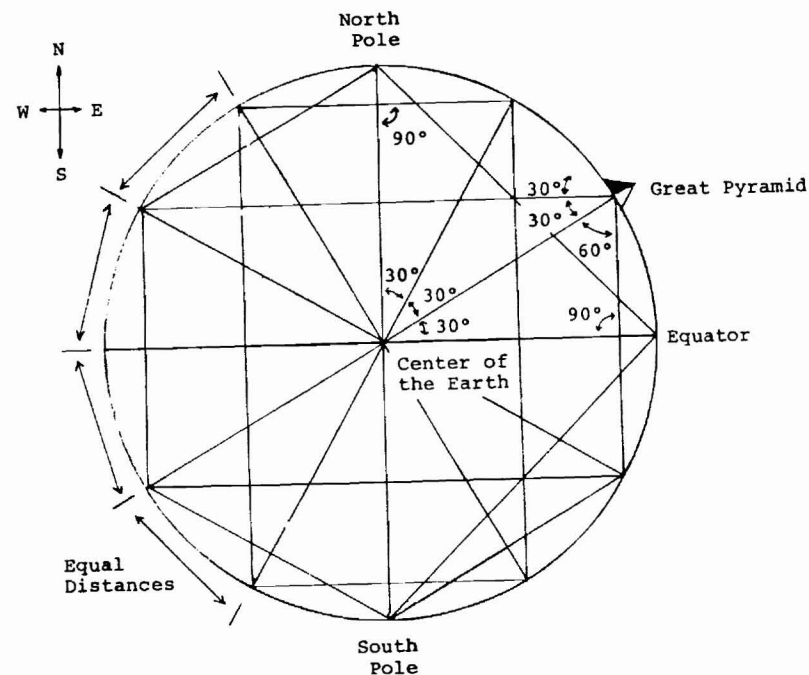


navigation.

The four sides of the Great Pyramid precisely face the four compass points: north, south, east and west. The sides are directed so exactly that the widest deviation is only one twelfth of a degree on the east side. In addition, the Great Pyramid is situated less than five miles south of the northern thirtieth parallel. The Great Pyramid can therefore be used as a reference point for sectioning the entire planet into a three-dimensional grid of 30-, 60-, and 90-degree angles with the North Pole, South Pole, Equator and center of the earth as reference points. This feature is especially useful because the Great Pyramid is located at the center of the Earth's land masses. Knowing only the dimensions of the Earth and having a method of calculating how far one has traveled, one can very effectively navigate, especially by air, from the Great Pyramid to any point on Earth using the 30-60-90 degree grids and the compass directions indicated by the pyramid. The only deviation comes from the fact that the Earth is not a perfect sphere, but is slightly flattened at the poles and widened at the Equator. However, this deviation is so slight, amounting to only 26.7 miles (.0003367 or the fraction $1/298$), that it is easily compensated for. Interestingly, when the Great Pyramid was first built, it was even more valuable as an aerial navigation marker than it is today because it had been covered with a casing of fine white limestone. The limestone blocks were carved so precisely that the pyramid looked from a distance as though it had been hewn from a single white rock. The limestone reflected the sun, making the pyramid visible from a much greater distance.*

The unique characteristics of the pyramids at Gizeh raise interesting questions about those monuments. Since they serve an aerial navigation function so well, were they built at least partially for that purpose? If they were, who

* Most of the limestone is gone today. Except for a few blocks found at the base of the Great Pyramid, the limestone casing had been excavated away from the pyramids beginning in the first millennium A D



ABOVE: Author's drawing showing how the Great Pyramid can be used as a reference point to accurately divide the Earth into a grid of 30-, 60- and 90-degree angles with the North Pole, South Pole and equator as reference points. This makes the Great Pyramid ideal for aerial navigation from a global perspective.

BELOW: The Great Pyramid is also pointed precisely along the four compass directions. This postage stamp issued by Egypt in 1959 shows an airplane flying in direct alignment with the Great Pyramid, as though to suggest that the pilot is using the pyramid to guide the airplane.

