

CAAIPS Advice on aircraft corrosion

Department for Transport – Civil Aviation Authority (CAA)

RPC rating: validated

The IA is now fit for purpose as a result of the regulator's response to the RPC's initial review. As first submitted, the IA was not fit for purpose.

Description of the measure

The measure will update the guidance on corrosion of aircraft structure in Leaflet 51-60 of the Civil Aircraft Airworthiness Information and Procedures (CAIIP) under the CAA Civil Aviation Publication (CAP) 562. In updating the guidance, the CAA hopes to improve the capability of engineers in identifying and dealing with aircraft corrosion. The change will bring the guidance on corrosion up to date, by including information on new technologies and practices for treating aircraft corrosion. The update also aims to make the guidance easier to read, by including supporting examples and images.

Impacts of the measure

The assessment states that parties affected will be engineers and operators that carry out regular airworthiness management or maintenance of general aviation aircraft, as well as aircraft owners and operators - most of whom are private individuals.

The CAA explains that the costs of the measure relate solely to familiarisation, and involve reading and understanding the new information provided in the leaflets. The information will be available for free online. The assessment conservatively assumes that all UK licensed engineers with current licenses will familiarise themselves with the updated guidance. The CAA estimates the time taken to read the updated guidance to be 1 hour, given that the document is 25 pages long. Based on an engineer's hourly wage rate with uplift of £35/hour, the assessment estimates a total maximum cost to industry of £24,500.

The CAA notes that a potential benefit of the measure would be an overall reduction in aircraft corrosion levels as a result of identifying and addressing corrosion early. The CAA claims this would reduce repair costs and improve airworthiness standards, with positive impacts on safety. The assessment also states that engineers applying

the updated guidance will deliver a higher quality service and thereby improve their reputation.

The RPC verifies the estimated equivalent annual net direct cost to business (EANDCB) of zero. This will be a qualifying regulatory provision that will score under the business impact target.

Quality of submission

Issues addressed following RPC's initial review

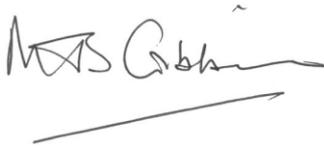
As initially submitted, the assessment included one issue that meant that the RPC did not consider it fit for purpose. The original submission contained a number of unjustified assumptions, such that the RPC was unable to validate the EANDCB. The resubmitted assessment takes a conservative approach and considers the 'worst case' scenario. The CAA now assumes that all 705 UK resident licensed engineers will read the updated guidance on corrosion. The initial submission assumed that 540 engineers would read the updated guidance. Furthermore, the CAA states that most engineers would read the guidance of their own accord, as a 'personal development opportunity'. The CAA has provided detail, in section 7 of the assessment, that as the businesses affected are independent licensed engineers it would be disproportionate to seek support from them. The CAA has used experts from its General Aviation Unit Design Surveyors team to support the assumptions made. The assessment states that "in this specific case the expert concerned has in excess of 20 years experience as an aircraft structures engineer." The RPC accepts for this particular case the use of such experts as a proxy for business support for assumptions made in these circumstances, where the alternative of seeking support from the business sector has been shown to be disproportionate. The assessment would have benefited from more emphasis on the use of the proxy within Section 5.

Departmental assessment

Classification	Qualifying regulatory provision (IN)
Equivalent annual net direct cost to business (EANDCB)	£0.0 million
Business net present value	-£0.04 million

RPC assessment

Classification	Qualifying regulatory provision (IN)
EANDCB – RPC validated ¹	£0.0 million
Business Impact Target (BIT) Score ¹	£0.0 million
RPC rating (of initial submission)	Not fit for purpose



Michael Gibbons CBE, Chairman

¹ For reporting purposes, the RPC validates EANCB and BIT score figures to the nearest £100,000.