a.) Development of a high accuracy multi target doppler tracking and ranging radar system, using CW and FM to determine range and velocity of multiple targets simultaneously.

The system consists of multiple power amplifiers (96) independently feeding each element of a phased array, capable of phase angle control to allow electronic beam steering in addition to mechanical (servo driven pedestal) positioning.

A similar separate phased array antenna mounted on the same pedestal for receive, achieves similar characteristics in beam forming using digital post processing of the individual antenna outputs.

- b.) Objectives include; maturing the system into a low maintenance mobile product, which can easily be set up at a variety of air craft and or ballistic test ranges to provide hyper accurate flight or trajectory data to the end user.
- c.) The system is able to provide raw and processed data about the target trajectory with accuracy never before accomplished with this type of radar.