

## DEFENCE

## Sky Master II workshare nears finish

Thales Airborne Systems is finalising workshare on its Sky Master II Airbus A320 airborne early warning and control (AEW&C) aircraft programme and has chosen Air France Industries for a major part of the mission system installation work.

Talks are meanwhile under way with Airbus over the European manufacturer's participation in the project and the provision of design data. Airbus will have to investigate the impact on the A320's handling characteristics of installing a large dorsal-mounted electronically scanned array radar on the forward fuselage, and perform windtunnel tests.

The AEW&C platform will also require a more powerful electrical supply and auxiliary fuel tanks in the cargo hold. "Air France Industries will be a partner working with us, the question is more to finalise the scope of the work," says Thales Airborne Systems AEW&C programmes director Yves Destefanis.

Thales is developing the Sky Master II as a competitor to the Boeing 737AEW&C equipped with Northrop Grumman's MESA radar and Raytheon's Airbus A321-based solution incorporating the Israel Aircraft Industries (IAI) Phalcon radar.

Thales says all the Sky Master II system, including the radar, electronic support measures, communications, command and control and self-protection equipment and satellite communications, can be produced in house, although "we are looking for partners" in specific markets.

■ The Phalcon airborne early warning system on offer to India is more advanced than that sold to China before US pressure sunk the deal, says Israeli sources. It is understood that the Phalcon's radar will have longer detection and identification ranges and the antenna will have improved transmit/receive modules.

## DEFENCE PAUL LEWIS / FORT CAMPBELL, KENTUCKY

## USA eyes Singapore's six Chinooks to cover losses

Command plans to rebuild and modernise remaining MH-47Es to MH-47G standard

The US Special Operations Command (SOCOM) is considering acquiring six Singapore Boeing CH-47D Chinooks as interim replacements for MH-47E helicopters destroyed or heavily damaged during recent operations in Afghanistan and the Philippines. The CH-47Ds would also provide fleet sustainment during the planned rebuild and modernisation to MH-47G standard.

The Singapore air force operates six CH-47Ds for training. It has since acquired 12 improved CH-47SD machines with a Honeywell glass cockpit and wants to standardise the fleet on this version.

SOCOM is looking at a number of options to bolster the dwindling number of MH-47Es available to

the 160th Special Operations Aviation Regiment, including converting standard US Army CH-47Ds. The Singapore machines are attractive as they are already structurally configured for the same enlarged 7,827 litre (2,070 USGal) fuel tanks as on the MH-47Es.

The MH-47E's extended endurance, along with an in-flight refuelling probe, uprated Honeywell T55-714A engines, 24,495kg (54,000lb) increased gross weight and terrain avoidance/avoiding radar, makes it the only US machine capable of effectively operating in the 3,050-4880m (10,000-16,000ft) terrain of Afghanistan's Hindu Kush mountains. Between October and December last year the MH-47Es

flew 90 6-10h missions into Afghanistan from the Karshi Khanabad air base in Uzbekistan.

This activity has taken its toll, with one MH-47E recently destroyed in combat and at least four machines so badly damaged they will require rebuilding. A second MH-47E recently crashed in the Philippines, while a 1996 loss has never been replaced. Boeing only built 26 of the special operations helicopters, as well as converting 11 MH-47Ds.

SOCOM plans to modify six helicopters a year with a yet-to-be-defined digital cockpit, survivability suite, low maintenance rotor hub, strengthened airframe structure and improved engines with infrared suppressor and cargo handling.

## AIR TRANSPORT MAX KINGSLEY JONES / SAO JOSE DOS CAMPOS

## Embraer works to keep 170 on track

Embraer flew the second pre-production 170 regional jet last week, as it battles to keep the certification programme for the 70-seater on schedule. The Brazilian manufacturer says it will provide an update on the flight-test programme by the end of this month, as it faces the prospect of a two-month delay to certification and first deliveries to its launch customer Swiss.

The first pre-series aircraft flew on 19 February, around eight weeks behind schedule, and has accumulated 39h of the 2,200 flight-test hours. The second aircraft flew on 10 April, painted in the colours of Swiss's predecessor Crossair, and the company intends to have all six test aircraft flying in the certification programme by the end of June.

Although it is still publicly committed to the original December target, Embraer now concedes it may have to delay certification. "If there is a slippage, it will be of the same order as the delay to the first flight," says Embraer's director of



The second pre-series Embraer 170 flew in Crossair colours on 10 April

170/190 programmes Luis Affonso.

Swiss is due to receive the first of 30 Embraer 170s by the end of the year, but delivery of the remainder is not due to begin until next March, says Affonso, "which helps us [if there is a delay]".

According to Affonso, Embraer will deliver around 30 170s next year, and production at its Sao Jose dos Campos plant will reach three a month by the end of 2003.

Development of the 78-seat 175

and 110-seat 195 is under way, with certification planned for mid- and late 2004 respectively. Although no orders have been announced for the 175, Embraer is moving ahead with the project and the first 175 will be among the initial batch of 15 Embraer 170s built. "We will roll out the first 175 in mid-2003," says Affonso. Embraer says 175 launch customer candidates include Air France, Alitalia, British Airways, and LOT.