

SAFETY MEMO

To : AMO Employees
Date : 24th September 2020
Reference : GAM-S/ME/50/SEP20
Subject : COVID-19 PANDEMIC: AIRWORTHINESS GUIDELINES ON AIRCRAFT CLEANING AND DISINFECTION

1. Announce to all staff Galaxy Aerospace, Galaxy Aerospace (M) Sdn Bhd (GAM) Safety Department emphasize a procedure on aircraft cleaning and disinfection to ensure that while operating in the midst of this crisis, it is essential to maintain safety for both personnel and aircraft level.
2. This procedure draws on the information and guidelines from the **Airworthiness Guidance AG-6106 Issue 1 by Civil Aviation Authority Malaysia (CAAM)** and **Technical Airworthiness Advisory Circular TAAC-M-001 by Directorate General Technical Airworthiness (DGTA)**.
3. AMO's shall ensure all used disinfectants, in addition to disinfecting capabilities on the specific SARS-CoV-2, must be aircraft component compatible and does not have a negative effect on individual parts or structure of aircraft.
4. AMO's need to implement a preventive disinfection program that aims to disinfecting all fixed wing and rotary wing aircraft after any COVID-19 related task inclusive of casevac/meDEVAC/bodevac or whenever it deemed as necessary.
5. AMO's need to ensure disinfectant chosen will not have damaging effects on human health or aircraft in terms of:
 - aircraft structure (i.e. corruptions)
 - electronics and avionics (i.e. insulation of cables)
 - sensors (i.e. smoke detection)
 - interior (i.e. installations, seats, tabletop, serving tray, windows, galleys, toilet, stretcher bay)
6. Safety notes to be read thoroughly especially the usage of ethanol-based agents which are flammable and usage near proximity of oxygen system should be avoided.
7. Person involve in the disinfection process have to be properly covered or in suitable suit.

8. Before process of disinfection been performed, the helicopter/fixed wing must be quarantined for a period of minimum 3 hours. (aircraft involved with Post Helicopter Emergency Medical Service)
9. After helicopter interior has been disinfected, the helicopter shall be parked at open space with free flow of air. Temporarily open all the access door and windows of the helicopter. This lets dry air go through the helicopter.
10. Common cleaning, disinfection and safety measures for flight decks, passenger cabin and cargo compartments.
 - i. Cleaning and disinfection process should be done in accordance with the established operator's procedures.
 - ii. Operator may implement different cleaning and disinfection frequency based on a risk assessment which, considers the operational circumstances and the duration of the disinfecting effects of the substance used.
 - iii. Cleaning and disinfection agents used should be aviation approved. Refer to the original equipment manufacturer (OEM) instructions to ensure that the proper application, ventilation, and personal protection equipment is used. For more detailed recommendations or additional disinfecting chemicals, please contact the specific airframe manufacturer.
 - iv. Clean surfaces of dirt and debris before disinfecting to maximize effectiveness.
 - v. Do not spray cleaning or disinfection solution in the flight deck, passenger cabin and cargo compartment. Apply with pre-moistened wipes or single use wetted cloth.
 - vi. Cleaning and disinfection solutions are flammable, so precautions should be taken around potential sources of ignition.
 - vii. Currently, there is no data on the long-term effects associated with frequent application of the disinfection solution. Thus, the operator should periodically inspect the equipment to ensure that there are no long-term effects or damage over time. If damage is observed, contact the OEM for guidance on alternate disinfectants. Specific care should be taken for application on leather and other soft goods.
 - viii. Cleaning personnel should be adequately trained so they understand and respect the procedures that will ensure effectiveness of the cleaning and disinfecting agents, use the proper personal protective equipment, prevent contamination of other areas and minimize occupational health and safety risks to personnel, including ensuring adequate ventilation in confined areas such as lavatories.

11. Specific Disinfection Measures – Maintenance

- i. On the helicopters and fixed wing which install with the Integrated environmental control system (ECS), an Engine Ground Run (EGR) shall be performed. Operate the ECS for 15 minutes minimum with Aircon Disinfectant spray (Eg. Dettol Disinfectant Spray Morning Dew) applied in the cabin during

the EGR. This is to ensure disinfectant spray content has been recycled throughout the system and kills the germs, bacteria and viruses.

- ii. It is recommended that GAM staff include access panels and other maintenance areas in their disinfection procedures to ensure a safe environment for the maintenance personnel.
- iii. Engineering Manager (EM) must determine the number of personnel who need to contact high-touch surfaces such as access panels, door handles, switches, etc.
- iv. It is recommended that Engineering Manager (EM) establish maintenance procedures applied after disinfection procedures to check Flight Deck, Passenger Cabin and Cargo Compartments for correct positioning of control handles, circuit breakers and control panels switches and knobs. Access panels and doors closure also should be checked.
- v. Regarding aircraft filter maintenance, follow normal maintenance procedures as specified by the OEM. Please take note of special protection and handling of filters when changing them. Contact OEM or refer to OEM published documents to check if an additional sanitization procedure and/or personnel health protection is required to avoid microbiological contamination in the filter replacement area.

12. In the same regard, seeking all departmental head to disseminate this information to their subordinates and to paste this memo onto your respective notice board.

Reference:

- ICAO Council Aviation Recovery Task Force (CART) Report.
- CART - Take-off: Guidance for Air Travel through the COVID-19 Public Health Crisis.
- ICAO Doc. 10144 - Handbook for CAAs on the Management of Aviation Safety Risks related to COVID-19.
- CAAM, Airworthiness Guidance AG-6106 Issue 1.
- DGTA, Technical Airworthiness Advisory Circular TAAC-M-001.

Thank you,



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Safety Manager

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Quality Assurance Manager