



Gerald (Jerry) Charlwood

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“General Applications of AESA Radar Technology”

Abstract: In order to provide affordable radar systems that are capable of performing multifunction operations in harsh environments Active Electronically Steered Array approaches are required to meet today’s missions from Air Traffic Control to Air and Missile Defense. The flexibility of the AESA Tile based (or planar) packaging approach for radar implementation supports a wide range of applications with affordability as a key discriminator. Active Antenna technologies and packaging concepts developed at MACOM are providing an affordable approach to supporting these applications (Air Traffic Control, Weather tracking, Air and Missile Defense, Counter UAS). Specific mission driving requirements, affordability drivers and the resulting technology and manufacturing needs to meet these requirements for the future out to 2030 will be the focus of the discussion. The presentation will provide a look into future AESA needs.

Biography: Jerry has 33+ years of leadership in Systems Engineering, Program Management, Engineering Management, and Business Development/Capture Management related to sensor and weapons programs for Navy, Army, Missile Defense and Marine Corps programs including AESA radar, communications, ESM systems, navigation products, combat systems, ship and vehicle integration. Jerry is currently the Business Unit Director at MACOM developing AESA tiles for radar applications. Jerry earned his Bachelor of Science Degree in Electronic Engineering Technology from Wentworth Institute of Technology.