Gulfstream

DOCUMENT NO:	SGER-548	PROJECT NO:	
REVISION STATUS:		DATE:	24-September-13
GAC CAGE CODE:	59734	MODEL:	G1159/A/B,G-IV,GV
		ATA NO:	20

GULFSTREAM AIRCRAFT FUMIGATION PROCEDURES

PROPRIETARY NOTICE

THIS DATA AND INFORMATION DISCLOSED HEREIN IS PROPRIETARY DATA OF GULFSTREAM AEROSPACE CORPORATION. NEITHER THIS DATA NOR THE DATA CONTAINED HEREIN SHALL BE REPRODUCED, USED OR DISCLOSED TO OTHERS WITHOUT THE WRITTEN AUTHORIZATION OF GULFSTREAM AEROSPACE CORP.

			Browntter
DEPARTMENT:	Service Engineering	TECHNICAL APPROVAL:	B. Stropnik
SECTION:	Mechanical Systems	TECHNICAL APPROVAL:	
PREPARED BY:	J. Sandt Asia	PROJECT ENGINEER:	P/. Alibbs
CHECKED BY:	B. Lum Bos		Maccan
			,,

REVISION APPROVAL

REV LTR	REVISED BY	APPROVED BY	DATE	REV LTR	REVISED BY	APPROVED BY	DATE

Gulfstream

Revision -

Section	DESCRIPTION OF CHANGE	

TABLE OF CONTENTS

1.0 Fumigation Procedures	3
1.A Preparation	3
1.B Application	
1.C Follow-on	
Figures	

1.0 FUMIGATION PROCEDURES

Aircraft are major distributors of insect stowaways. Almost 3,000 species belonging to 293 families of insects have been intercepted on aircraft. Pests that get aboard aircraft can cause damage to the aircraft as well as create health risks to the passengers. The following procedure outlines how to fumigate the Gulfstream cabin area, cockpit area and the baggage compartment.

The chemicals currently used in aircraft disinsection are based on two active ingredients, permethrin and d-phenothrin, currently recommended by the World Health Organization (WHO). The difference between permethrin and d-phenothrin is principally one of residual effect; permethrin is a residual pyrethroid and d-phenothrin a non-residual pyrethroid.

d-phenothrin works by treating the airspace within the cabin, and quickly kills small soft bodied insects which may be present. Permethrin (although slower acting) not only treats this same space, but also provides a fine residual coating to many of the internal surfaces. When insects come in contact with these treated surfaces they will be knocked down to the floor where they will receive a lethal dose.

A. Preparation

SPECIAL TOOLS AND TEST EQUIPMENT

Callington Haven 1-Shot Aerosol 150g (per AMS1450	OA)NSN 6840-66-131-2263			
Optional Approved Disinsectants				
Permethrin Insecticide - one shot (per AMS1450A)	PSA #216A			
Arrow Solutions A900 (per AMS1450A)	NSN 6840-99-220-4227			
Resperator	3M 5XP71 or Equivalent			
Rubber Gloves	Sol-Vex 37-155 or Equivalent			
Protective Clothing	US Tool 100530XX or Equivalent			
Safety Glasses	Uvex or Equivalent			

(1) References

- Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices
- G-IV reference includes G300, G400, G350, & G450.
- GV reference includes G500 & G550.

(2) Aircraft Preparation

- (a) Prepare aircraft for safe ground maintenance. See Safe Ground Maintenance Procedure, 20-00-00, Maintenance Practices.
- (b) Reference AMM procedures Pressurization Outflow Valve Operational Test to close the outflow valve prior to fumigation.
- (c) Use The Dsinsectant in accordance with manufacturer's instructions.
- (d) Place a WARNING NOTICE /Safety Barrier in position to tell persons that the aircraft will be fumigated.

10/02 (CG)

B. Application

CAUTION: ALL PERSONNEL NOT PARTICIPATING IN THE PROCEDURE MUST VACATE THE AIRCRAFT

DO NOT SPRAY ON FOOD STUFFS.

NOTE: The following procedure is for the use of Callington Haven 1-Shot Aerosol. If a different disinsectant is being used follow the manufactures directions for application.

