Module 1a Air War

Rule 30: SAR Radar

There are 2 types of radar units. SAR- Surface to Air Radar and GR- Ground Radar. Ground RADAR units have 2 modes of search; GSR- Ground Search Radar and ART- Artillery Counter-battery Radar. SAR units may only search for Aircraft (including Drones, Combat Air Support, and Helicopters). Ground Radar units may search for ground based enemy units and artillery fire. The Radar/FIST-V (RF) Ability Charts in the NATO and Warsaw Pact homepages list the available Radars. Active radar are detected by any EW unit in EW Range that is operating in ELINT mode.

A. SAR Surface to Air Radar

A SAR radar must be deployed to operate in search mode. It takes 1 complete player turn to deploy a SAR radar. Once deployed place a SAR radar counter face down on top of the Radar unit. When the owning player decides to activate the SAR unit the SAR counter is flipped to its operating side. A SAR unit may turn off the radar in any friendly player movement phase by flipping the SAR counter from it's active side.

Active SAR radar may be jammed by Radar Jamming EW units. If jammed place a RADAR Jammed counter on top of the Active SAR counter. Active SAR units may be subject to attack by HARM missile if a CAS aircraft with HARM ammunition comes within the attack range of the ammunition and the radar is active.

If the player wishes to move the SAR unit, it must deactivate. It takes one complete player turn to deactivate the SAR unit. The SAR unit may move on the next friendly player turn after deactivation.

1. SAR Spotting Procedure:

a. Refer to the appropriate line for the specific Radar type in the RF Ability Chart to determine the Maximum Detection Range (MDR).
b. If the target aircraft is within the MDR, determine what specific Range Category it is in; Close, Medium or Long. Each category has a value listed; 0, 2, or 4. The value to be used is determined by counting the specific range in hexes from the spotting unit to the target aircraft and cross-referencing this number with the Range Category to determine the appropriate modifier.
c. Determine the appropriate Base Spotting Value on the Aircraft Spotting Table. Subtract the Range Category Value (from step b.) from the Base Spotting Value to get the Final Spotting Value.
d. Roll the die and subtract the specific Aircraft Defensive Modifier (IR value for Helicopters) from the die roll. If this number is ≤ the Final Spotting Value (from step c.), the target aircraft is detected by the spotting Radar unit and may be fired on. *(SEE #3 below for RCS Option to Step d.)*
e. Terrain may block the Radar LOS to the target. Higher terrain between the Radar unit and the target aircraft blocks the radar.

2. **DATA Link:** The SAR radar may be data linked to nearby Anti-aircraft units. Anti-aircraft units within 2 hexes of a SAR radar spot any target aircraft detected by the SAR radar. AA units may engage these detected aircraft within the restrictions of the weapon type, LOS and range to target.

3. ***Optional RCS*:** RCS (Radar Cross Section) value may be used (See Aircraft Capabilities Chart) as a DRM to the spotting roll for aircraft. Roll the die and add the specific RCS Modifier Value to the die roll. If this number is ≤ the Final Spotting Value (from step c.), the target aircraft is detected by the spotting Radar unit and may be fired on. *Note: The NATO F-117 Nighthawk is a stealth aircraft and has a positive RCS value.*