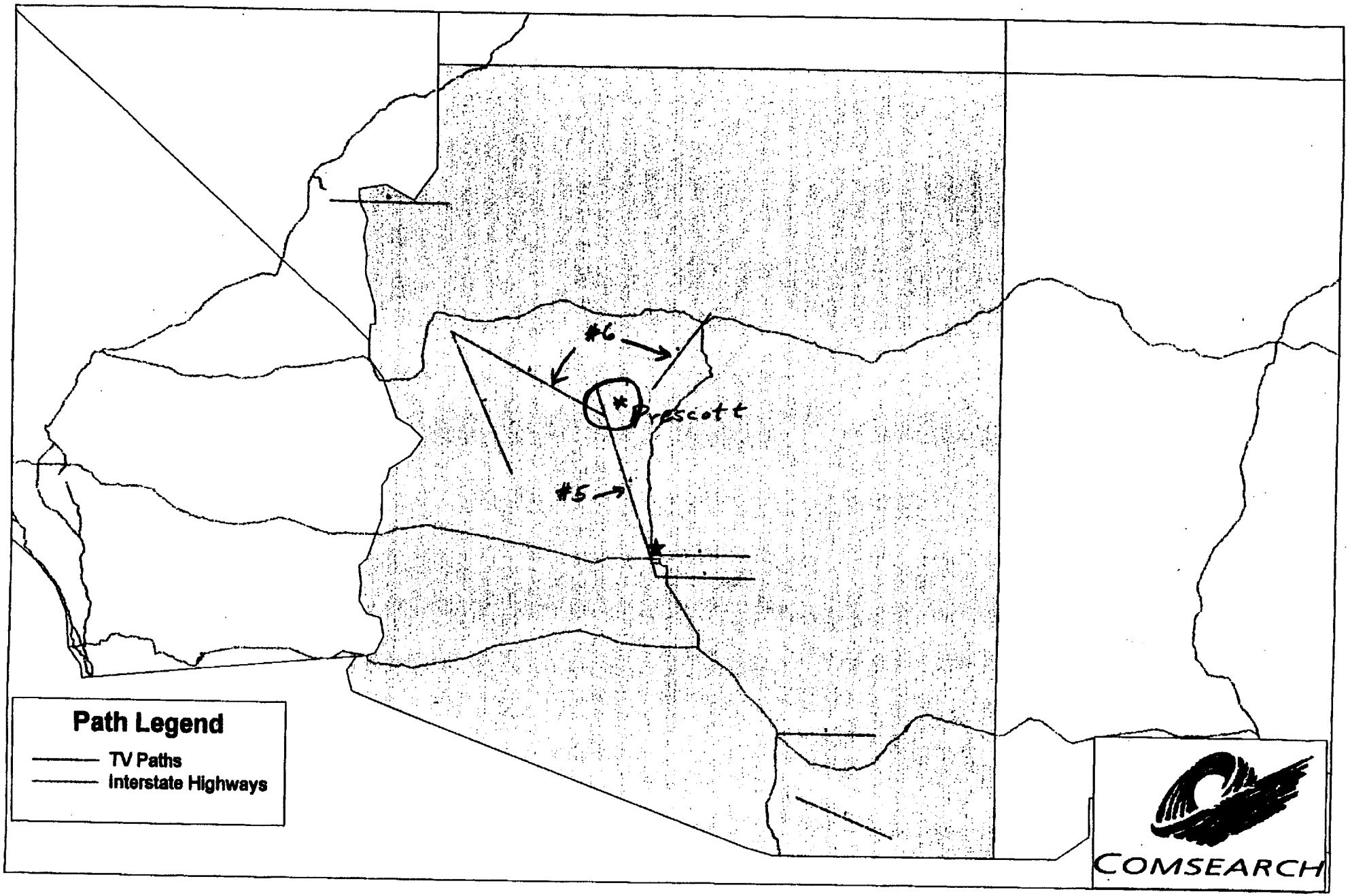
Exhibit 1

The proposed research program will collect propagation data at S-band which will be used in the development of the next generation mobile satellite communications systems. In particular, it is desired to obtain propagation data to be used to improve performance in vehicles and buildings. In order to evaluate the impact of such a requirement, a good understanding of the propagation environment at S-band is essential.

The propagation data will be obtained by installing transmitting equipment on an aircraft which will fly overhead a number of receivers in various locations on the ground to simulate the environment of a satellite communications system. Factors such as elevation angle and fading environment can be experienced. A horn antenna will be mounted on the underside of the aircraft fuselage and will have the ability to remain pointed at the receiving location on the ground throughout the experiment.

A large propagation database was collected in support of the Iridium system to define the propagation environment at L-band. Much of the L-band data can be scaled to S-band to provide preliminary results. There are, however, areas in the database where little data exists. The data collected in the proposed experiment will enable the validation of the scaling of L-band data to S-band and in addition, will obtain additional S-band data as necessary to complete the database.

1990 - 2025 MHz Terrestrial Microwave Paths in Arizona



2160 - 2200 MHz Terrestrial Microwave Paths in Arizona