FAA / OSHA Aviation Safety and Health Team

First Report

Application of OSHA's Requirements to Employees on Aircraft in Operation

December 2000

FAA/OSHA Aviation Safety and Health Team (First Report)

Table of Contents

Executive Summary.	<i>ii</i>
Introduction.	iv
Discussion.	1
Issue 1 - Recordkeeping	2
Issue 2 - Bloodborne pathogens.	6
Issue 3 - Noise.	11
Issue 4 - Sanitation.	14
Issue 5 - Hazard communication.	
Issue 6 - Anti-discrimination.	22
Issue 7 - Access to employee exposure/medical records	25
Matters for Further Consideration.	

Appendices.

A.	FAA/OSHA Memorandum of Understanding, August 7, 2000.	. 29
B.	FAA Federal Register Notice, July 2, 1975.	.32
C.	FAA Federal Register Notice, October 4, 1999	. 34
D.	OSH Act of 1970, § 4 (b) (1).	. 39

Executive Summary

On August 7, 2000 the Federal Aviation Administration (FAA), U.S. Department of Transportation (DOT) entered into a Memorandum of Understanding (MOU) with the Occupational Safety and Health Administration (OSHA), U.S. Department of Labor (DOL). The purpose of the MOU is to enhance safety and health in the aviation industry. In the MOU, FAA and OSHA agreed to establish a joint team (FAA/OSHA Aviation Safety and Health Team) to identify the factors to be considered in determining whether OSHA requirements can be applied to the working conditions of employees on aircraft in operation (other than flight deck crew) without compromising aviation safety.

The MOU calls for the joint team to produce a first report, within 120 days of the date of execution of the MOU, that addresses whether and to what extent OSHA's existing standards and regulations on recordkeeping, bloodborne pathogens, noise, sanitation, hazard communication, anti-discrimination, and access to employee exposure/medical records may be applied to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety.

This report fulfills the objectives identified in the MOU. It is not intended to modify, supplement, or replace any federal standard, policy, or legal interpretation. Matters for further consideration are included to provide a framework for addressing the ultimate goals established in the MOU.

With respect to the seven subject areas, the joint team reached the following conclusions regarding the impact of applying the relevant standards and regulations on the safety of aircraft in operation:

1. Recordkeeping.

OSHA's existing regulations on recording and reporting occupational injuries and illness are applicable to all employees in the aviation industry. Compliance with these regulations does not implicate aviation safety concerns.

2. Bloodborne Pathogens.

The requirements of OSHA's bloodborne pathogens standard concerning hepatitis B vaccinations, personal protective equipment (PPE), and exposure training could be applied to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. However, OSHA requirements that necessitate engineering and administrative controls may implicate aviation safety and would need to be subject to FAA approval.

3. Noise.

The training and testing requirements of OSHA's standard on occupational exposure to noise could be applied to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. However, requirements that necessitate the use of engineering

and administrative controls and PPE would implicate aviation safety concerns. Any such controls should be subject to FAA's approval.

4. Sanitation.

Since OSHA's sanitation standard is flexible and performance-oriented, it could be applied to aircraft in operation without compromising aviation safety. However, sanitary conditions on aircraft are regulated by several federal agencies in addition to FAA, and any consideration of applying OSHA requirements must be informed by a discussion of the effects of multi-agency regulation.

5. Hazard Communication.

Compliance with OSHA's Hazard Communication Standard would not compromise aviation safety. Under the various circumstances the team has considered, employers could comply with the standard's requirements while remaining sensitive to flight safety concerns.

6. Anti-discrimination.

OSHA's anti-discrimination provisions could be applied to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. Although the OSH Act has been interpreted to provide employees with the right to refuse to perform work tasks in certain limited situations, the team can conceive of few scenarios in which a safety or health hazard associated with the standards considered in this report would present the immediacy and degree of danger required to justify a work refusal protected under the OSH Act.

7. Access to employee exposure and medical records.

OSHA's standard on access to employee exposure and medical records does not regulate working conditions. Compliance with the standard does not compromise aviation safety.

Introduction

A. The Occupational Safety and Health Administration's Authority Over Working Conditions.

The Occupational Safety and Health Act of 1970 (the "OSH Act") was promulgated in part to assure, so far a possible, every working man and woman in the Nation safe and healthful working conditions. To achieve that goal, Congress delegated broad, general authority to the Secretary of Labor to regulate the working conditions that affect the occupational safety and health of the Nation's employees. However, Congress also recognized that other federal agencies similarly exercise limited authority to regulate the working conditions of certain employees. Section 4(b)(1) of the OSH Act provides that nothing in the OSH Act "shall apply to working conditions of employees with respect to which other Federal agencies ... exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health." Thus, OSHA is preempted from exercising its authority under the OSH Act if another federal agency has been granted statutory authority to regulate the relevant working conditions, and the other federal agency has exercised its authority in a manner such as to exempt the cited working conditions from OSHA's jurisdiction.

B. The Federal Aviation Administration's Exercise of Jurisdiction over the Working Conditions of Aircraft Crewmembers on Aircraft "In Operation."

On July 10, 1975, FAA published guidance information in the Federal Register that detailed FAA's role with respect to occupational safety and health conditions affecting aircraft crewmembers on aircraft in operation (40 FR 29114). In the Federal Register statement, FAA determined that its authority to promote the safety of civil aircraft operations "completely encompass[ed] the safety and health aspects of the work environments of aircraft crewmembers." As a result, FAA concluded that, with respect to civil aircraft in operation, the "overall FAA regulatory program ... fully occupies and exhausts the field of aircraft crewmember occupational safety and health."

C. OSHA's Present Authority to Regulate the Health and Safety of Employees in the Aviation Industry.

Given FAA's stated exercise of its legislative authority (see 40 FR 29114), OSHA historically has not attempted to enforce the provisions of the OSH Act with respect to employees on aircraft in operation. Where FAA has not preempted OSHA from enforcing its standards and regulations, OSHA generally has exercised its authority with respect to the working conditions of aviation employees.

D. Efforts to Address Working Conditions for Crewmembers on Aircraft In Operation.

Since FAA published its Federal Register statement, FAA and OSHA have made several attempts to address occupational health and safety issues that concern aviation industry employees, including crewmembers on aircraft in operation, by negotiating Memoranda of Understanding ("MOU"). However, these attempts proved to be unsuccessful because of the

complex and interwoven nature of the aviation safety issues and the occupational safety and health issues that are associated with the working environments of these employees.

