

DATA COLLECTION USING ADAPTIVE PHASED ARRAY



T.T. NOJI
AIL, a Division of Cutler-Hammer
Melville, N.Y.

ABSTRACT: Adaptive Ground Implemented Phased Array or AGIPA provides a rapid and cost effective means to read out and interrogate a very large number of earth based sensors. AGIPA locates an array in space but locates all of its beam forming and beam steering network on the ground; thereby providing multiple high gain beams to be formed with minimal complexity in space. AGIPA offers:

- Less total system cost by placing a high gain array on a central data collection system and reducing the cost of each of the thousands of sensors.
- Rapid data collection due to electronic beam steering as well as through formation of multiple beams.
- Nulling of unintentional RFI that can disable the entire data collection system.