Bombardier looks at bigger planes

MONTREAL – Bombardier sees “strong reasons” to go ahead with plans to build a bigger regional jet and invade the lowest rung of the Boeing and Airbus product line, according to Gary Scott, president of Bombardier’s new commercial aircraft program and a former Boeing executive hired by Bombardier.

Scott sees a niche for a regional aircraft with 100 to 135 seats because he thinks airlines are ill-served by the smaller airplanes of the two big aircraft manufacturers. The 53-year-old executive supervised the successful launch of two aircraft programs during nearly 30 years at Boeing.

Bombardier shelved plans to launch a bigger aircraft four years ago because of poor economics. But Scott said Bombardier can hope to produce a plane at least 20 percent more efficient because of technological advances. He is assembling a team of 300 engineers and aircraft experts in Montreal to complete a feasibility study on the C$2 billion project.

General Comments

By Carlo Kopp

In response to the critique published in HeadsUp 305, Chief of Air Force Air Marshal Houston submitted a response document to the Joint Standing Committee on Foreign Affairs, Defence and Trade. This is part 2 of a rebuttal.

• The criticism of inferior weapon delivery capabilities provided by tanker-constrained F/A-18A aircraft was challenged with the argument that only 16 F-111Cs are available from an inventory of 27 F-111s. Serviceability rates would further limit this number.

THIS argument presents three problems. The first is that serviceability rates of F-111C/G demonstrated in the most recent Red Flag deployment approached 100 percent and exceeded newer types deployed. In times of crisis, maintenance tempo increases. Therefore similar availability would apply. The second is that RF-111C aircraft will be Mil-Std-1760 capable and usable for precision weapons other than laser-guided. The third is that were the F-111 retained, the Block C-4 SIP computer presents an economical way to put a Mil-Std-1760 capability into the F-111G, and making all 27 funded F/RF-111C/G precision strike capable.

• The proposition that Australia needs an increase in strike capability was challenged with an argument that AEW&C, A330 tankers, an undefined “network effect” and an “improvement in data transfer” all somehow “dramatically increase” strike capability.

• The proposition that Link-16 and IDM networking equipment is becoming economical to retrofit into modern digital systems like the F-111C Block C-4 was challenged with a claim that “considerable effort was required to integrate the AGM-142 into the 1960s architecture” of the F-111.

THIS is a nonsense, insofar as the AGM-142/Block C-4 system was integrated into the 1990s design AUP system, not the 1960s AJQ-20 analogue system replaced a decade ago. Moreover, MIDS-LVT Link-16/TACAN terminals are designed to replace legacy TACAN with a single box, to minimise integration costs. IDM terminals are now available on a single VME card, hardware-compatible with the spare slots in the new Block C-4 computer. Comparing the integration of Link-16 and IDM networking terminals to the AGM-142 upgrade is misleading.

• The argument that adding new EWSP and networking to the F-111 was an incremental task was challenged with a lengthy treatise on the complexity of integration, with much emphasis on power, cooling and interfaces.

THE power and cooling demands of form fit replacement Link-16 terminals like the MIDS-LVT are designed to match the legacy TACAN box they replace, so this is simply irrelevant, while demands of VME-based IDM hardware are already covered in the Block C-4 SIP design. How complex any software might be is a function of how elaborate the sought functionality is – basic functions could be done for ~$3 million or less, for a total project cost of ~$17 million for 27 F-111s.

• The case of fitting the ALR-2002 warning receiver, designed to replace the legacy ALR-62, was challenged with the comment that “this ... is focused on physical dimensions and does not include the extensive cost and complexity of integration.”

SOME years ago the RAAF paid for the full design, integration and flight testing of the ALR-2002 under the Block C-2A upgrade. Is it now the case that Defence has somehow managed to lose the resulting engineering and flight test reports, that all of this effort must be repeated at full cost?

Mountains out of molehills

Carlo’s commentary

By Carlo Kopp

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