FAA has issued regulations and guidance material that directly affect the workplace of flight attendants and other persons whose workplace is on an aircraft in operation. Among the FAA rules that address cabin safety are regulations designed to protect crewmembers. These regulations address slip-resistant floor surfaces; flight attendant duty period limitations and rest requirements; flight attendant initial and transition training requirements; protective breathing equipment for crewmembers; emergency exits used by crewmembers; crewmember seatbelts; toxicity and other characteristics of materials in the crewmember workplace; noise reduction; smoke evacuation; carbon monoxide, carbon dioxide and cabin ozone concentrations; ventilation, heating, and pressurization; first aid, emergency medical equipment, and protective gloves; and prohibition on interference with crewmembers. The FAA advisory materials address issues such as radiation exposure of air carrier crewmembers, air carrier first-aid programs, and exposure to bloodborne pathogens.

In spite of these efforts to make the aircraft cabin safer for crewmembers, FAA acknowledges that it has not promulgated enforceable regulations to address all employee safety and health issues associated with working conditions in and around the aircraft.

In the spring of 1999, FAA met with OSHA regarding the effect of FAA's jurisdiction over occupational health issues related to employees on aircraft in operation. The goal of the two agencies was to review the working conditions of crewmembers to see if OSHA regulation would be appropriate without compromising aviation safety. FAA held a public meeting on December 10, 1999 entitled "Occupational Safety And Health Issues for Airline Employees" to elicit comments from the regulated community and other interested parties.

FAA ultimately determined that the workplace for crewmembers (on board civil commercial aircraft) differs significantly from the workplace of non-aviation workers and that FAA must take the lead in promulgating regulations to address these concerns. FAA determined that it would propose modifications to address these occupational safety and health issues through the regulatory process.

E. Execution of the Memorandum of Understanding ("MOU").

In June 2000, members of Congress urged FAA and OSHA to work together to address the working conditions of crewmembers on aircraft in operation. On August 7, 2000, FAA and OSHA signed a Memorandum of Understanding that provided that FAA and OSHA would work collectively to enhance employee safety and health in the aviation industry. In the MOU, FAA and OSHA agreed to establish a procedure for coordinating and supporting enforcement of the OSH Act with respect to the working conditions of employees on aircraft in operation (other than flight deck crew) and for resolving jurisdictional questions.

F. Scope of the MOU.

The MOU considers the application of OSHA requirements with respect to seven health and safety issues of concern to employees on aircraft in operation. The phrase "in operation" is

defined in FAA's 1975 Policy Statement to include an aircraft with at least one crewmember on board. Therefore, the scope of the MOU includes crewmembers (defined by FAA's regulation at 14 CFR § 1.1 as persons "assigned to perform duty in an aircraft during flight time") on the aircraft, as well as those employees who perform servicing and maintenance activities in the aircraft while at least one crewmember is on board. Flight deck crew are excluded from the scope of the MOU.

G. Actions Taken to Date Pursuant to the MOU.

Pursuant to the MOU, FAA and OSHA established a joint team made up of representatives from FAA and OSHA. The joint FAA/OSHA Aviation Safety and Health Team (the "joint team") has examined OSHA's provisions and requirements concerning recordkeeping, bloodborne pathogens, noise, sanitation, hazard communication, access to employee exposure/medical records, and anti-discrimination. The team has attempted to ascertain the hazards to which employees on aircraft in operation may be exposed and has determined which of these hazards would be addressed by the respective standards, regulations, or requirements. The team also has considered whether the respective OSHA standard, regulation, or requirement, if applied to employees on an aircraft in operation, would compromise aviation safety.

H. OSHA Enforcement Scheme – Discussion of Federal v. State OSHA Authority.

There are 23 states and jurisdictions that operate OSHA-approved state plans covering both the private and public sectors (state and local government employees). Like OSHA, these states currently enforce their occupational safety and health standards on the ground at airports, protecting primarily airport and airline maintenance and ground crews. Should OSHA assume authority for enforcement of occupational safety and health standards with regard to employees on aircraft in operation (other than the flight deck crew), the state plan states would be able to assume this responsibility within their jurisdictions.

The Occupational Safety and Health Act of 1970 (OSH Act) established a comprehensive regulatory scheme covering safety and health conditions in workplaces throughout the United States and its territories. In furtherance of its goal to promote workplace protections, § 18 of the OSH Act encourages states to develop and operate their own programs to enforce job safety and health standards ("state plan"). States desiring to exercise this authority must submit a plan to the Secretary of Labor that details procedures for developing and enforcing occupational safety and health standards. Absent an approved state plan, state safety and health laws will be preempted. OSHA approves and monitors state plans and provides up to 50 percent of an approved plan's operating costs.

To receive approval as a state plan, the state must set job safety and health standards that are "at least as effective as" comparable federal standards. In fact, most states adopt standards that are identical to federal standards. States have the option to promulgate more stringent standards and additional standards covering hazards not addressed by federal OSHA. Where state standards differ from the federal standards and are applicable to products used or distributed in interstate commerce, they must be "required by compelling local conditions and not unduly burden interstate commerce."

Although OSHA reviews and approves state standards, they are enforceable by approved state plans upon adoption under authority of state law. States must have procedures for conducting inspections to enforce their standards, and for investigating workplace accidents and complaints that are "at least as effective" as federal OSHA's procedures. Employees finding safety and health hazards at their workplace may file a formal complaint with the appropriate state plan or with the appropriate OSHA Regional Administrator. Complaints that meet the requirements of the OSH Act or comparable state law will be investigated. All approved state plans enforce nondiscrimination provisions similar to OSHA's § 11(c); however, states do not exercise authority for other whistleblower statutes that are administered by Federal OSHA (e.g., Clean Air Act, Surface Transportation Act).

Most state plans have statutory language similar to § 4(b)(1) providing that state occupational safety and health standards do not apply when a federal agency (other than OSHA) exercises statutory authority to prescribe or enforce standards affecting occupational safety and health. However, some States do not have a parallel statutory provision, and the language in those that do, may differ (or have been interpreted differently). Thus, any determination that a federal OSHA standard is preempted by another federal agency and cannot be enforced in the aircraft cabin, would also have to be determined on a case-by-case basis in state plan states.

In States with approved plans, OSHA generally limits its enforcement activity to areas not covered by the state and suspends all concurrent federal enforcement. Once the state is determined to be operating "at least as effectively" as federal OSHA and other requirements are met, final approval of the plan may be granted and federal authority will cease in those areas over which the state has jurisdiction. States with approved plans cover most private sector employees as well as State and local government workers in the State. Federal OSHA continues to cover federal and U.S. Postal Service employees and certain other employees specifically excluded by a State plan – for example, maritime operations, employees on Indian reservations and military bases.

Discussion

Purpose and Scope of this Report.

