

An Aerial Radiological Measuring Survey (ARMS) of the Orlando area was made for the Civil Effects Test Operations, Division of Biology and Medicine, U. S. Atomic Energy Commission, by Edgerton, Germeshausen & Grier, Inc. (EG&G), between Feb. 11 and Feb. 21 1963.

The survey was part of a nationwide program to measure present environmental levels of gamma radiation.

Approximately 4500 traverse miles were flown, at an altitude of about 500 ft above the ground, in the area which consisted of the land portion of a 100-mile square centered on the Kennedy Space Center. The EG&G ARMS-II instrumentation was used in the survey.

The data are presented as aeroradioactivity units, or areas with similar gamma radiation counting rates at 500 ft, at two map scales: (1) generalized at about 1:1,000,000 and (2) detailed at 1:250,000. The maximum aeroradioactivity in almost all the area was less than 400 units/sec. In a few small areas along the east coast, the maximum counting rate was 500 units/sec.

Aerial measurements of ground radioactivity in the ARMS-II Orlando area were consistent with what was expected, considering the geology of the area.

Artificial radionuclides were probably present in only small quantities because background gamma radioactivity was less than 200 counts/sec in many places.