International Civil Aviation Organization

A38-WP/38
TE/4
6/6/13

WORKING PAPER

ASSEMBLY — 38TH SESSION

TECHNICAL COMMISSION

Agenda Item 38: Other issues to be considered by the Technical Commission

SUMMARY OF WORK UNDERTAKEN SINCE THE 37TH ASSEMBLY IN THE AREA OF NON-CHEMICAL DISINSECTION OF THE AIRCRAFT CABIN AND FLIGHT DECK FOR INTERNATIONAL FLIGHTS

(Presented by the Council of ICAO)

EXECUTIVE SUMMARY

Methods of aircraft disinsection are recommended by the World Health Organization (WHO) in order to reduce the risk of spread of insect, (vector)-borne disease from one State to another. The Standards contained in Annex 9 — *Facilitation* permit disinsection using only those methods recommended by WHO.

Assembly Resolution A37-14 requested the Council of ICAO to urge WHO to continue to explore advances in chemical and non-chemical disinsection methods; to compare the efficacy and safety of non-chemical disinsection with those of chemical-based methods; and to provide recommendations on acceptable disinsection practices.

Since the last Assembly, progress has been made concerning methods and testing of chemical disinsectants, and in providing updated recommendations on their use. The use of non-chemical disinsection methods remains under development.

Action: The Assembly is invited to:
a) note the work undertaken since the 37th Assembly;
b) note that Assembly Resolution A37-14 remains relevant; and
c) agree that any pertinent outcomes of new research into non-chemical methods should be reported to ICAO and/or WHO.

Strategic Objectives:	This working paper relates to the Safety, and Environmental Protection and Sustainable Development of Air Transport Strategic Objectives.
Financial implications:	The activities referred to in this paper will be undertaken subject to the resources available in the 2014-2016 Regular Programme Budget and/or from extra budgetary contributions.
References:	Doc 9958, *Assembly Resolutions in Force (as of 8 October 2010)* Annex 9 — *Facilitation* WHO International Health Regulations (2005)

1. INTRODUCTION

1.1 The disinsection of aircraft is a common practice undertaken by some States to reduce the spread of vector-borne diseases. The Standards contained in Chapter 2 of Annex 9 — *Facilitation* permit disinsection and require States to authorize or accept only those methods of disinsection recommended by the World Health Organization (WHO) and considered effective by the State involved.

1.2 WHO considers there is little evidence to support the hypothesis that chemical insecticides are harmful to humans when used in accordance with the manufacturer's instructions; however, some States have concerns that in certain circumstances they may cause discomfort and possible adverse health effects. The International Transport Workers' Federation has expressed similar concerns.

1.3 WHO, in collaboration with ICAO and the United States Center for Medical, Agricultural and Veterinary Entomology, Gainesville, Florida, considers the "air curtain" to be a possible alternative method to pesticides for preventing the transport of disease by insects (vectors) in aircraft.

1.4 The principle of the air curtain is that flying insects, such as mosquitoes, can be prevented from entering an aircraft by applying a brisk, fan-generated, flow of air from around the entry door and away from the side of the aircraft. Under experimental conditions it has been demonstrated to be 95 to 99 per cent effective. However, further research is necessary to demonstrate its effectiveness under operational conditions.

2. DISCUSSION

2.1 Since 2010, WHO has undertaken three initiatives concerning the prevention of spread of disease by insects in air transport.

2.2 In 2012, *Guidelines for testing the efficacy of insecticide products used in aircraft* was developed after peer review and expert consultation and posted on the WHO website. The aim of the guidelines is to provide specific, standardized procedures and criteria for testing the efficacy of products designed specifically for killing insects in aircraft, and to assist States in adopting health control measures under the WHO International Health Regulations (2005). They will facilitate harmonization of the testing procedures used in different laboratories and institutions in order to generate comparable data for registering and labelling such products by national regulatory authorities.

2.3 Guidelines concerning human safety with respect to chemical disinsectants are addressed in a WHO document titled *Generic risk assessment model for aircraft disinsection with chemical insecticides*. This is currently available in draft format on the WHO website for public and peer review. It is expected to be finalized during 2013. When finalized, the document will provide generic models that can be used for risk assessment of exposure to insecticide products for aircraft disinsection and will harmonize risk assessments undertaken by national regulatory authorities.

2.4 WHO has also been addressing the control of vectors in and around airports, on the basis that if successful control is achieved, the requirement for aircraft disinsection is diminished. Further information is awaited from WHO.

3. CONCLUSION

3.1 Since the 37th Assembly, progress has been made in standardizing the efficacy and safety testing of chemical disinsectants.

3.2 The results of further research concerning the use of the “air curtain”, or other methods of non-chemical disinsection, are awaited.

3.3 Further information on chemical and non-chemical disinsection should be available by the 39th Assembly, planned for 2016, and will be presented at that time.

— END —