In this report, the joint team has considered whether and to what extent OSHA's existing standards and regulations on recordkeeping, bloodborne pathogens, noise, sanitation, hazard communication, anti-discrimination, and access to employee exposure/medical records may be applied to the working conditions of employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. For each of these standards and regulations, the joint team has:

(1) outlined the provisions and requirements of the respective standard or regulation;

(2) detailed the variations, if any, between the respective federal OSHA standard or regulation and the requirements that have been adopted by those individual states that operate OSHA-approved State Plans pursuant to 29 U.S.C. § 667;

(3) reviewed standards and regulations promulgated by FAA or other federal agencies that may relate to the safety or health hazard(s) addressed by the relevant OSHA standard or regulation;

(4) considered the specific hazards to which employees on aircraft in operation may be exposed that would be addressed by the particular OSHA standard or regulation; and

(5) attempted to ascertain whether the application of the particular OSHA standard or regulation on an aircraft in operation could adversely affect or compromise aviation safety. In no case would hazard abatement be required where the proposed abatement would compromise aviation safety.

In addition, the joint team has developed a list of issues that it believes merit further consideration in order to establish a procedure for coordinating and supporting enforcement of the OSH Act with respect to the working conditions of employees on aircraft in operation (other than flight deck crew) and for resolving jurisdictional questions.

This report is not intended to modify, supplement, or replace any currently applicable federal standard, policy, or legal interpretation. The report does not offer a conclusion regarding the wisdom or propriety of applying selected OSHA standards to aircraft in operation; rather, the report provides a framework in which to achieve the goals stated in the MOU.

Issue One: Recording and Reporting Occupational Injuries and Illnesses

Application of OSHA's Recordkeeping Regulations (29 CFR Part 1904) to Employees on Aircraft in Operation (other than flight deck crew).

1. OSHA Regulations. Provisions and requirements of OSHA's Recordkeeping Regulations.

a. Current application of OSHA's Recordkeeping Regulations.

OSHA's Recordkeeping regulations, 29 CFR part 1904, require the preparation and maintenance of occupational injury and illness information and do not regulate "working conditions." Section 4(b)(1) of the OSH Act preempts the application of the Act to "working conditions" over which other federal agencies have exercised their statutory authority. Therefore, OSHA's recordkeeping regulations are not subject to preemption under § 4(b)(1) and are applicable to employees on aircraft in operation.

b. What do OSHA's Recordkeeping Regulations require and what must an employer do to comply with the provisions of the regulations?

The following discussion is a general overview of the regulations that likely could be most pertinent to employees working on an aircraft in operation (other than flight deck crewmembers). This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the regulations. See 29 CFR part 1904.

OSHA's recordkeeping regulations require employers to record some injuries and all illnesses that are work related. The key terms are injury or illness and work relationship. Under the OSH Act, all work-related illnesses are recordable. However, injuries that are work related are recordable except for those minor injuries that do not require medical treatment (other than first aid) or those injuries that do not involve loss of consciousness, restriction of work or motion, or transfer to another job. The distinction between an injury and illness is made by the nature of the original event or exposure that caused the case, not by the resulting condition of the affected employee.

(1) General Discussion.

An occupational injury is any injury such as a cut, fracture, sprain, dismemberment, etc., which results from a work accident or from an exposure involving a single incident in the work environment. An occupational illness of an employee is any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment. Illness includes acute and chronic illnesses or diseases that may be caused by inhalation, absorption, ingestion, or direct contact. In summary, injuries are caused by instantaneous events in the work environment. Cases resulting from anything other than instantaneous events are considered illnesses. (For example, a single incident involving an instantaneous exposure to chemicals is classified as an injury.)

Occupational illnesses must be diagnosed to be recordable. Diagnosis may be made by a physician, registered nurse or a person who by training or experience is capable to make such a determination. Employers, employees, and others may be able to detect some illnesses, such as skin diseases or disorders, without the benefit of specialized medical training. Medical verification is not required for recordability. However, employers have the ultimate responsibility for making good-faith recordkeeping determinations. If any employer doubts the validity of an employee's alleged injury or illness and there is no substantive or medical evidence supporting the allegation, the employer need not record the case.

An injury or illness is work related under the OSHA recordkeeping system when the injury or illness results from an event or exposure in the work environment. The work environment is primarily composed of the employer's premises, and other locations where employees are engaged in work related activities or are present as a condition of their employment. Exposures to harmful substances, in and of themselves, are not recordable under part 1904 of the OSHA regulations. However, when the exposure results in a recordable work injury or illness, the injury or illness must be ecorded. Usually an identifiable event or exposure in the work environment exists to which the employer or employee can attribute the injury or illness. However, this identifiable event is not necessary for recordkeeping purposes. Even if the particular event or exposure cannot be identified, but it seems likely that the work environment either caused or contributed to the case, the case is work related. Fault and preventability on the part of the employee or employee need not be involved in a specific job task for the injury or illness to be recordable.

(2) Aviation Employers and Recordkeeping.

Occupational injuries and illnesses are considered in the scope of this report when the aircraft is on United States soil or water and/or in the air space of the United States and its territories or possessions. Aviation employers must enter recordable occupational injuries and illnesses (as defined in 1904.12(c)) that are experienced by employees on their Log and Summary of Occupational Injuries and Illnesses (OSHA No. 200) no later than six workdays after learning of the case. For each recordable occupational injury and illness that is entered on the OSHA 200 Log, the employer must also complete a Supplementary Record of Occupational Injuries and Illnesses (OSHA No. 101) or equivalent form. When completing the Annual Occupational Injuries and Illnesses Survey (OSHA No. 200-S), the employer must include the number of recordable injuries and illnesses in its totals. The employer should post a copy of the Summary during the month of February following the year to which the Summary pertains. A copy of the Summary must be posted in a location or locations where notices to employees are customarily posted. Upon request, the employer must provide a copy of the OSHA Log 200 to an employee, former employee, or their representatives. Access may be provided to the entire form including the column containing the injured or ill employees' names. The access provisions apply to the current year's OSHA 200, and to the OSHA 200s retained as required under the regulation. The employee access provisions do not apply to the OSHA No. 101.

The employer must report to OSHA any work related fatality of an employee within 8 hours of learning of the incident. Any work-related incident involving the in-patient hospitalization of

three or more employees must also be reported. In determining which injuries and illnesses are recordable on the OSHA Log, the employer must use the definitions of occupational injury and illness. These definitions are discussed above, and are found in 29 CFR Part 1904, in the supplemental instructions found on the OSHA No. 200, as well as in the instructions found in the OSHA publication titled *Recordkeeping Guidelines for Occupational Injuries and Illnesses*.

With regard to employees not in fixed establishments, recordable injuries and illnesses on an aircraft in operation must be recorded on the OSHA Log that pertains to the employee's base of operations. Airlines must respond to OSHA's annual survey by including the hours worked in the "hours worked" data field. In responding to the Bureau of Labor Statistics' annual survey, airlines must include the injuries and illnesses experienced by employees on aircraft when completing the survey forms.

2. State OSHA Program Variations. The variations on Federal OSHA's recordkeeping regulations that have been adopted by states pursuant to 29 U.S.C. § 667.

