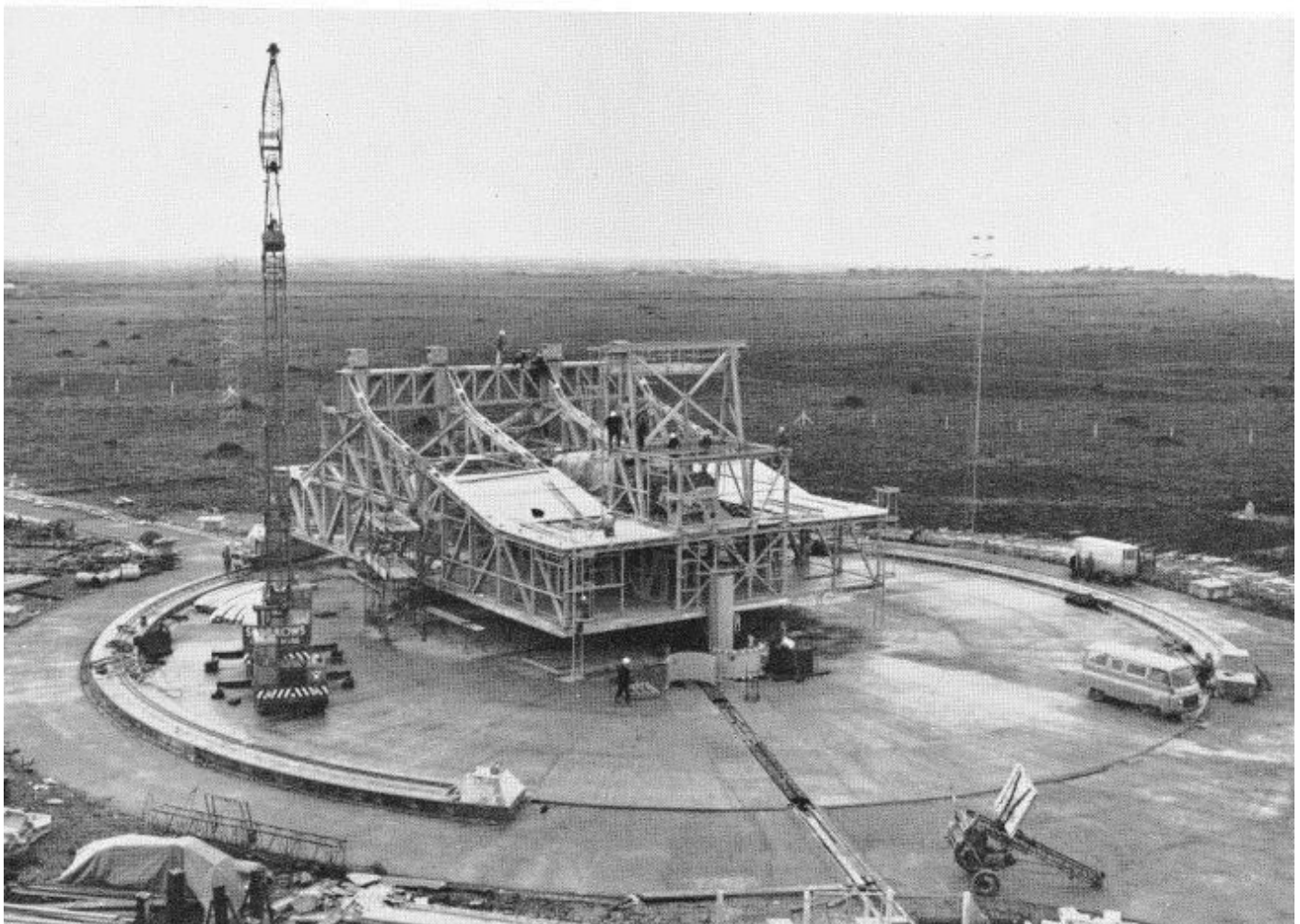
Ray Goodey, a member of the Marconi Space Division's mechanical team, gave us details of progress so far. 'The base structure is almost complete, and the external cladding of the equipment rooms has begun. The main support beam for the

elevation bearings is in position ready to take the first members of the moving reflector. The thirty-ton main screw for moving the reflector in elevation is also in position. Peter Bowkett leading the Marconi installation team under the administrative direction of Peter Martin, Site Manager, together with a team of steel erectors from our sub-contractors, Cornubian Construction Co., has now received steelwork for the second stage of the reflector backing structure, and assembly is going ahead. The reflector is being built by Cocksedge and Co., of Ipswich, and the first panels are now complete.

'The bulk of electrical equipment is housed in rooms in the rotating base structure. Low noise amplifiers and associated equipment are mounted in a small cabin behind the centre of the ninety-foot dish.

