Civil Aviation Authority of Sri Lanka

AVIATION SAFETY NOTICE

ASN No: 031	Ref No: Ops/2003/03	File Ref: Op/20/13/1

Recipients: **On line Carriers** — **For strict compliance**
Off-line carriers represented in Sri Lanka — For information
Chairman, AASL - -do-
Director General of Agriculture -do-
Director General of Health Services -do-
Chairman, AOC - -do-
Chairman, BAR - -do-
Chairman, SLAAR -do-

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01. Subject	:	**Disinsection of aircraft operating to Sri Lanka**
02.Nature	:	Compulsory
03. Issue No	:	02
04. Status	:	Replacement of ASN 006 dated 24 August 2001
05. Effective Date	:	With immediate effect
06. Validity	:	Until further notice
07. Contact Person	:	For more details about this ASN contact Mrs. Romany Lawrence-Hewa, Cabin Safety Inspector, Civil Aviation Authority at # 64,Galle Road, Colombo 3. Telephone No; 441523
08. Availability	:	A copy of this document is available at the Library of the Civil Aviation Authority for reference. (e-mail – caasl@srilanka.net)
09. Applicability	:	This is applicable to all International aircraft operating into Bandaranaike International Airport

10. Comments : Comments (if any) on the contents of this ASN may be forwarded to the contact person. However the ASN will come into effect on the date shown in the ASN notwithstanding any objection or comment made by any party unless and until an amendment to the ASN is issued afresh by this office.

11. Notice : Since the inception of international air transportation, there has been concern that insect vectors and the diseases that they transmit, might be introduced by aircraft into countries where such diseases were not previously found. The possible public health consequences of the importation of such insect vectors are as follows.

- If the insect vectors are infected, they may transmit diseases in the country of arrival. (eg. Airport malaria)
- The importation of an infected insect vector may result in the establishment of autochthonous transmission by a local insect vector.
- Introduced insect vectors may become established in the countries into which they have been imported, especially in tropical or semi-tropical areas.
- The introduction and establishment of an imported insect vector may necessitate a costly control programme.

There is abundant evidence that disease vectors are being imported into countries by aircraft and such vectors have transmitted diseases. Hence many countries have introduced regulations requiring comprehensive aircraft disinsection programmes as a measure of public health. Accordingly the ministry of health has sought the assistance of the Civil Aviation Authority to introduce disinsection of aircraft operating to Bandaranaike International Airport, Colombo, with immediate effect.

12. Action Required	:	**Aircraft Operators operating flights to Bandaranaike International Airport, Colombo, shall carry out aircraf disinsection as per the details given in the attachment hereto.**
13. Checklist	:	Not applicable

H M C Nimalsiri,
Director General of Civil Aviation and
Chief Executive Officer

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PRE- FLIGHT CABIN SPRAYING COMBINED
WITH TOP- OF- DESCENT SPRAYING

Any flight originating in or operating via, from any of the aerodromes located in the following countries shall carry out pre-flight (Blocks away) spraying, top-of-descent spraying and hold spraying in accordance with the instructions given below.

- Africa
- Asia
- Central South America,
- Oceania
- Middle East Countries

PRE-FLIGHT (BLOCKS AWAY) SPRAYING

1. A pre- flight spray must be applied to the flight deck, all toilets, lockers and crew rest areas before crew and passengers board, except where approval has been granted for the residual treatment of these areas.

2. Passengers shall be advised prior to disinsection to close their eyes and / or cover their faces for a few seconds whilst the procedure is carried out, if they feel that it may cause them any inconvenience.

3. To be effective, the aircraft air condition system must be turned off whilst spraying is carried out, and the crew must treat all possible insect harbourage including toilets, galleys, lockers etc. Overhead and side wall lockers are to be opened during treatment.

4. Holds and flight deck are sprayed prior to departure – the flight deck prior to boarding of flight deck crew. Cans used, should be retained in the aircraft for inspection.

5. Pre-flight spraying is to be carried out at the last port before departure to Colombo, Sri Lanka.

6. The aerosol to be used is 2% permethrin, with an approved propellant and solvent recommended for use by WHO. Cans should have discharge rate of 1 gram per second and mass medium droplet diameter of 8 micrometers with droplet diameters in the range of 3 to 10 micrometers. The recommended Can size is 100 grams, and the aerosol formulation must be clearly shown on the label. The propellant must be registered with the appropriate Authority * for use as a

propellant in the disinsection of aircraft cabins. All spray Cans must conform to the appropriate standard**.

7. Spraying, equating to a rate of 35 grams of formulation per 100m** (10 gm per 1000 ft**) is to be carried out as follows:

a) B747 or its analogues: Two personnel each using 2 x 100 g Cans for the formulation, starting at the rear of the aircraft and moving forward at a slow walking pace of not more than one step or one row per second, the spray being directed into the open lockers. The upper surfaces of each toilet interior should be sprayed for three seconds. (NB. A total of 4 x 100g Cans will be required to treat these areas)

A fifth 100g can be used to complete spraying of the lockers on the upper deck and for treatment of crew quarters (5 seconds) and upper deck toilets (for aircraft with upper deck only).

b) Airbus A 330/340 or its analogues: Only one Can to be used by each of the two personnel walking slowly from the rear of the cabin. Toilets and coat lockers are to be sprayed as mentioned in 7a. (NB. A total of 2x100g Cans should be fully used for this procedure). A pre flight cabin spraying could also be combined with " Blocks Away " treatment.

c) Boeing 777 or its analogues: Only one can to be used by each of the two personnel walking extra slowly fro rear of the cabin. Toilets and coat lockers are to be sprayed as mentioned in 7a. (NB. A total of 2x 100 g Cans should be used for this procedure.)

d) Airbus A320 or its analogues: Only one Can to be used by the crewmember walking at a slow pace of not more than one step or one row per second. (NB. A total of 1x100g Cans to be used for this procedure.) A second100g Can should be used for spraying the toilets (3 seconds), the flight deck (3 seconds) and for treatment of crew rests (5 seconds).