- (1) Empty galley compartments and remove all loose equipment, foodstuffs from the aircraft.
- (2) Remove carpet and place protective covering over seats and conference table if equipped.
- (3) Open all storage areas, electronic equipment doors, pressure bulkhead/baggage, closets and lavatory doors.
- (4) If required starting at the entry way floor remove alternating floor boards down the center of the aircraft to include the below floor area in the fumigation.
- (5) Close external baggage door.
- (6) For GII, GIIB, and GIII aircraft perform Step 1.0 B(7) for GIV and GV aircraft proceed to Step 1.0 B(8).
- (7) Place 2 canisters of the disinsectant throughout the aircraft as follows. (reference figure 101). The aerosol shall be directed up in the aisle ways.
 - (a) Even with cabin window 1
 - (b) Just fwd of the baggage compartment door threshold
- (8) Place 3 canisters of the disinsectant throughout the aircraft as follows. (reference figure 102). The aerosol shall be directed up in the aisle ways.
 - (a) The base of the step box just aft of the cockpit
 - (b) Between Cabin windows 2 and 3
 - (c) Just Aft of the baggage compartment door threshold
- **WARNING:** Personnel must wear protective clothing; gloves, respirator, and eye protection to avoid injury / exposure to the insecticides.
- **WARNING**: Do not let insecticides get onto foodstuffs. Insecticides are poisonous. Do not spray them directly onto furnishings or cockpit instruments and panels. Insecticides can cause damage to furnishings and equipment.
- **CAUTION**: Ensure the aerosol/s are directed away from your body and walk away from area being treated. Avoid breathing the mist.
- (9) Working from the rear of the aircraft and moving to the main entrance door activate the aerosol cans. The aerosol shall be directed up in the aisle ways.
- (10) Exit the aircraft and close the main entrance door.
- (11)Leave aircraft closed for 4 hours.
- **NOTE:** The 4 hour time period is the minimum required in order to exterminate a large number of insects and their larvae.
- (12) From the outside of the aircraft open the main entrance door and external baggage door.
- (13)Place fans or equivalent in the door openings to force fresh air into the cabin and let aircraft vent for 5 hours minimum before re-entry.

10/02 (CG)

(14)After 5 hours operate the Environmental Control System for 1 hour to remove the residual insecticide vapors from the cabin and the cockpit. Crew entering the aircraft must be wearing suitable personnel breathing equipment.

NOTE: For GIV aircraft the radome will be required to be open during ECS run and equipment boxes in the radome area cleaned at the conclusion of the run.

C. Follow-on

- (1) Clean all interior surfaces to remove residue of spray. (Reference appropriate Aircraft Maintenance Manual and Cabin Maintenance Manual cleaning procedures).
 - All cockpit display units
 - All cockpit equipment and furnishings
 - All plastic surfaces and mirrors
 - All light alloy and steel components
 - All monitors and display screens in the cabin
 - All Galley surfaces
- (2) Install the galley equipment, and other equipment previously removed and close the storage areas.
- (3) Remove the WARNING NOTICE / safety barrier.
- (4) Inspect for presence of foreign objects.
- (5) Record all maintenance actions in accordance with current governing authorities.

10/02 (CG)

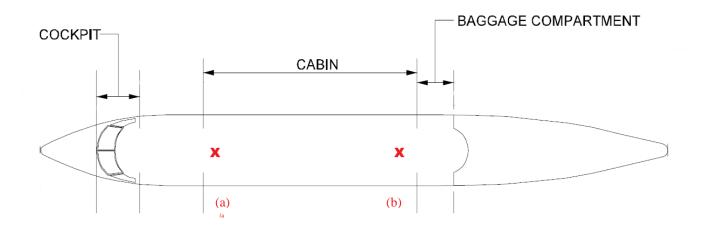


Figure 101 - GII / GIIB / GIII Canister Locations

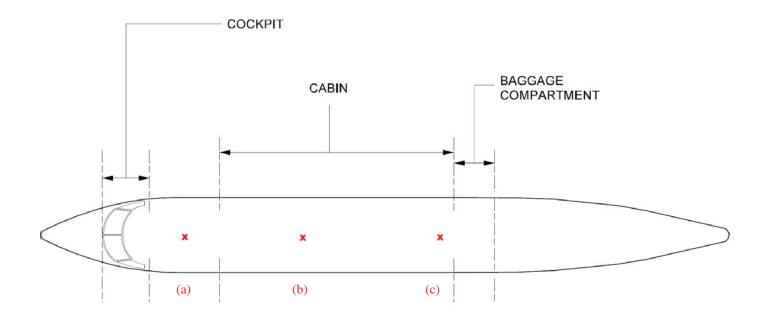


Figure 102 - G-IV / GV Canister Locations