

MESSAGE SENT TO ALL CAMs, FSRs, AND EMBRAER-OWNED AND AUTHORIZED SERVICE CENTERS

SUBJECT: EMBRAER CLEANING RECOMMENDATIONS FOR NOVEL CORONAVIRUS (2019-NCOV)

APPLICABILITY: ALL EMBRAER EXECUTIVE AIRCRAFT

DESCRIPTION:

The purpose of this notice letter is to inform operators of Embraer aircraft where to find proper cleaning procedures, following questions we've received about the outbreak of novel coronavirus.

Because of the current state of the virus with no scientifically proven measures for prevention or treatment, Embraer cannot recommend an interior air sterilization product, filter, or procedure that displays clear efficacy against the virus. Embraer recommends that operators reach out to their local authorities or the World Health Organization (WHO) for proper sanitary guidance.

All operators may find the standard cleaning procedures for Embraer aircraft in the relevant maintenance manuals, chapter 12 and 25 of AMM PART II:

Phenoms – Task 12-23-00-100-802-A INTERNAL AIRCRAFT – CLEANING
Legacy & Praetors – Task 12-23-02-100-801-A INTERNAL AIRCRAFT – CLEANING
Legacy 600/650 – Task 25-00-00-100-801-A – EQUIPMENT/FURNISHINGS CLEANING
Legacy 600/650 – IMCM-3980 – INTERIOR MANUAL – CARE AND MAINTENANCE
Lineage – Tasks 12-22-01/300 AIRCRAFT CLEANING – SERVICING

Airplanes must be sanitized according to the cleaning procedures available in their respective maintenance manuals, using the products mentioned in them. If there are no cleaning products mentioned in the AMM, we recommend the usage of Neutral Detergent – MIL-D-16791 Type I and Isopropyl Alcohol – TT-I-735I.

We recommend performing a thorough cleaning of the affected areas with detergent and water before applying the disinfectant products. The purpose of this is to clear the surface of debris that might shield the surfaces from the effect of the disinfectant solutions.

The health authorities generally recommend that the contaminated surfaces be cleaned with broad spectrum (bactericidal, fungicidal, and virucidal) disinfectants of proven efficacy. Some of these products are based on sodium hypochlorite or formaldehyde solutions, which may corrode the aircraft's metallic structure. As such, this kind of product should be avoided. In the event that a product with potential corrosion effects is spilled on or in the airframe, the spill should be flushed with fresh water and the area should be dried. After this, adequate corrosion prevention measures should be adopted, including the application of corrosion inhibiting compounds.

CABIN AIR

As the virus can be in the ambient air via coughing from an infected passenger, there's danger of it passing through the cabin air system. Therefore, as a preventive measure, we recommend that you do the following:

- Open the main door and the emergency door for adequate ventilation at least 2 hours before cleaning starts.
- Allow air to circulate in the cabin while the cabin is being disinfected, including the opening of all gaspers so that air circulates through all ducts, vents, inlets and gaspers.
- If any flammable material is used (for example, Lysoform), make sure to allow the interior of the aircraft to ventilate properly.
- Always be careful when applying a disinfectant product to the various delicate internal surfaces. Test the product on a non-visible area of the affected surface to ensure that there are no adverse effects. If an adverse effect is found, immediately stop using the disinfectant on the specific material to be tested.
- Use new microfiber and towel products when transitioning between sections of the aircraft. Do not transfer and use them from one area to another.
- Replace gloves, respirators and all towel products when moving to a different aircraft.
- All PPE and cleaning materials can be disposed in normal waste.

Note: Additionally, please refer to link below from NBAA. Here you will find the NBAA's recommendation, as well as procedures that other companies in the industry are implementing:

<https://nbaa.org/aircraft-operations/safety/coronavirus/aircraft-disinfection-coronavirus/>

Disclaimer: While these procedures are offered in good faith, no responsibility is accepted for claims arising from the procedures suggested.

For reference, please find below three relevant guides to hygiene and sanitation in aviation.

The European Union Aviation Safety Agency's advice for airlines and crew (SIB No: 2020-02, Coronavirus '2019-nCoV' Infections – Operational Recommendations):

<https://www.easa.europa.eu/newsroom-and-events/news/coronavirus-further-advice-airlines-and-their-crews>

The Federal Aviation Administration's health guidance for disease control and prevention for air carriers and crews:

<https://www.faa.gov/news/media/attachments/CDC%20FAA%20airline%20guidance.pdf>

The World Health Organization's "Guide to hygiene and sanitation in aviation":

https://www.who.int/water_sanitation_health/publications/aviation_guide/en/

As has been noted by the most up-to-date research on the virus, disease prevention procedures could differ from country to country. Embraer's recommendation is for operators to comply with the guidance provided by the medical and sanitary authorities in their countries of operation.