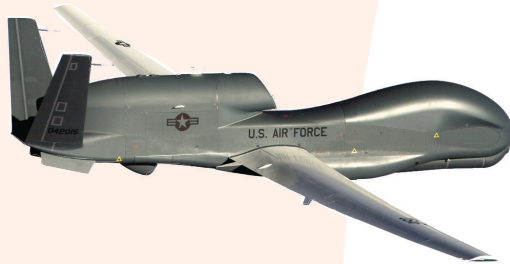
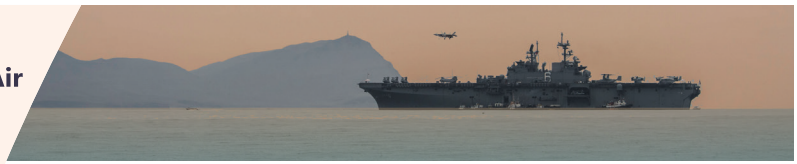


Supporting RF Systems on Land, on the Sea, and in the Air



## Synthetic Aperture Radar (SAR) Program and System Support Ku and X-Band

Synthetic Aperture Radars provide extremely high resolution imagery from long ranges in all types of weather, day or night. Microwave Applications Group (MAG) provides components for several well-known Synthetic Aperture Radar (SAR) systems.

MAG-designed and manufactured RF components are used on the following airborne SAR systems:

U.S. Air Force U-2 Aircraft ASARS-2 Advanced Synthetic Aperture Radar System;

U.S. Air Force RQ-4 Global Hawk UAV Synthetic Aperture Radar;

U.K. Ministry of Defence ASTOR Sentinel R1 Airborne Stand-Off Radar;

U.S. Air Force RQ-1 Predator UAV TESAR Synthetic Aperture Radar.

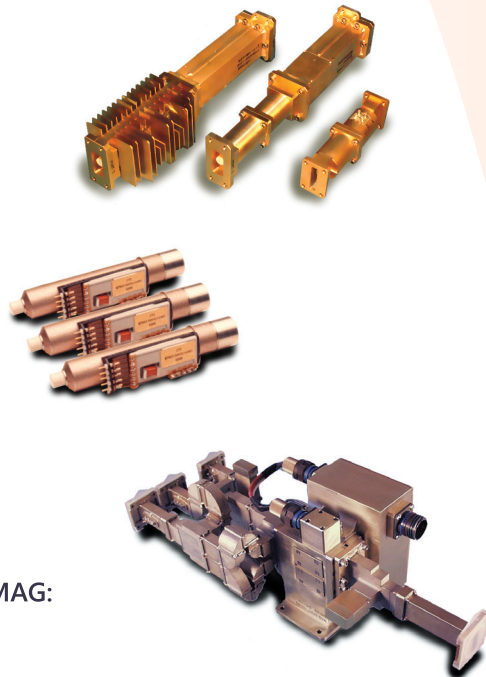
In addition to the aforementioned systems, MAG was at the forefront of the development of the B-1B APQ-164 radar system — which incorporates SAR capabilities — and continued support through the production phases of program. MAG continues support of this system into the 2020s.

SAR technology has been used worldwide in support of humanitarian missions in addition to its military role.

# Synthetic Aperture Radar (SAR)

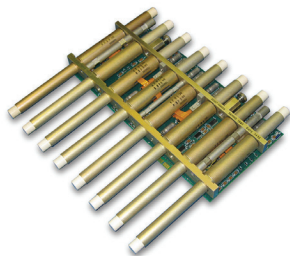
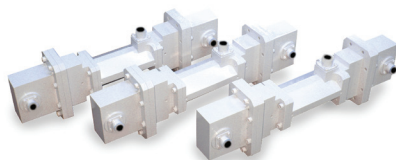
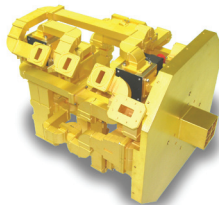
## Products produced by MAG:

Ferrite Phase Shifters  
Waveguide Switches  
RF Switches  
Circulators  
Isolators  
Rotators  
Resolvers  
Variable Power Dividers  
Waveguide Assemblies  
Electronic Drivers  
Beam Steering Computers  
Antenna Subsystems  
Attenuators  
Waveguide Feeds  
Waveguide Horns  
Rotary Joints  
Cable Assemblies



## System types supported by MAG:

Aircraft Landing Control  
Air Defense  
Warning and Control  
Surveillance and Tracking  
Synthetic Aperture Radar  
Fire Control  
Weather Observation  
High Altitude Surveillance  
Threat Identification  
Threat Simulation  
Test Range  
Range Instrumentation  
Reflectarray  
Laboratory  
Particle Physics  
Fusion Research  
Radome Testing



## Sample of programs supported by MAG as OEM:

APQ-164 B-1B ORS  
APQ-181 B-2  
APS-143 CP-140 Imaging  
APY-1/2 E-3 AWACS  
AR320 3D Air Defense  
ARTS-V1 / CLPS  
ARTS-V2  
ASARS-2 Synthetic Aperture  
ARSR-4 FAA Long Range  
ASTOR  
DWSR-2501C Doppler Weather  
Global Hawk Synthetic Aperture  
I-15/23 Reflectarray  
I-30 Simulator  
MPN-14K Landing Control  
PAAS Test Range  
Princeton Plasma Physics Laboratory  
RAC 3D Air Defense  
Skyshield 35 Air Defense  
Smart-L 3D Air Defense  
SPN-35C Approach Control  
SPQ-9B Surveillance / Tracking  
TPAAS Test Range  
TRS-3D Multimode  
TRS22XX 3D Air Defense  
ZPQ-1 Predator TESAR

## MAG DMSMS program support:

MPQ-64 Sentinel SHORAD  
APY-1/2 E-3 AWACS  
BMEWS / PAVE PAWS  
HAWK  
SPN-35C Approach Control  
MSQ-T43 MTE System

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