States must impose identical requirements for recordability of occupational injuries and illnesses and the manner in which they are entered. For all other recordkeeping requirements, states may be more stringent than or supplemental to the federal requirements. Sixteen states enforce identical fatality/catastrophe reporting requirements, while 7 states (Alaska, California, Hawaii, Minnesota, Oregon, Utah, and Washington) are different, usually by requiring reporting even when fewer than three employees are hospitalized. Twenty-one states have adopted identical recordkeeping exemptions for certain Standard Industrial Classification (SIC) codes, Minnesota has no exemptions, and California's are different. Twenty-one states have an identical enforcement policy for issuing citations on recording work-related shifts in hearing, but Tennessee and North Carolina will issue citations for not recording a work-related 10dB shift in hearing.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have standards or regulations that mandate the recording of occupational exposures, illnesses, and/or injuries.

FAA requires aviation employers to report aviation accidents, incidents and industrial accidents. An aviation accident, in part, is an occurrence associated with the operation of an aircraft in which any person suffers death or serious injury, incidents are aviation occurrences that affect or could affect the safety of operations, and industrial accidents occur when there is no intention of flight. The aforementioned occurrences could involve an injury to an employee on aircraft in operation (other than flight deck crew).

In addition, FAA requires that records and reports be kept for employees on aircraft in operation (other than flight deck crew). For example, 14 CFR Part 121, Subpart V contains requirements for the preparation and maintenance of records and reports concerning details such as an employee's airplane qualifications, training, and duty period limitations and rest requirements. These records address the qualifications of the employee and the required rest periods between scheduled duty periods, which, as FAA notes, affect the safety of the aircraft in flight. The National Transportation Safety Board also has aviation reporting and recordkeeping requirements relating to aviation accidents, incidents, and occurrences. The purpose of gathering

these records is not for investigating injuries or illnesses, but concerns a determination of probable cause and could result in revisions to current federal aviation regulations.

The Department of Transportation, Research and Special Programs Administration ("RSPA") requires that an airline complete a form documenting hazardous materials incidents. The RSPA form requires very little information about persons and is focused on the incident (the estimated quantity of hazardous material, fatalities, hospitalized injuries, non-hospitalized injuries, number of people evacuated). Copies are kept with the employer, and the local Civil Aviation Security Office. The original is maintained by RSPA in a database for statistical purposes, trend analysis and risk management. RSPA also publishes a biannual report that is publicly available. In the near future, RSPA will publish a Notice of Proposed Rulemaking on reporting hazardous materials incidents, but the form will change very little. The National Transportation Safety Board accident investigation requirements at 49 CFR Part 830, and FAA's investigative procedures for accidents/incidents (Accident Investigation Handbook) are similarly geared to detailing information about the cause of the incident as opposed to any resulting injuries and illnesses.

4. Hazards to Employees.

As stated initially in this section, OSHA's recordkeeping regulations do not regulate working conditions or hazards, but instead serve to prepare information to apprise employers of any and all potential workplace hazards to which their employees may be exposed. Therefore, a discussion of the potential hazards to which employees on aircraft in operation are exposed is contained in the sections of this report on bloodborne pathogens exposure, occupational exposure to noise, sanitation, and hazard communication.

5. Aviation Safety. The effect on aviation safety of the application of OSHA recordkeeping requirements on aircraft in operation.

Since OSHA's Part 1904 recordkeeping requirements do not regulate working conditions or hazards, but rather serve to prepare and maintain information, application of these requirements would not compromise aviation safety.

Issue Two: Bloodborne Pathogens

Application of OSHA's Bloodborne Pathogens Standard (29 CFR 1910.1030) to Employees on Aircraft in Operation (other than flight deck crew).

1. OSHA Regulations. *Provisions and requirements of OSHA's Bloodborne Pathogens Standard.*

The following discussion is a general overview of the standard's requirements that likely could be most pertinent to employees working on an aircraft in operation other than flight deck crewmembers. This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the standard. See 29 C.F.R. § 1910.1030.

On December 6, 1991, OSHA issued a final regulation concerning occupational exposure to bloodborne pathogens. (*See* 29 CFR 1910.1030.) The standard became effective on March 6, 1992. OSHA promulgated the standard because the agency determined that employees face a significant health risk as the result of occupational exposure to blood and other potentially infectious materials that may contain bloodborne pathogens. OSHA concluded that the risk of exposure to blood or other potentially infectious materials could be minimized, and in some cases eliminated, through a combination of engineering and work practice controls, personal protective clothing and equipment, employee training, medical surveillance, hepatitis B vaccination, warning signs and labels, and other designated means.

The bloodborne pathogens standard covers all employees who reasonably could be anticipated to come into contact with blood and other potentially infectious materials while performing their job duties. However, "Good Samaritan" acts, such as assisting a co-worker with a nosebleed, would not be considered to be an occupational exposure under the standard.

While portions of the bloodborne pathogens standard relate only to specific categories of employers (e.g., voluntary blood-donor centers, HIV/HBV research facilities, etc.), many of the standard's provisions could be applicable to employees on aircraft in operation. The provisions of the standard that could be most applicable to employees on an aircraft in operation are summarized below:

a. Exposure Control Plan.

Employers must develop a written plan, which identifies the tasks and procedures, as well as the job classifications, where occupational exposure to blood and other potentially infectious material may occur. The plan must set forth a schedule for implementing the provisions of the standard and must specify the procedure to be used for evaluating circumstances related to exposure incidents. The plan must be accessible to employees and must be available for review by OSHA. Employers must review and update the plan on an annual basis, or more often, if necessary to accommodate workplace changes.

b. Methods Of Compliance.

The standard requires that employers adopt universal precautions to prevent contact with blood or other potentially infectious materials and provides that engineering and work practice controls must be the primary means to prevent employee exposure. The standard stresses the importance of hand washing and requires employers to provide hand washing facilities, where feasible. Where the installation of such facilities is not feasible, the employer must provide an appropriate antiseptic hand cleanser in conjunction with clean or antiseptic towels. Employers must ensure that employees use these facilities following exposure to bloodborne pathogens. The standard further establishes procedures to: minimize needle sticks, minimize splashing and spraying of blood, ensure appropriate packaging of specimens and regulated wastes, and decontaminate or label contaminated equipment.

Employers also must provide, at no cost to the employee, personal protective equipment, and employers must require that employees use appropriate personal protective equipment, such as gloves, gowns, masks, mouthpieces, and resuscitation bags, except in those extraordinary circumstances in which an employee determines that the use of the personal protective equipment would prevent the delivery of care or pose an increased hazard. The employer also must clean, repair, and replace such equipment as necessary.

