

ANALYSIS: MA60's travails casts shadow on C919's prospects

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Xian Aircraft's call this week for the grounding of its problematic MA60 turboprop is another blow for Chinese airframers already struggling to gain the trust of the wider market, and could even cast a negative light on China's highly watched C919 narrowbody programme.

The grounding call on 26 February came after pilots of an Okay Airways MA60 encountered problems with the landing gear indicator. The crew had apparently lowered the turboprop's landing gear, but this was not shown on the indicator, leading to confusion on whether the landing gear was actually down.

Apologising after the incident, Okay Airways' president Liu Weining admitted that a problem with the aircraft's landing gear indicator had happened several times before.

This is far from the Chinese-made aircraft's first brush with danger. Flightglobal's Ascend Online fleets database shows that the MA60 had registered 13 accidents between 2009 and 2014. Of these, seven resulted in major aircraft losses.

Analysts Flightglobal spoke with say the market prospects for Xian Aircraft's upgraded MA600 and its in-development MA700 will no doubt be damaged by association to the unreliable MA60. When it launched the 70-seat MA700 last December, AVIC had said that the turboprop would be pitched against the ATR 72-500/600 and Bombardier Dash 8 Q400.

"Poor service record, both in terms of dispatch reliability and safety, for any aircraft type, will have potential consequences for future programmes from any manufacturer, particularly when that manufacturer has no real demonstrable track record historically in these areas," says Rob Morris of Flightglobal's Ascend advisory service.

Dubious record: MA60 accidents and fatalitiesFlightglobal's

	Total Losses	Major Damage	Minor Damage
2009	1	2	0
2010	0	0	0
2011	1	1	1
2012	0	1	1
2013	2	2	0
2014	0	1	0
	4	7	2
Year	Accidents	Fatalities	
2009	3	0	
2011	3	25	
2012	2	0	
2013	4	0	
2014	1	0	
	13	25	

Ascend on-line fleets database

More critically, the poor reputation of the MA60 could also potentially impact the market perception and sales prospects of Comac’s ARJ21 regional jet and C919 narrowbody. Both programmes are already under tremendous pressure due to the many delays in both development and certification. The ARJ21, for example, had its maiden flight in 2008, but its tired looking test aircraft are still struggling towards certification.

“Chinese OEMs face a considerable challenge to convince airlines that they can produce aircraft that benchmark against current products in the market today. Programme execution, in terms of delivering a safe design with competitive performance and economics and benchmark support to ensure dispatch reliability in excess of 99%, is key to this,” says Morris.

He adds that the C919 in particular needs to deliver on its design and commercial promises to prove to the market that Comac can deliver as it says.

Ray Jaworowski, senior aerospace analyst at Forecast International, says that though problems in the MA60 could influence perception among potential western customers for the ARJ21 and C919, each programme will ultimately “have to stand on its own”.

“Concerns among potential buyers could be assuaged by relatively problem-free flight test and development campaigns, achievement of FAA and/or EASA certification, and establishment of a global product support network,” he adds.

Orders for the ARJ21 and C919, though relatively healthy looking, are mostly from Chinese airlines and leasing companies. Comac is struggling to convince the FAA, which is conducting a shadow certification alongside the Civil Aviation Administration of China, that the ARJ21 meets

standards. So much so, that Comac could only be working towards Chinese certification for the C919, with achieving US FAA's endorsement being kept on the backburner.

Jaworowski adds that though the achievement of western certification is a long and costly road, it is a prerequisite for the penetration of western markets. It is however, not a guarantee of western sales as most would still stick to the tried and tested and keep to established airframers.

Chinese manufacturers clearly do not have the trust of the international market at present, and they can only achieve this by delivering on their promises. This is not unlike the path Airbus had to take in the 1970s.

“For Chinese airframers to succeed they have to create and then deliver on a promise that excites the market. This will require innovation and delivery. Trust is hard to gain and really easy to lose,” says Morris.

For the MA60, Xian Aircraft now needs to get its act together and make the necessary modifications to ensure safe operation of the turboprop. The turboprop will however remain a niche product with sales limited to Chinese operators and international markets with Chinese political influence. Flightglobal's Fleet Forecast predicts only a handful of annual sales through 2018, when production is expected to cease.

Ascend data shows that there are 80 MA60 and MA600 turboprops in the market. Of these, 30 are in storage.

Source: <http://www.flightglobal.com/news/articles/analysis-ma6039s-travails-casts-shadow-on-c91939s-396447/>