

INVESTIGATION PAUL DUFFY / MOSCOW

# Crew errors cited in An-140 probe

Report says poor crew management of the approach and incorrect GPS use caused twin turboprop to crash in Iran

The Aeromist-Kharkov Antonov An-140 crash near Isfahan, Iran in December 2002 was caused by procedural navigation errors by the crew, says the report into the accident. All 44 people on board died when the aircraft hit high ground during the night descent towards Isfahan airport.

The Scientific-Technical Commission of the CIS Interstate Aviation Committee (MAK) report concludes that the main causes of the crash were poor crew management of the approach, and incorrect use of the aircraft's GPS satellite navigation system. Although the twin turboprop was being flown by test pilots, it had been

chartered to carry senior Ukrainian aerospace industry executives to a roll-out ceremony for the Iranian licence-built version of the type.

The crew were normally engaged on visual flight rules factory tests and had low recent experience in instrument meteorological conditions and long-range flights. For that reason, they carried a supernumerary navigator who had no workstation and was seated in the jump seat of the normally two-crew cockpit.

The report says the aircraft, its equipment and the airport's navigation aids were all serviceable as the new An-140 began its approach from a reporting point 110km

(60nm) from destination. The crew had made earlier visits to the airport, but in Antonov An-74s with different GPS equipment.

The An-140's GPS is specified as "unsuitable for approach" and was set in navigation mode, but the crew were using it as the sole approach aid, and ignored published procedures.

The night approach to runway 26R, intended to be visual, took place in haze, and the crew decided they would turn left to intercept a distance measuring equipment (DME) arc of 10nm (18.5km), but they used the GPS – not the DME beacon – to achieve the intercept. The GPS read 9.5nm for more than

3min despite the fact the aircraft was tracking to approach the DME arc and intercept it, and hit a mountain 33km from the beacon.

MAK says the crew made a number of errors, including:

- failure to apply approach procedures;
- incorrect reliance on the GPS, in breach of its operational requirements and their rating for its use on approach;
- failure to use information from other installed navigation equipment;
- failure to seek an alternative approach when they realised the GPS could not be giving a realistic DME readout.



JUSTIN WASTNAGE

## RENEWAL

## TransAirWays upgrades fleet

Mozambican domestic carrier TransAirWays is to take delivery of its second Beechcraft 1900C as it upgrades its fleet following an increase in the country's tourism. The Maputo-based carrier has a fleet of four refurbished Walter M601D-powered Let L-410 UVP turboprops (pictured) and a single 1900. The carrier will take a second 1900C this month as it expands domestically, and may take further aircraft soon.

## STRATEGY

## ASA to retire leased ATR 72s

Atlantic Southeast Airlines (ASA) will further thin its turboprop fleet this year by retiring seven leased ATR 72s, but the Delta Connection carrier's strategy is in limbo with a network planning review under way and 12 more ATR 72s to remain in service until 2007.

ASA is to return the first of seven ex-Air New Zealand ATR 72s to

lessors in October. The aircraft are not configured like the other 12 ATRs, says ASA president Skip Barnette, and their disposal will cut maintenance and training costs.

ASA is to rotate its remaining ATR 72s and Bombardier CRJ200s and CRJ700s into the Atlanta-based short-haul markets that were served by the outgoing turboprops.

CARGO JUSTIN WASTNAGE / LONDON

# Asiana eyes converted 747-400Fs to expand

Asiana Airlines aims to expand its cargo revenues by 65% over the next four years and is considering phasing out its Boeing 747-400 Combis as its freighter fleet grows.

The South Korean carrier obtains around 31% of its revenues from cargo flights, with 482,000t carried last year. Mann Woo Chang, Asiana general manager for cargo and services, says it aims to increase annual tonnage to 790,000t by 2008 and raise the cargo component of its revenues to 35%. Over the same period, the carrier will enlarge its freighter fleet by three 747-400Fs, taking its total to eight.

The first aircraft is a new-build to be delivered from Boeing in January 2006, with the remaining two to be converted from the carrier's fleet of six Combis in 2007 and 2008. Chang adds that Asiana may phase out the remaining four Combis in favour of dedicated freighters, with a decision due next year.

Asiana expects much of the growth to come from freight trade with China and Japan, but Chang admits much depends on the successful negotiation of new air ser-

vices agreements between the Seoul government and other Asian states.

As part of a cost-cutting exercise, Asiana has finished its roll-out of modular cargo management software, jointly developed with Indian software developer Kale Consultants, which acquired British Airways IT subsidiary Speedwing in 2001. The CSP software system will replace existing software and will lead to cost savings equal to 1% of Asiana's 2003 annual revenues of 840 billion won (\$600 million), says Dong Nam Choi, Asiana's senior vice-president for information technology.

Kale Consultants airlines division president Ashish Malhotra says there is still "significant resistance among carriers to shift from 'business-as-usual' systems in the cargo divisions, when there are more pressing investment requirements in passenger divisions".

Meanwhile, Chang says Asiana "has tried and failed" to join a cargo alliance several times, with opposition to its joining Star Alliance shadow cargo alliance, Wow, coming from Singapore Airlines.