



FIGURE 27

They Can Help in Our Search for Mineral Resources

Radar images of the Carlin, Nevada, area have revealed surface expressions of a number of faults, and they show that the recently discovered Carlin mine (the largest new gold mine in the United States) is associated with a previously unrecognized fault structure. These images suggest that other areas nearby are worthy of intensive exploration. It is almost certain that small-scale images acquired from space will add greatly to our knowledge of the tectonic framework of the United States and will be of immeasurable assistance in guiding our exploration programs.

They Can Aid Greatly in Achieving an Understanding of Dynamic Phenomena

Figure 28 is an infrared photograph and a topographic map of the Maumee River as it enters Lake Erie. The photograph depicts the course of the pollutants issuing from a sewage treatment plant and shows that the breakwater, constructed since the last topographic map was revised, is effectively impounding the sewage and preventing its dispersal into Lake Erie. This photograph strikingly illustrates our need for understanding the distribution of pollutants as well as their character and concentration. The following facts are particularly significant in pollution research: water quality meters give us precise data from pinpoint locations; the Geological Survey operates a water quality meter at the end of the quay on the east side of the river; the readings from this meter do not measure the quality of the water in the full cross-section of the river.