

[2 Images](#)

ASIA PACIFIC

Date Posted: 27-Apr-2011

Jane's Defence Weekly

Taiwan 'could be first customer' for F-16 AESA radar

Reuben F Johnson *JDW Correspondent*

Rio de Janeiro

Taiwan's Republic of China Air Force (ROCAF) is pushing to be one of the first customers for an active electronic scanned array (AESA) radar retrofit as part of a comprehensive upgrade for its Lockheed Martin F-16 fighter aircraft.

The Raytheon Advanced Combat Radar (RACR) is one of the two models offered for an overall F-16 modernisation effort that is being considered by the ROCAF, US Air Force (USAF) and several export users. The other retrofit option is the Northrop Grumman Scalable Agile Beam Radar (SABR).

RACR is a derivative of the Boeing F/A-18E/F AN/APG-79 and F-15E AN/APG-82 AESA models and has been developed along two tracks by Raytheon - one variant for retrofit into older-model or new-production F-16s and the other for previous series-production model F/A-18s.

"The advantage that Raytheon has is our two 'hot' production lines that we have - the APG-79 and APG-82 models - are 90 per cent common with one another and create an economy of scale that allow us to offer the RACR at a competitive price," said Larry Seeley, part of the Raytheon team at the Latin American Aerospace and Defence (LAAD) expo supporting the F/A-18E/F bid in Brazil's FX-2 fighter competition.

By far the larger of the two potential markets for the RACR is the F-16, with additional near-term customers in the USAF, the Republic of Korea Air Force and the Republic of Singapore Air Force. Taiwan's ROCAF is an unusual case in that it has what are officially labelled F-16A/B aircraft, but are described as "F-16C/D Block 50 minus models" by Raytheon and technical specialists from other F-16 subcontractor firms.

This makes them more compatible with the technological demands of an AESA than an older, standard A/B configuration. Raytheon specialists told *Jane's* that they have designed an interface module that allows the RACR to "talk" to the main mission computer (MMC) for ROCAF and similar-generation F-16s, making it a non-invasive radar retrofit.

Sources in Taiwan told *Jane's* that the ROCAF does not view the upgrade of its existing F-16s as a substitute for a new batch of 66 F-16C/D aircraft that it has requested since 2007. Moreover, the ROCAF would be looking to procure these F-16s equipped "out of the box" with an AESA radar set already fitted.

"Given the increase of air power assets now aimed at them by the People's Republic of China People's Liberation Army Air Force, ROCAF defence planners view the two programmes - the upgrade of the current fleet and the purchase of new AESA-equipped aircraft - as a necessary 'stage one to be followed by stage two' actions and not an 'either or' proposition," a senior Taiwan lobbyist in Washington said.



An F-16 with the RACR AESA radar installed. (IHS Jane's/Michael J Gething)
1363876



A SABR AESA radar installed aboard a USAF F-16D. (Northrop Grumman)
1364147

Copyright © IHS Global Limited, 2011