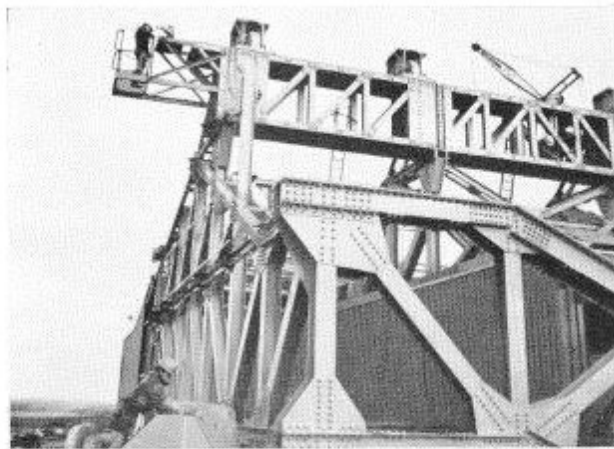
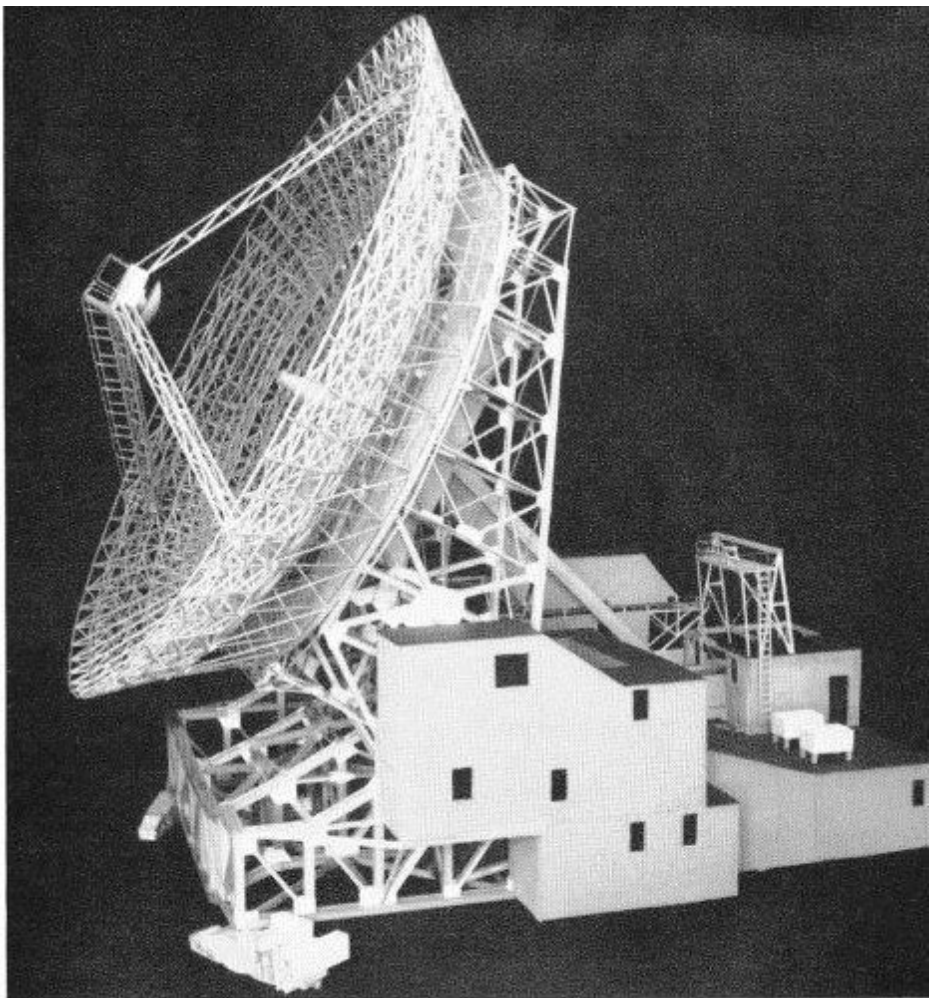
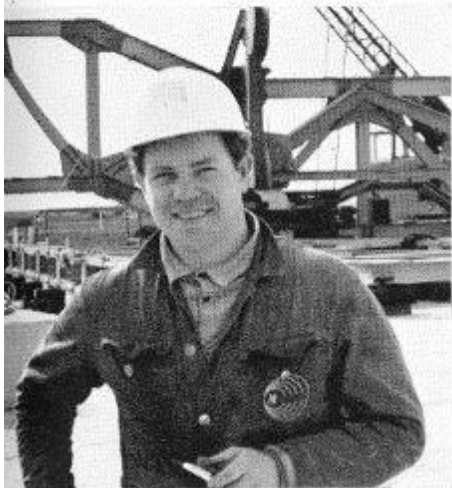
'Dick Muir, leader of the mechanical project team,

**The new landmark on the Lizard: the Goonhilly station under construction. The framework for the aerial bowl backing structure is now in position**



# Lizard

RIGHT: A model of the aerial framework was built by the apprentices to the scale of half an inch to a foot, and has been invaluable for checking individual members in the maze of steelwork. BELOW: Frank Crilly of Marconi's, who has been working on the roofing and cladding of the equipment rooms



ABOVE LEFT: On the job at Goonhilly. Engineers responsible for the erection of the aerial structure refer to the drawings. Left to right, Peter Bowkett, Senior Installation Engineer; Noel Rule, Foreman, Cornubian Construction Co.; and Tony Brown, Installation Engineer [*W. Slaughter*]. RIGHT: This shows the size of the structure. Roger Dace is lining up the dish elevation bearings on the beam [*R. J. Muir*]

commented after his last visit to site: "Taking all things into consideration—including the weather—the erection is going quite well."

'Back at Marrable House, John Preston, who leads the Goonhilly II project for Space Division, keeps a close watch on progress. With project control based on a computer guided PERT system, he is able to identify items which need special attention to maintain the tight time-schedules of the

programme. John told us that major electronic equipment manufactured throughout the whole of the Marconi Company has now been completed, and is undergoing initial system testing. "Our programme is running a little behind schedule at this time," he said, "but we are confident that we shall have the whole system ready to hand over to the customer well ahead of the launching of the Intelsat III satellite, now being built in the States."