The standard also requires that work areas be maintained in a clean and sanitary condition. Employers are required to develop a written schedule for cleaning work areas and must identify the method of decontamination to be used, in addition to cleaning, following contact with blood or other potentially infectious materials. The standard specifies methods for disposing of contaminated "sharps" and sets forth requirements for containers that store "sharps" and other regulated wastes. Further, the standard includes provisions for handling contaminated laundry to minimize exposure to blood or potentially infectious material.

c. Hepatitis B Vaccination.

The standard provides that the employer must offer vaccinations to all employees who have "occupational exposure" to bloodborne pathogens within 10 working days following the employee's initial assignment. The vaccinations must be offered at no cost to the employee, at a reasonable time and place, under the supervision of licensed physician or licensed healthcare professional, and according to the latest recommendations of the U.S. Public Health Service (USPHS). Pre-screening may not be required as a condition for receiving the vaccine. Employees must sign a declination form if they choose not to be vaccinated, but may opt later to receive the vaccine at no cost to the employee. If the USPHS subsequently recommends booster doses, employees must be offered booster doses.

d. Post-Exposure Evaluation and Follow-Up.

The standard specifies procedures applicable in situations in which an employee has had an "exposure incident" and provides that any laboratory tests necessitated by the standard be conducted by an accredited laboratory at no cost to the employee. Follow-up activities include a confidential medical evaluation that: documents the circumstances of exposure; identifies the

source individual and tests his/her blood, if feasible and permitted; and provides post-exposure prophylaxis, counseling, and evaluation of reported illnesses. Healthcare professionals must be provided specified information to facilitate their evaluation and their written opinion regarding the need for hepatitis B vaccination following an exposure. All diagnoses must remain confidential.

e. Hazard Communication.

The standard requires warning labels, including the orange or orange-red bio-hazard symbol, affixed to containers of regulated waste, refrigerators and freezers, and other containers which are used to store or transport blood or other potentially infectious materials.

f. Information and Training.

The standard mandates that employers provide training on at least 14 specified elements upon an employee's assignment and subsequently on an annual basis. Employees who have received appropriate training within the previous year need to receive additional training only on items not previously covered. The training must provide an opportunity for questions and answers, and the trainer must be knowledgeable in the subject matter.

g. Recordkeeping.

The standard provides that medical records must be maintained for each employee with an occupational exposure for the duration of that employee's employment plus an additional 30 years. The records must be treated as confidential and must include employee's name and social security number, hepatitis B vaccination status (including dates), results of any examinations, medical testing and follow-up procedures, a copy of the healthcare professional's written opinion, and a copy of information provided to the healthcare professional. Training records must be maintained for three years and must include training dates, contents of the training program or a summary, the trainers' names and qualifications, and the names and job titles of all persons attending the training sessions. Medical records must be made available to the subject employee, anyone with the employee's written consent, OSHA, and the National Institute of Occupational Safety and Health (NIOSH). Disposal of such records must be in accord with OSHA's standard covering access to records.

2. State OSHA Program Variations. State Regulatory Variations on Federal OSHA's bloodborne pathogens regulations that have been adopted by states pursuant to 29 U.S.C. § 667.

All but one of the twenty-three states that operate OSHA-approved state plans have adopted and enforce a standard that is identical to OSHA's bloodborne pathogens standard. The Kentucky standard has one variation from OSHA's bloodborne standard which applies to blood donation centers, and that variation would have no effect on employees working on aircraft in operation. California enforces an additional standard that requires safe needle devices and the reporting of needlestick injuries, but it applies only to health care workers.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have standards or regulations pertaining to Bloodborne Pathogens.

In order to address the potential safety and health risks that crewmembers and passengers may face as a result of exposure to bloodborne pathogens, FAA promulgated an amendment to several FAA regulations, which provided that disposable latex gloves, or equivalent nonpermeable gloves, must be located on board aircraft operated in air carrier, air taxi, and commercial operations. 14 CFR 121.309,125.207,135.177.

4. Hazards to Employees. Potential crewmember exposure to Bloodborne Pathogens on aircraft in operation.

Employees on aircraft in operation, particularly crewmembers and cabin cleaning personnel, may be exposed to blood and potentially infectious materials, which could be governed by OSHA's bloodborne pathogens standard, during the course of performing their duties on the aircraft. While FAA regulations do not require that crewmembers provide passengers with assistance that may bring them into contact with blood and potentially infectious materials, crewmembers sometimes provide assistance to ill or injured people on aircraft, and this assistance may cause such persons to come into contact with the body fluids of persons infected with a bloodborne pathogen such as the human immunodeficiency virus (HIV) or the hepatitis B virus (HBV). In addition, cleaning and maintenance personnel, who are working while the aircraft is in operation, may be exposed to bloodborne pathogens if they are cleaning or working on parts of the aircraft that have been contaminated with bloodborne pathogens or if they are removing, and disposing of, materials that have been contaminated with bloodborne pathogens. While the joint team anticipates that such exposures likely would be unusual, it is important to determine the extent and nature of such exposure in order to adequately protect employees on aircraft in operation from exposure to blood and potentially infectious material.

5. Aviation Safety. The effect on aviation safety that the application of OSHA's Bloodborne Pathogens Standard may have on aircraft in operation.

OSHA's rule on exposure to bloodborne pathogens could be applied to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. For example, the requirements that the employer provide hepatitis B vaccinations, additional personal protective equipment, and mandatory bloodborne pathogens exposure training would have no effect on aviation safety.

However, OSHA's rule may have aircraft safety implications to the extent that it mandates engineering solutions and work practice controls. For example, while bio-hazard and sharps containers normally may be portable, and OSHA would not require that they be affixed inside the aircraft, the installation of such containers on the aircraft would create aircraft design considerations. In addition, the standard requires that employers make medical evaluations and follow-up "immediately available" to employees who have been exposed to bloodborne pathogens. However, the team has concluded that this requirement would not affect aviation safety because compliance would necessitate extremely few, if any, unscheduled landings and because any such unscheduled landings would be dictated more by medical necessity than by the standard's requirements. Finally, the requirement in OSHA's bloodborne pathogens standard for housekeeping requires the decontamination of the contaminated work surfaces with an appropriate disinfectant -- normally a 1% to10% bleach solution, EPA-registered tuberculocides, sterilants, or products registered against HIV/HBV -- that could have a corrosive effect on the aircraft components and could compromise the safety of the aircraft, if an employer used a disinfectant that was not among the solutions approved for use by FAA.

Issue Three: Occupational Exposure to Noise

Application of OSHA's General Industry Standard for Occupational Exposure to Noise (29 CFR § 1910.95) to Employees on Aircraft in Operation (other than flight deck crew).

1. OSHA Regulations. *Provisions and requirements of OSHA's occupational noise exposure standard.*

What does the occupational noise exposure standard require and what must an employer do to comply with the provisions of the standard?

The following discussion is a general overview of the standard's requirements that likely could be most pertinent to employees working on an aircraft in operation (other than flight deck crewmembers). This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the standard. See 29 CFR § 1910.95.

