

EASA	COMMENT RESPONSE DOCUMENT
	EASA PAD No. 09-142 [Published on 17December 2009 and officially closed for comments on 14 January 2010]

Comment 1 sent by : Deutsche Lufthansa AG - Bigitte Gilles - 21/12/2009

Comment # 1

Due to the fact that Airbus confirmed, that the NLG with S/N B58, which is installed on one of our airplanes, was not affected by a towing incident, the PAD is not acceptable for us. Please remove the NLG P/N D23285101-7 with S/N B58 from the applicability of the upcoming AD, because this NLG is not longer affected form the requirements.

In case of AD issuance as proposed, a generic AMOC will be required for NLG S/N B58 to release of the mandated inspection requirements and allow landing gear replacement also between operators.

Please consider our comments.

EASA response:

Airbus informed EASA that an AMOC will be requested as soon as the AD is issued in order to cover this NLG S/N B58.

Comment 2 sent by:- Cathay Pacific. – Bharat Yadav– 06/01/2010

Comment # 2

MSN 126 was involved in a Towing incident whilst operated by Singapore Airlines in 1996. In that incident the tow bar detached from the aircraft and went under the NLG and got caught on the diaphragm/jacking dome with sufficient force to shear the attached bolts. There was no damage reported above the tow fitting. The gear fitted to this aircraft at the time was P/N D23581100-1 SN B124.

Airbus allowed the continuing operation of the NLG and the aircraft was subsequently delivered to Cathay Pacific (CX).

The gear was then removed for overhaul 9 years after the date of the original incident. During overhaul the gear was dismantled and all protective treatments

removed before the gear NDT tested. No defects were noted during the overhaul. The sliding tube was inspected and no irregularities were noted anywhere on the gear. MD issued a certificate of airworthiness and the gear was allowed back in to service.

After this point the NLG was fitted from Overhaul to CPA A340-300 Reg. B-HXA (MSN 136) and is currently in-service.

Cathay Pacific has since received AISB A340-32-4275 and VSB D23581-32-061 for inspection of the gear for residual stress caused by previously reported towing incidents. CX has compared the tests that are required against the area of confirmed impact on the NLG SNB124. The areas requiring inspection and testing in the VSB are all areas ABOVE the towing fitted. There are currently no inspections below the towing fitting.

It appears that the other aircraft towing incidents the tow bar detached and rode up the leg. Whereas in B124 case the tow bar went under the slider. The inspections areas and requirements currently listed in VSB D23581-32-061 are not applicable to the towing incident of B124. This information has been relayed to Airbus and MD. Also relayed to Airbus and MD or CX opinion that this inspection is not applicable on a gear which endured 9 years service after the original event and has since been overhauled and been in service for 5 years since.

MD has stated that they cannot remove the inspection requirement from the AD BUT will revise the SB to include an inspection that is applicable to the towing incident itself on gear SN B124.

Therefore Cathay Pacific request the following from EASA:

1. That SN B124 is removed from the applicability of this AD.

Or

2. That the AD is not issued until after MD have revised VSB D23581-32-061 to include an inspection that is applicable to the suspected area of impact of NLG S/N B124 towing incident.

3. The repeat inspection for protective treatment damage is not realistic in the case of NLG B124. The location in question will get damaged from the close proximity to the ground and FOD sprayed from the wheels. In the VSBs current form CX could prospectively be burdened with repetitive protective treatment application to allow the aircrafts continuation in-service.

Cathay Pacific therefore request that EASA review their request ensuring that the inspection if still required is applicable to the NLG SNB124. CX will not want to be left in a situation where the aircraft is grounded because of the lack of an applicable inspection procedure.

EASA response:

Comment not agreed.

As reported to EASA, the towing incident on A340 MSN 0136, which led to the jacking dome attachment bolts to shear, did not result in any reported

damage to the bottom of the Sliding Tube. Nevertheless, Airbus considers it is highly unlikely that the tow fitting and / or the tow bar did not contact the bottom of the Sliding Tube (area of concern) prior to passing beneath the Sliding Tube. Airbus explained that it was noted at the time of the incident that there was a concern about residual stress in the Sliding Tube and as a result of this, an ovality check of the Sliding Tube was carried out. Therefore, Airbus considers that this Sliding Tube should remain on the applicability list for inspection.

The area at risk is where the impact occurred, therefore Airbus is only concerned with the Slider OD which is covered by the inspection. Figure 3 of VSB D23581-32-061 shows the area to be inspected below the towing lugs centreline. Whilst Airbus is aware of the limitations of doing an 'on wing' MPI inspection in this area (given the complex geometry and lack of space to get a good biased magnetic field), Airbus indicates that a thorough inspection can be achieved using the articulated Yoke (Babb-Co type B310S or equivalent) specified in the inspection procedure combined with a thorough visual inspection of the substrate steel.

Therefore, EASA position is to maintain NLG S/N B124 in AD applicability and EASA consider it is not necessary for Airbus to develop a new inspection procedure.