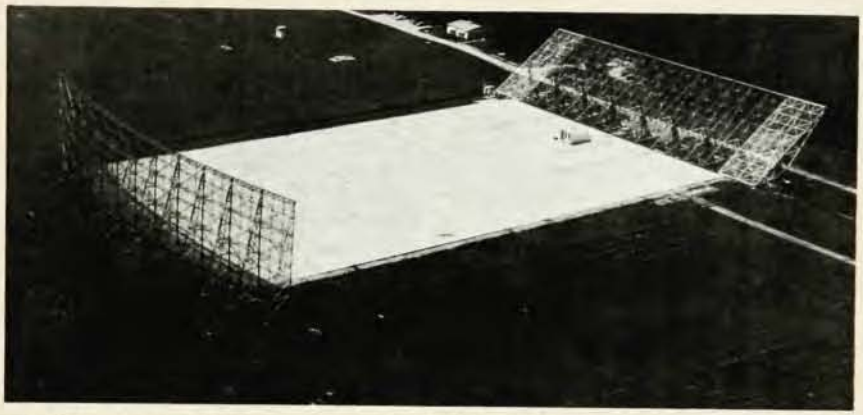
# Fore! Golf course clears way for telescope

Earlier this year Ohio State University's Radio Astronomy Observatory was threatened with having no land to stand on when the owners of a country club purchased the land to expand their facilities. In an effort to save the observatory, concerned citizens and scientists considered making arrangements to move the radio telescope to a new site, including consideration of what Robert Dixon (assistant director of the Observatory) called the "desperation plan" of hoisting it by helicopter. It now appears that the radio telescope will not have to be air-lifted in 30-ton pieces to make way for a golf course. "That's good news," says John Kraus, director of the observatory, "because the only helicopter capable of lifting the segments is made in the Soviet Union." George Foster, a private citizen heading the Committee to Save the Telescope, cautions, however, that the problem has not yet been solved. But how did the problem arise?



**The Ohio State radio telescope** was faced with being shut down so that a golf course could expand. The two antennas can operate in the 500–3000 MHz range and are used for a SETI program.

Since the early 1960s the observatory has been operated by Ohio State University on land leased from Ohio Wesleyan University. In January Ohio State was informed by Ohio Wesleyan that the land was being sold to the Delaware Country Club as part of a 260-acre parcel. The country club originally planned to expand its golf course on part of the land surrounding the telescope and to develop the balance of the land, including the 24 acres on which the telescope stands. Ohio State, whose lease expires 31 August, was told to move the telescope or lose it.

Described by Dixon as the third largest in the US, the radio observatory consists of two antennas, each 360 feet wide and 100 feet high, with 3 acres between the reflectors. Capable of operating in the range 500–3000 MHz, the telescope was used until 1972 to catalog 20 000 objects, including many new quasars, in an all-sky search for 21-cm wavelength sources. Since 1973 the telescope has operated at 1420 MHz as part of the NASA Search for Extraterrestrial Intelligence program. The telescope's capabilities for the SETI program were enhanced by a factor of 60, Dixon told us, with the recent addition of a $40 000 computer donated by Digital Equipment Corp. It will allow the telescope to look for signals at 3000 instead of 50 frequencies, in the 1400–1700 MHz range. Another computer, a PDP 1140 donated by Bell Labs, is now being installed to operate in conjunction with the DEC PDP 1123 and replace the present computer.

Kraus, Dixon and many private citizens were concerned about the possible loss of the telescope; Dixon said that hundreds of letters were received expressing support. Moving the telescope, described by Kraus as "a last resort," would cost about $5 million, or about the same as replacing it. Ohio State simply didn't have the money. Foster spearheaded a drive to find a solution. Although the citizens' committee was able to find a donor willing to provide land nearby at essentially no cost, plans to move it bogged down when they determined that no American-made helicopter could lift segments of the telescope. Meanwhile, the committee has been able to negotiate a one-year extension of the lease and to determine that the telescope can operate in the vicinity of the golf course. While, as Foster put it, we have achieved a "commutation of the death sentence," there are several major tasks ahead. Foster said that the committee is now trying to organize a consortium of up to six institutions, including Ohio State, to run the telescope in the future. He expressed the hope that, by sharing both the costs and the capabilities of the telescope, they would be able to use it more fully. —JC

# Rival computer companies share R&D

Microelectronics and Computer Technology Corporation, a consortium of rival computer companies set up to share the results from a new joint research and development venture, has chosen Admiral Bobby R. Inman as its president and chief executive officer. By pooling resources to pay for a new research facility, and by holding the patents while sharing the results from the research among themselves, members of the consortium hope to get a three-year jump on other high-tech firms. (After three years, other companies will be able to develop technology from their research.) Concerns about the possible violations of antitrust law of such an

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