OSHA's noise standard requires that employers take certain precautions against the effects of noise exposure when sound levels meet or exceed the standard's permissible noise exposure levels. The standard applies to varying noise by and to exposures of less than 8 hours. (For example, a 90-decibel exposure over 8 hours is a permissible noise exposure, but a 115-decibel exposure is permissible only for 1/4 hour or less.) When employees are subjected to sound levels exceeding permissible noise levels set forth in the standard, the employer must implement administrative or engineering controls. If such controls fail, the employer must provide and the employees must use personal protective equipment (PPE). However, when exposures exceed or equal the 8-hour time-weighted average of 85 decibels or a dose of 50 percent (referred to as the "action level"), the employer must take other actions as follows: monitor sound levels, administer a hearing conservation program, provide hearing PPE at no cost to employees (the employees must have a variety of hearing PPE from which to choose), notify each employee exposed above the action level, and establish and maintain an audiometric testing program.

The employer shall provide training in the use and care of all hearing protectors provided to the employees, shall ensure proper initial fitting, supervise the correct use of all hearing protectors, and evaluate the hearing protector attenuation. The audiometric testing program must not incur a cost to employees and must be performed by licensed or certified audiologists or other professionals. A baseline audiogram must be taken within 6 months of the employee's first exposure with annual audiograms thereafter. The audiograms must be evaluated to detect a Standard Threshold Shift (STS), which is a change in hearing threshold relative to the baseline audiogram (of an average of 10dB or more at the 2000, 3000, and 4000 Hz in either ear). Employees with STSs shall be offered follow-up treatment.

The employer's noise monitoring program must include personal sampling to account for any high worker mobility, significant variations in sound level, or significant components of impulse noise. The employer must repeat the monitoring when there is a change in production, process, or equipment. Employees or their representatives may observe the monitoring.

The employer shall institute a training program and shall ensure employee participation. Training shall be repeated annually and shall include the topics of the effects of noise on hearing, the purpose of the hearing protectors, the advantages, disadvantages and the attenuation of the various types of hearing protectors and instructions on their selection, fitting, use and care. The employer shall make available to affected employees or their representatives copies of the noise standard and the employer shall post a copy in the work place. The employer shall maintain all employee test records and exposure assessment records.

2. State OSHA Program Variations. The variations on OSHA's occupational noise exposure requirements that have been adopted by states pursuant to 29 U.S.C. § 667.

Nineteen of the 23 states that operate OSHA-approved state plans enforce identical noise standards. North Carolina also has an identical standard but as an enforcement policy may in some circumstances require engineering or administrative controls rather than personal protective equipment and hearing conservation programs. The standards in California and Oregon contain a few technical differences, while Washington's noise standard contains several more stringent requirements.

3. Other Federal Agency Standards. *Whether FAA or other federal agencies have standards or regulations that address employee exposure to noise.*

FAA regulates aircraft noise under 14 CFR Part 36, Noise Standards: Aircraft Type and Airworthiness Certification and 14 CFR Part 21, Certification Procedures for Products and Parts, § 183 (e). These regulations govern aircraft noise emissions outside of the aircraft. The joint team does not have data at this time to measure the effect of these requirements of noise level reduction inside the aircraft. FAA does not prescribe acceptable noise levels and exposures for non-flight deck employees on aircraft in operation.

4. Hazards to Employees. The hazards to which employees on aircraft in operation may be exposed that could be covered by the standard.

The joint team does not have data as to the levels of occupational noise to which employees on aircraft in operation are exposed. Exposure to noise in excess of acceptable OSHA levels may occur in the following situations and locations: during takeoffs and landings, in the aircraft cabin areas near the engines, and in the gate areas during boarding and deplaning. FAA notes that recent aircraft models are designed and manufactured so as to minimize noise levels in the aircraft cabin.

5. Aviation Safety. The effect on aviation safety if OSHA's noise standard were applied to aircraft in operation.

Many provisions of OSHA's noise standard, such as those for training and testing, could apply to employees on aircraft in operation (other than flight deck crew) without any effect on aviation safety. The provisions of the standard that relate to abatement methods -- such as engineering and administrative controls, and the use of hearing protection devices -- implicate aviation safety. Therefore, the application of these abatement methods would require FAA approval.

Engineering controls implicate aviation safety because these controls might involve redesigning or changing the construction of the aircraft (e.g., by adding noise dampening or muffling materials). Thus, under no circumstances would OSHA require abatement through engineering controls without prior FAA approval. Certain administrative controls, such as rotating employees from areas of the aircraft with higher noise levels, would compromise aviation safety because they conflict with FAA requirements regarding crewmembers on aircraft in operation. For example, during taxi of the aircraft, takeoff, and landing, FAA requires that flight attendants remain at their duty stations with safety belts and shoulder harnesses fastened and that flight attendants be uniformly distributed throughout the aircraft in order to provide the most effective egress of passengers in the event of an emergency evacuation. Thus, FAA has concluded that requiring rotation of employees to reduce exposure to hazardous noise levels would compromise aviation safety.

In addition, the use of hearing protection devices by flight attendants would require FAA approval. FAA notes that crewmembers must be able to hear communications and instructions to initiate time-critical emergency procedures. Specifically, flight attendants must be able to hear chimes from the flight deck, instructions from other crewmembers, passengers' requests for assistance, and communications over the aircraft interphone. Thus, the use of hearing protection devices would be subject to FAA approval to ensure that these devices would not prevent crewmembers from performing such aviation safety-related duties.

Issue Four: General Industry Sanitation Standard

Application of OSHA's General Industry Sanitation Standard (29 CFR § 1910.141) to Employees on Aircraft in Operation (other than flight deck crew).

1. OSHA Regulations. *Provisions and requirements of OSHA's Sanitation Standard.*

What are OSHA's sanitation requirements and what must an employer do to comply with the provisions of the standard?

The following discussion is a general overview of the standard's requirements that likely could be most pertinent to employees working on an aircraft in operation (other than flight deck crewmembers). This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the standard. (See 29 CFR § 1910.141.)

a. Working surfaces.

OSHA requires that floors be maintained, so far as practicable, in a dry condition. OSHA also requires that, where wet processes are used, drainage shall be maintained and false floors, platforms, mats, or other dry standing places shall be provided, where practicable, or appropriate waterproof footgear shall be provided. OSHA also requires that every floor, working place, and passageway shall be kept free from protruding nails, splinters, loose boards, and unnecessary holes and openings.

b. Waste.

