International Civil Aviation Organization

WORKING PAPER

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ASSEMBLY — 36TH SESSION

EXECUTIVE COMMITTEE

Agenda Item 18: Passenger and crew health and the prevention of spread of communicable disease

NON-CHEMICAL MEANS OF DISINSECTION FOR THE AIRCRAFT CABIN AND FLIGHT DECK

(Presented by the International Transport Workers' Federation)

EXECUTIVE SUMMARY

The International Transport Workers' Federation (ITF) represents unionised aviation workers around the world and speaks for millions of aviation employees globally. The day-to-day safe and secure operation of air transport worldwide depends on their skills and commitment.

This paper reviews the issue of aircraft disinsection. Non-chemical methods of disinsection have recently been developed, offering Contracting States means to enforce their foreign quarantine regulations without exposing aircraft passengers and crewmembers to insecticide sprays. The option for a non-toxic alternative is important because the sprays have been associated with adverse health effects to passengers and crewmembers.

Action: The Assembly is invited to:

a) consider requesting that the Secretary General request and recommend that the World Health Organization (WHO) take the lead in convening an international scientific symposium in consultation with ICAO. The specific intent of the symposium would be to bring together parties on the subject of non-chemical disinsection for an information exchange and discussion to further discuss the efficacy and feasibility of implementing these methods;

b) consider including in this symposium scientific experts on methods of non-chemical disinsection, representatives from Contracting States that require disinsection, the WHO, ICAO, personnel representatives, airlines, aircraft manufacturers, and manufacturers of non-chemical disinsection equipment; and

c) consider issuing Standards for Contracting States that continue to rely on spraying insecticides in the passenger cabin and flight deck, requiring airlines to notify passengers of chemical spraying practices prior to ticket purchase so that individuals can decide if the health risks associated with exposure are acceptable.

Strategic Objectives:	This working paper relates to Strategic Objectives A, B and C. It will further Strategic Objective A and B by ensuring that crew members are not exposed to toxic disinsectants and complements Strategic Objective C by reducing toxic emissions from aircraft spraying.
Financial implications:	To be determined.
References:	ICAO Resolution A35-13; ICAO FAL/12-WP/61; ICAO FAL/12-WP/69, and 35th General Assembly WP/176

[1] English, French and Spanish versions provided by the International Transport Workers' Federation

1. INTRODUCTION

1.1 The International Transport Workers' Federation (ITF) recognizes the importance of measures to control the transmission on board aircraft of insects that might have an adverse effect on human health, animal health, agriculture, or the environment. It continues, however, to be seriously concerned about the impact of current spraying procedures on the health of aircraft passengers and crewmembers.

1.2 To this end, the ITF is pleased that the United States Government has developed and tested non-chemical methods of disinsection that Contracting States can apply on aircraft, such that quarantine concerns are addressed and aircraft passengers or crewmembers are not exposed to insecticide sprays.

2. BACKGROUND

2.1 In 2003, the Department of Transportation (DOT) formed an inter-agency working group comprised of representatives from seven government agencies[2] to discuss the potential for non-chemical means of aircraft disinsection. The DOT was responding to concerns raised by crewmember associations, passengers, and government agencies regarding the documented health impact during and following exposure to insecticide sprays on board commercial aircraft.

2.2 Around that time, the California Department of Health Services (now called the California Department of Public Health) was finalizing its report on an investigation into the acute health effects associated with exposure to insecticide sprays, as reported by crewmembers' physicians. The report concluded that the aerosol application of insecticides in the confined space of the aircraft cabin poses a health risk to cabin crewmembers; that non-toxic alternative methods should be employed; and that, in the interim, airlines should mitigate crewmembers' exposure to insecticides (Sutton, 2007; CADHS, 2003). The report also acknowledged the potential long-term health effects associated with repeated low-level exposures to aircraft insecticides, as experienced by cabin crewmembers.

2.3 Starting in 2004 and in conjunction with the DOT, the Department of Agriculture (USDA) developed and tested non-chemical methods of disinsection. Specifically, researchers constructed a test rig intended to simulate the configuration of a typical passenger aircraft, and then tested the efficacy of treated net curtains at the "service doors" and air blowers at the "passenger boarding door" at repelling flying insects in repeated trials. The air curtains were found to be highly effective (Carlson, 2006). The net curtain trials are in progress and appear promising.

2.4 The non-chemical methods developed and tested by USDA can be applied, either prior to departure for a country with insect quarantine concerns (to prevent flying insects from boarding an aircraft), or upon arrival in a country with insect quarantine concerns (to contain any onboard flying insects).

2.5 The ITF notes that at the 35th Session of the ICAO Assembly in 2004, the Assembly requested the Council to assist the World Health Organization (WHO) in evaluating non-chemical approaches to aircraft disinsection, encourage the exploration of non-chemical approaches to aircraft disinsection of the cabin and flight deck, and report on the implementation at the next ordinary Session of the Assembly.

[2] Centers for Disease Control & Prevention; Department of Agriculture; Department of Defence; Environmental Protection Agency; Federal Aviation Administration; State Department

2.6 The ITF also notes that in 2006, the WHO formed a Transportation Strategic Advisory Group (SAG) intended to advise the WHO on travel and health issues. ICAO is a member of this group. At its first meeting, members agreed that aircraft disinsection methods need to be reviewed.

2.7 There is a need for a scientific symposium to recognize non-chemical methods as the preferred method of complying with quarantine rules after more tightly defining the application methods to ensure both efficacy (insect control) and feasibility (airline operations). The symposium would also aim to facilitate partnerships between Contracting States that require aircraft disinsection and experts on the practical application of non-chemical methods, enabling airlines in those States to implement non-chemical methods, thereby avoiding the costs of chemical injury to crew and passengers and potentially increasing tourism. An ICAO resolution calling for a symposium would foster efforts to procure external funding for the event.

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