



BAE has already supplied technology like the M777 howitzer to Canada

for the pylon, which came from experience with the Hawk wing in a rapid engineering solution, the open architecture research we have been conducting since 2000, and experience with HERTI and Taranis,” said Chris Clarkson, ASFC’s Technical Director. He added that the mission system on board MANTIS is an evolution of that flown on the HERTI.

MANTIS UNVEILED AT FARNBOROUGH

The MANTIS program was officially unveiled at Farnborough in July 2008, although the design stage had started in late 2007 in response to a UK MoD requirement for a deep, persistent UAS ISTAR capability with additional potential for weapons carriage and release. At the earlier time, the project was being funded privately by BAE Systems, with a view to creating a UAS capable of taking on the MoD’s requirement for a medium altitude, long endurance (MALE) UAS within the overarching Project Dabinett ISTAR program. During the early part of 2008 a joint funding arrangement was agreed, and funds for the program have subsequently been provided partially by the MoD and partially by an industrial partnership, led by BAE Systems,



MANTIS features surveillance gear from Canada’s L-3 WESCAM

but also involving GE Aviation, Meggitt, QinetiQ, Rolls-Royce and Selex Galileo.

The air vehicle has a 22 metre wingspan, twin ‘pusher’ Rolls-Royce 250B17 turboprops and a targeted endurance in excess of 24 hours at altitudes over 40,000 feet, fitting it extremely well for the strategic persistent surveillance role. With a ‘T’ tail configuration, there is little attention paid to low-observable or ‘stealth’ characteristics, mainly due to the potential user requirement, according to Clarkson. “We looked at the Dabinett persistent ISTAR requirement and also looked at the way British forces are using the Reaper in Afghanistan. From this operational analysis we derived the system characteristics that

would meet the required mission parameters – stealth wasn’t a part of that, but defensive aids were, as was the man-portable surface to air missile threat,” he said. Corax, which does have some LO characteristics, was at first considered as a basis for the program, but subsequent analysis showed that the configuration which has become MANTIS offered the optimal balance between ISTAR utility, potential strike capability and stealth.

CUSTOMER SATISFIED WITH RESULTS

From its genesis, the MANTIS project was conceived as a spiral development program and the Spiral 1 air vehicle quickly took