Babylonian Boundary Stone or Landmark

Among the ancient Babylonians, boundary stones or landmarks had special significance, because they were inscribed with evidence of the ownership of the land. Removal or destruction of a boundary stone would, in effect, mean destruction of the title to the land. This stone—of black basalt and 22 in. high—is inscribed with the purchase deed of a plot of land in Bit-Hanbi, sold to an officer of the King of Babylon, about the year 1100 B.C. The figure carved on it represents the king. Inscriptions invoke the vengeance of the gods on anyone removing this "eternal landmark" or tampering with the boundaries of the land it describes. Photo and caption through the courtesy of James W. Darling, F. ASCE, Registered Professional Engineer and Land Surveyor.

Laser Aids Aerial Mapping Work

Successful flight testing of the first terrain profiler employing a laser has been announced by the Aero Service Division of Litton Industries, Philadelphia, Pa. Aero will begin utilizing the system almost immediately to produce terrain profiles for a variety of civil engineering, planning and construction projects. The first profiler is installed in Aero's specially modified A-26 mapping aircraft.

The profiling system consists of a continuous-wave gas laser altimeter, a high-resolution, differential barometric pressure sensor, and either a 35-mm strip camera or an aerial mapping camera. While the laser altimeter continuously measures with great accuracy the distance to the terrain below, the barometric sensor provides a reference to the aircraft's pressure altitude within 1 ft. In this way Aero engineers are assured that any recorded change in elevation is a representation of terrain change rather than a change in aircraft altitude. The camera, which is bore-sighted and attached to the laser altimeter optical system, obtains a photo record of the terrain being profiled.

The profiler has an accuracy of better than 1 ft in an aircraft flying at 250 mph, 1,000 ft above the ground. At this altitude it will record the difference in level between the street and sidewalk. At 10,000 ft, the profiler is accurate to within 2 ft. The high accuracy of the laser altimeter makes it the most useful airborne profiler yet developed.