

## ESCAPE FROM THE EARTH IS A BIGGER JOB THAN SUPPOSED

HIS FIRST LESSON IN SCHOOL GEOGRAPHY TELLS THE PUPIL THAT THE EARTH IS 8,000 MILES IN DIAMETER AND 25,000 MILES AROUND.

ACTUALLY, RADIO PHYSICISTS LEARNED BUT LATELY, THIS SPINNING GLOBE IS ABOUT 22,000 IN DIAMETER. ITS GIRTH, THEN, MUST BE SOME 67,000 MILES.

THOSE RATHER STARTLING FIGURES INCLUDE THE AIR ENVELOPE WHICH IS AS SOLIDLY ATTACHED TO EARTH AS THE GRANITE HILLS. BY CHARTING THE PATH AND MEASURING THE SPEED OF BARKHAUSENS WHISTLERS--L.R.O. STOREY, CANADIAN PHYSICISTS, REPORTS, IN SCIENTIFIC AMERICAN--SCIENTISTS HAVE DETERMINED THAT THE ATMOSPHERE EXTENDS AT LEAST 7,000 MILES STRAIGHT UP. PREVIOUSLY, THE LAST KNOWN TRACE OF AIR WAS 1,500 MILES HIGH. HOWEVER, ONLY 200 MILES OF ATMOSPHERE HAS BEEN FULLY EXPLORED BY RADAR SOUNDINGS.

BEYOND THAT LIMIT LIES "UNKNOWN SPACE." NOW, THE "WHISTLERS" THAT HENRICH BARKHAUSEN FIRST DETECTED 40 YEARS AGO ARE "ECHOES OF DISTANT THUNDER." THAT DISTURBANCE, THE RADAR YARDSTICK SHOWS, IS 7,000 MILES REMOVED. EVEN UP THERE, THE LATEST MEASUREMENTS INDICATE, THERE ARE 3,200 ELECTRONS IN EACH CUBIC INCH OF SPACE.

SUCH A COUNT POINTS TO THIN AIR--BY EARTHLY STANDARDS, A PRETTY GOOD VACUUM--YET AIR ENOUGH TO SLOW DOWN AND FINALLY STOP THAT MAN-MADE MOON. IT FOLLOWS THAT THE LONG-PROMISED PERMANENT SATELLITE WOULD HAVE TO BE HURLED BEYOND THE 7,000-MILE LIMIT.

ESCAPE FROM THE EARTH, IT APPEARS, IS A BIGGER JOB THAN FORMERLY SUPPOSED. EVEN SO, THE NEW SLANT GIVEN THE SCIENTISTS ON BOTH EARTH AND THE STARRY HEAVENS WOULD WELL REPAY THE EFFORT AND THE EXPENSE INVOLVED.