Waste receptacles must be leak-proof, constructed so that they may be thoroughly cleaned and maintained in a sanitary condition, and have solid tight-fitting covers, unless the receptacle can be maintained in a sanitary condition without a cover. OSHA requires that "[a]ll sweepings, solid or liquid wastes, refuse, and garbage shall be removed in such a manner as to avoid creating a menace to health and as often as necessary or appropriate to maintain the place of employment in a sanitary condition." OSHA requires that waste receptacles be constructed of smooth, corrosion-resistant, easily-cleanable, or disposable materials, and that these receptacles shall be provided and used for the disposal of waste food. OSHA requires that these receptacles be provided in number, size, and located so as to encourage their use and not result in overfilling. OSHA requires that these receptacles be emptied not less frequently than once each working day, unless unused, and shall be maintained in a clean and sanitary condition.

c. Vermin.

Every enclosed workplace shall be so constructed, equipped, and maintained, so far as reasonably practicable, as to prevent the entrance or harborage of rodents, insects, and other vermin. A continuing and effective extermination program shall be instituted where their presence is detected.

d. Potable water.

Potable water shall be provided in all places of employment for drinking, washing of the person, cooking, washing of foods, washing of cooking or eating utensils, washing of food preparation or processing premises, and personal service rooms. Portable drinking water dispensers shall be designed, constructed, and serviced so that sanitary conditions are maintained, shall be capable of being closed, and shall be equipped with a tap. Open containers such as barrels, pails, or tanks for drinking water from which the water must be dipped or poured, whether or not they are fitted with a cover, are prohibited. A common drinking cup and other common utensils are prohibited.

e. Nonpotable water.

Outlets for nonpotable water, such as water for industrial or firefighting purposes, shall be posted or otherwise marked in a manner that will indicate clearly that the water is unsafe and is not to be used for drinking, washing of the person, cooking, washing of food, washing of cooking or eating utensils, washing of food preparation or processing premises, and personal service rooms. Construction of nonpotable water systems or systems carrying any other nonpotable substance shall be such as to prevent backflow or backsiphonage into a potable water system. Nonpotable water shall not be used for washing any portion of the person, cooking or eating utensils. Nonpotable water may be used for cleaning work premises, other than food processing and preparation premises and personal service rooms. The nonpotable water must not contain concentrations of chemicals, fecal coliform, or other substances that could create unsanitary conditions or be harmful to employees.

f. Toilet and lavatory facilities.

OSHA requires a ratio of about one water closet for every fifteen employees. OSHA requires that washing facilities shall be maintained in sanitary condition. Each lavatory shall be provided with hot and cold running water, or tepid running water. Hand soap or similar cleansing agents shall be provided. Individual hand towels or sections thereof, of cloth or paper, warm air blowers or clean individual sections of continuous cloth toweling, convenient to the lavatories, shall be provided.

g. Food handling.

OSHA requires all employee food service facilities and operations to be carried out in accordance with sound hygienic principles. In all places of employment where all or part of the food service is provided, the food dispensed shall be wholesome, free from spoilage, and shall be processed, prepared, handled, and stored in such a manner as to be protected against contamination.

2. State OSHA Program Variations. *The variations on OSHA's Sanitation Standard that have been adopted by states pursuant to 29 U.S.C.* § 667.

Eighteen of the 23 states that operate OSHA-approved state plans enforce identical general industry sanitation standards, while five states enforce different standards: California, Kentucky, Oregon, Tennessee and Washington. Oregon and Washington have a few additional

requirements (*e.g.*, ventilation requirements, showers and handwashing facilities where exposure to toxic chemicals). California, Kentucky and Tennessee standards have a few minor, technical differences.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have standards or regulations that address employees' exposure to unsanitary or unhealthy working conditions.

a. Working surfaces.

FAA requires that the floor surface of all areas that are likely to become wet in service must have slip-resistant properties. This requirement is part of FAA's airworthiness standards. (14 CFR part 25, Transport Category Airplanes Subpart D-Design and Construction; Personnel and Cargo Accommodations, § 25.793, Floor Surfaces). Aircraft cleaning is included in FAA's Continuous Airworthiness Maintenance Program and the FAA-approved General Maintenance Manual, as well as in airline policies and procedures under 14 CFR § 121.373 Subpart L, Maintenance, Preventative Maintenance, and Alterations.

b. Waste.

FAA requires that receptacles have covers not for the purpose of containing wastes but to contain flame - receptacles for used towels, papers, and wastes must be of fire-resistant material and must have a cover or other means of containing possible fires started in the receptacles. 14 CFR part 121, § 121.215.

USDA requires that receptacles for regulated garbage be leak-proof and have covers while on aircraft in the territorial waters, or within the territory of the United States Regulated garbage is garbage that is regulated by USDA because it has moved outside of the United States or Canada, or garbage that has moved to or from Hawaii, the United States territories, or possessions. There is an issue as to whether only *regulated* garbage is subject to USDA requirements. Regulated garbage must be contained in tight, leak-proof and covered receptacles during storage on board a means of conveyance while in the territorial waters, or while otherwise within the territory of the United States.

c. Vermin.

USDA's Animal and Plant Health Inspection Service (APHIS) prevents the spread of plant pests by regulating their movement into or through the United States and by treating infestations in aircraft. FDA also regulates insect and rodent control on aircraft by screening, insecticides, traps, and poisons. FDA regulations also cover the construction, maintenance and use of places where food is prepared, served, or stored so as to be clean and free from flies, rodents, and other vermin. Public Health Service regulations cover foreign air carriers which are subject to a sanitary inspection/disinsection to determine whether there exists rodent, insect, or other vermin infestation, contaminated food or water, or other unsanitary conditions requiring quarantine measures. Disinsection includes the cabin and cargo areas. The Center for Disease Control (CDC) enforces requirements relating to foreign quarantine and disinsection of aircraft coming into the United States.

d. Toilet and lavatory facilities.

FDA requires that toilet and lavatory equipment and spaces shall be maintained in a clean condition.

e. General.

FDA regulates food-handling operations, including the construction, maintenance and use of areas, including galleys and pantries, where food is prepared, served, or stored. FDA requires that all food-handling operations shall be accomplished so as to minimize the possibility of contaminating food, drink, or utensils and that the hands of all persons shall be kept clean while engaged in handling food, drink, and utensils.

4. Hazards to Employees. *The hazards to which the employees on aircraft in operation may be exposed that would be covered by OSHA's Sanitation Standard.*

Employees on board aircraft in operation may be exposed to slippery floor surfaces, passenger waste and garbage, unsanitary toilet facilities, unsanitary washing facilities, sewage from malfunctioning toilets or drains, and hazards resulting from unsanitary food and beverage handling and storage.

5. Aviation Safety. The effect on flight safety of applying OSHA's sanitation standard.

Barring the potential preemptive effect of FDA, USDA, and FAA requirements discussed above, OSHA's sanitation standard generally could be applied to aircraft in operation without compromising aviation safety. Given that the OSHA standard is flexible and performance-oriented, the standard's provisions, such as those for toilet and lavatory facilities, waste disposal, and working surfaces, could be applied without compromising aviation safety.

