

❖ NOTICE ❖



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TO: ALL MEMBERS

RE: LIQUID PENETRANT INSPECTIONS

Earlier this year the ALAEA was contacted by a member requesting advice on certifying Fluorescent Penetrant Inspections (FPI's) he had been performing for his employer. He and other LAMEs who had been performing FPI's were directed to certify the work under their Part 66 B1 licences. Based on his understanding of CASA's Guidance Material (GM) and Advisory Circulars (AC's), the member didn't believe this to be correct.

It has been relatively common knowledge in the industry that a B1 LAME has "privileges" to certify for Type II colour contrast Liquid Penetrant Inspections (LPI's) i.e., Red Dye, but not for Type I Fluorescent Penetrant. This is reflected in AC66-08 Section 3.4.3.6. It should be noted here that the AC also explains that colour contrast LPI's are not permitted to be used for final inspection of aircraft components or before the use of FPI's; effectively minimizing or eliminating their use in aviation maintenance.

Where the issue arises is in the text of the Part 66 Manual of Standards (MOS) 66.A.20 (a)4.(H). The MOS describes the following privilege.

*inspection using an NDT method — but only if **limited to liquid penetrant inspection** using aerosol-packed materials.*

[My emphasis]

This can arguably be interpreted that FPI is covered under the B1 LAME privileges – and this is what the member's employer has used for their direction.

We raised this discrepancy with CASA, and they responded with a detailed explanation, acknowledging the inconsistency between the MOS and the AC, and outlining CASA's policy and their interpretation of the privileges. (The full response is available on our [website](#) with this notice)

To summarise CASA's position.

- The B1 LAME's privileges only cover Type II dye penetrant (visible under ordinary light).
- Type I Fluorescent Penetrant Inspections require additional training under the control/oversight of a Level 3 qualified NDT person.
- NDT inspections using the visible colour contrast LPI method, are not to be used for final inspection of safety critical components, and not to be used before an inspection using fluorescent penetrants.
- If being performed in a Part 145 AMO, a Specialist Maintenance Authorisation is required to certify FPI's.
- If being performed in a CAR 30 approved organisation, a CAR 33B Airworthiness Authority issued by CASA is required.
- CASA will undertake a review to ensure clarity and consistency of information provided across the suite of documents.

If further information is required, please contact alaea@alaea.asn.au for advice.

Steve Re

ALAEA Trustee