The system for which this license is being submitted is a GPS repeater which will be used to checkout GPS time and position processing in equipment being flown by UTSI for NASA and NOAA for performing earth observations associated with global climate change and other environmental monitoring applications. As such the application is Experimental RNSS Test Equipment for the purpose of testing GPS receivers. The experiment hardware being developed by NASA Marshall Space Flight Center (contact: Dr Charles Laymon 256-961-7885 charles.laymon@nasa.gov NASA contract # NNM09AB71P) and NOAA Oak Ridge (contact: Mr Ed Dumas 865-576-3500 ed.dumas@noaa.gov NOOA Contract # NA09OAR4600160) either relies on aircraft GPS receivers for time and position or utilizes hardware integral to the experiment for processing this information. It is vitally important to check these systems out before rolling out of the hangar. In many cases the equipment must be installed and tested while the aircraft is partially disassembled and cannot be rolled out of the hangar. The GPS repeater allows these experiments to acquire GPS signals so we can test acquisition of GPS time and position. In these experiments, observations will be made from UTSI aircraft and the location of the aircraft noted by GPS positioning. Time will also be marked by GPS. This will allow comparison of results to other ground based or satellite based observations. . On the aircraft we are testing software that is acquiring GPS time, position and velocity information from a Garmin 530 GPS Receiver and a National Instruments PXI-6682 GPS receiver.