8. All Cans used for cabin pre- spraying and for hold spraying (along with Cans used for the top- of- descent cabin spraying) must be kept for Inspection by the relevant Authority ***The normal practise is for the empty Cans to be delivered to the quarantine office as soon as possible after the aircrafts' arrival.

Note: Cabin Crew or a company designated person should hand over the Cans to the relevant authority on the aircraft arrival into Colombo.

9. Approval has been given in some cases (eg. Australia) to a number of airlines to residually treat lockers, flight deck, toilets etc, in lieu of the pre-flight spraying requirements detailed above. Treatment must be carried out in accordance with an agreed protocol reflecting the WHO recommendations on disinsection of aircraft. Formulations used for this purpose shall be as specified for fully residual treatment of aircraft. Application rates must be sufficient to achieve an even pattern of close droplets on all surfaces, not necessarily to achieve total cover, and certainly not to produce run-off. (Note: These procedures are not to be confused with the alternative full residual treatment procedures for aircraft cabins).

10. In the event that scheduled flights arrive without the pre- spray having been undertaken, the following procedures must be observed.

    - If the cabin area has been sprayed at top of descent, no further spraying will be necessary.
    - If the cabin area has not been sprayed, the "on- arrival" spray of the cabin must be extended to include toilets, flight deck and the overhead lockers when cleared of passenger's baggage.

TOP OF DESCENT SPRAYING

1. Cabin disinsection shall be carried out at top of descent after an appropriate announcement is made over the public address system. The recommended text for such an announcement is as follows.
" **we wish to inform you , that in accordance with Sri Lankan Health and Agricultural Requirements, the cabin will be sprayed now conforming to the World Health Organization's standards for disinsection of aircraft, as a measure of preventing harmful insects entering into Sri Lanka. Please remain seated and keep the aisles clear while the aircraft is being sprayed."**

2. The insectcide formulation must be 2% d- phenthorin containing a propellant approved for use in aircraft. Cans and nozzles must be designed and manufactured to deliver an even distribution of spray at an emission rate of one gram per second and mass medium droplet diameter of 8 micrometers, with droplet diameters in the range of 3 to 10 micrometers. The aerosol formulation is to be clearly shown on the label. The propellant must be registered with the appropriate authority* for use as a propellant in the disinsection of aircraft cabins. All spray Cans must conform to the appropriate standards**.

3. The following procedures must be followed.

a)B 747 or its analogues: The spraying is to applied as near as possible to the ceiling by two members of the Cabin Crew, one walking along each aisle holding 2 x 100g Cans at a slow walking pace of not more than one step or one row per second starting at the rear of the aircraft. The upper deck can be disinsected by one of the crewmembers with the remaining crewmembers completing disinsection of the main cabin at the front of the aircraft. (NB. A total of 4x100g Cans should be used for the above procedure.)

b) A330/340: Only one can to be used by each person walking slowly from the rear of the cabin. (NB. A total of 2x100g Cans should be used for this procedure)

c) Boeing 777or its analogues: Only one can to be used by each of the two personnel walking slowly from the rear of the aircraft. (NB. A total of 2x100g Cans should be used for this procedure)

d) A320 or its analogues: Only one Can to be used by cabin crewmember walking at a slow pace of not more than one step or one row per second starting at the rear of the aircraft. (NB. A total of 1x100g Cans should be fully used for this procedure)

4. Empty or partly used Cans must be kept for inspection and removal by an officer of the appropriate authority* boarding the aircraft at the first port of entry into a country when their quarantine formalities will be undertaken.

5. **Scheduled Flights**: Spraying of cabins should be warred out at a rate of 10g per 1000ft**. (28m**)

6. **Spray amounts:** The volumetric capacity of aircraft may vary because of different configurations. The following table accordingly lists, estimates of spray and spraying times per B747. They are based on a standard spray rate of 1g per second and on the basis of a required coverage of 35g of the formulation per 100m** (10g per 1000ft**) in aircraft cabins.

AREA	AMOUNT OF SPRAY	SPRAYING TIME(sec)
Main Cabin	340	340
Upper Cabin	15	15
Extended Upper Deck	25	25
Lower Galley/Holds (Where applicable)	40	40
Flight Deck	10	10

7. Due to the large number of varying type of aircraft, local arrangements based on the prescribed volumes should be made. if the procedures have been carried out in accordance with these instructions, i.e., one step or one row per second, the correct amount of spray should have been applied irrespective of the size of the aircraft. Small aircraft such as executive jets and regular aircraft such as DC9, Fokker F27 and F28 will require a discretionary judgement but obviously relatively small amounts of disinsection.

* Appropriate Authority for registration of propellant:
**. Applicable Standards:
*** Appropriate Authority for Inspection: Authorised officials of Ministry of Health, Ministry of Agriculture or Civil Aviation Authority.