



# EASA

European Aviation Safety Agency

# STC-modified products in relation to Airworthiness Directives

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# ADs for STC-modified Products

- STCs are approved to modify aircraft (aeroplanes and rotorcraft) or engines – some may even be approved to modify propellers.
- Consequently, an unsafe condition may be found to exist on such modified products, or may develop as a result of the STC modification.
- If a defect is found that causes the modified product to be in a condition below the acceptable safety standards, AD action can be considered to correct that condition.



# ADs for STC-modified Products

- Owners and operators of STC-modified aircraft are expected to maintain contact with the STC holder, for the purpose of receiving (updates of) instructions for continued airworthiness (ICA) related to the STC modification.
- Commission Regulation (EC) [1321/2014](#), Part M.A.302, paragraph (d)(ii), requires the implementation of those instructions into the approved Aircraft Maintenance Programme.



# ADs for STC-modified Products

- Commission Regulation (EU) [748/2012](#), Part 21.A.3B, paragraph c.1, requires the STC holder to develop instructions to detect and correct the condition and submit these to the Agency.
- After close cooperation with the affected STC holder (and having informed the TC holder(s) of the affected products), EASA will – unless the matter has a high urgency – issue a Proposed AD for public consultation, including reference to the STC holder's instructions (e.g. SB).



# ADs for STC-modified Products

- The STC holder's "SB" must be published before (P)AD issuance.
- Comments will be taken into consideration, answered, and published in a CRD as part of either:
  - PAD withdrawal (no AD); or
  - Final AD issuance.
- In case comments, or other information, lead to an increase of required actions, or an expansion of Applicability, or reduced compliance time, the PAD will be revised for further consultation.



# ADs for STC-modified Products

- Final AD will apply only to products that have the STC modification installed.
- Post-AD STC installations must have the AD actions (STC holder's instructions) incorporated.
  - If this is another mod, the STC must be updated, preferably before the AD becomes effective.
  - If inspections and corrections (no design change), or repetitive (life limit) replacement of parts, the actions must become part of the ICA of the STC for future installation of the STC.



# ADs for STC-modified Products

- EASA can issue or adopt “STC” ADs. These will be shown on our website as applicable to the STC holder and (where possible) the affected TC holder(s) product(s). Examples on our website:
  - [FAA AD 2016-14-10](#) CFM56 engines with STC SE00034EN
  - [FAA AD 2015-15-12](#) Airbus SA with STC ST00788SE
  - [EASA AD 2015-0179](#) Boeing 727 with STC SA4363NM
  - [EASA AD 2015-0154](#) Robin DR400 with STC EASA.A.S.01266
  - [FAA AD 2017-05-51](#) Bell 429 helicopters modified by STC SR00693DE
  - [FAA AD 2015-24-51](#) EC120B with STC SR00491DE



# STC as Alternative (AMOC) to AD (1)

- Scenario 1: An AD applies to “all s/n” of a product type design, but part of the fleet has been modified by STC, which makes compliance difficult or impossible – the AD does not exclude those products from having to comply.
- Suggested Action: STC holder develops method to address the unsafe condition, taking into account the configuration difference(s), and applies to have that method recognized as AMOC to the AD requirements.





## STC as Alternative (AMOC) to AD (2)

- Scenario 2: An AD applies to “all s/n” of a product type design, but it is found that an (existing or new) STC modification actually solves the unsafe condition, providing equivalent safety, but by a different method than the one required by the AD.
- Suggested Action: STC holder/applicant applies for an AMOC approval, recognising the STC as AMOC to the AD required action(s).



## STC as Alternative (AMOC) to AD (3)

- In both cases, the AMOC approval allows operators to demonstrate compliance with the AD, although not by using the method as specified in the AD.
- For a product already STC modified, an AMOC (scenario 2) approval can effectively mean an ‘exclusion’ from having to do what the AD requires – no exclusion from AD Applicability.



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## Any questions?

*AD compliance time is a reflection  
of the safety risk, not an invitation  
to delay action until the end of the  
compliance time*

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