Issue Five: Hazard Communication

Application of OSHA's Hazard Communication Standard (29 CFR § 1910.1200) to Employees on Aircraft in Operation (other than flight deck crew)

1. OSHA Regulations. *Provisions and requirements of OSHA's Hazard Communication Standard Regulations.*

The following discussion is a general overview of the standard's requirements that likely could be most pertinent to employees working on an aircraft in operation other than flight deck crewmembers. This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the standard. See 29 CFR § 1910.1200.

The Hazard Communication Standard is a performance-oriented standard that requires employers to transmit information to their employees on the hazards of chemicals to which they may be exposed under normal working conditions or in a foreseeable emergency. It applies to any chemical known to be present in the workplace. While chemical manufacturers, importers, and distributors of hazardous chemicals have extensive responsibilities related to evaluation and communication of hazards, employers that only use hazardous chemicals must follow a far less detailed set of requirements. Under the terms of the standard, "use" refers to packaging, handling, reacting, emitting, extracting, generating as a byproduct, or transferring the chemicals. Employers, such as airlines, that do not manufacture, import, or distribute chemicals may be required to establish a written hazard communication program, and ensure labeling on containers, availability of Material Safety Data Sheets (MSDS), and provisions for transmitting information and employee training.

A hazard communication program must describe how the employer will meet the standard's labeling, MSDS, and information and training requirements. In addition, the program must include a list of hazardous chemicals in the workplace and describe the methods the employer will use to inform employees of the hazards of non-routine tasks. Multi-employer worksites (which include leased aircraft with crews, known as "wet lease arrangements") must also explain the employer's methods for providing other employers onsite access to MSDS, for informing other employers of precautionary measures to protect employees during normal operating conditions and in a foreseeable emergency, and for informing other employees of the labeling system used in the workplace. For employees who work in multiple geographical locations (e.g., crewmembers), the hazard communication program may be kept at the primary workplace facility (e.g., airline crew base).

Employers whose employees use hazardous chemicals must ensure that containers are labeled or marked with information pertaining to the identity of the chemicals and warnings concerning their hazards. Employers are prohibited from removing or defacing labels on hazardous chemical containers, and must ensure all information on the containers is written in legible English. The standard requires that employers have an MSDS in the workplace for each hazardous chemical. However, the standard is not rigid in regard to the specific form of the information communicated in the MSDS. Also, electronic access, microfiche, and other alternatives to maintaining paper copies of the MSDS are allowed. Where employees must travel between workplaces during a work-shift, as in the case for crewmembers, MSDS may be kept at a primary workplace facility. In this situation, employers shall ensure that employees can readily obtain the required information. Employees may be exposed, even if the MSDS is not received with the original shipment of the chemicals. The manufacturer or importer is required to provide this information upon request.

Employers must provide employees with effective information and training on hazardous chemicals in their work area at the time of their initial assignment, and whenever a new hazard is introduced into the work area. Required information includes applicable provisions of the Hazard Communication Standard, information about operations in the work area where hazardous chemicals are present, and the location and availability of the hazard communication program. At minimum, the training must include methods for detecting the presence of a hazardous chemical in the work area, specific hazards of the chemicals in the work area, protective measures available to employees, and the details of the employer's hazard communication program.

2. State OSHA Program Variations. *The variations on Federal OSHA's Hazard Communication Standard that have been adopted by states pursuant to 29 U.S.C. § 667.*

Fourteen of the 23 states that operate OSHA-approved state plans have adopted hazard communication standards identical to the federal standard. Nine states – Alaska, California, Iowa, Maryland, Michigan, Minnesota, New Mexico, Tennessee, and Washington -- adopted different standards. The state standards for all but three of these nine track the federal standard, but with some additional requirements. For example, Alaska's standard extends to certain physical agents and requires employers to make available state-provided MSDS for them, but is in all other ways identical to the federal standard.

California, Minnesota, and Washington adopted standards that differ considerably from federal OSHA's standard. While California's warning requirements are similar to those of the federal standard, California provides a supplemental judicial enforcement mechanism, including actions brought by private citizens. Minnesota enforces its Employee Right-to-Know rule instead of the federal Hazard Communication standard. This rule covers harmful physical agents and infectious agents, as well as hazardous substances, and requires annual refresher training in addition to initial training. Washington's standard differs from the federal standard in two areas: (1) the Washington standard does not exempt nuisance particulates from coverage; and (2) employers must follow state Permissible Exposure Levels (PELs) for evaluation of employee exposures and training.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have standards or regulations that mandate Hazard Communication.

Although FAA has no equivalent to the Hazard Communication Standard, the Hazardous Materials Transportation Act (HMTA) (codified at 49 U.S.C. §§ 5101 et seq.) and the Hazardous Materials Regulations (HMR) (49 CFR parts 171-190) issued pursuant to HMTA address the communication of hazards within the context of hazardous materials handling. HMTA contains "reverse 4(b)(1)" language that precludes DOT preemption on hazardous materials handling. This broad interpretation of the preemption preclusion clause in 49 U.S.C. § 5107(f)(2) was upheld by the Review Commission in *Secretary of Labor v. Yellow Freight Systems*, OSHRC Docket No. 93-3292 (July 31,1996). In its current form, the "reverse 4(b)(1)" language reads: "An action of the Secretary of Transportation under subsections [concerned with training, hazardous materials handling, and vehicle registration] . . . is not an exercise, under § 4(b)(1) of the Occupational Safety and Health Act of 1970 . . . of statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health." (49 U.S.C. § 5107(f)(2))

Notwithstanding the HMTA's hazardous materials handling preemption preclusion clause, HMR contains training, handling, and labeling requirements (49 CFR §§ 172.700 *et seq.*, 172.400 *et seq.*, and 175.40). Other HMR provisions may also impact the occupational safety and health of airline employees. The regulations set out specifications for de-icing (using hazardous chemicals) and contents for first aid and emergency medical kits. The de-icing program regulations are set out at 14 CFR § 121.629. Required contents for emergency medical and first aid kits are set out at 14 CFR §§ 121.309, Appendix A. The emergency medical kit contains several substances that could fall under the coverage of OSHA's Hazard Communication Standard. The regulations specifically exclude several substances, including fuel and compressed oxygen, from FAA's hazardous materials handling requirements. (*See* 49 CFR § 175.10.)

4. Hazards to Employees. The illnesses, injuries, or other hazards to employees on aircraft in operation which may result from chemical hazards addressed by the Hazard Communication Standard.

The joint FAA/OSHA Aviation Safety and Health team has identified several hazards that may be addressed by OSHA's Hazard Communication Standard. These include hazards posed by commercial cleaning agents, jet fuel vapors and combustion bi-products, de-icing chemicals, compressed oxygen, and medication contained in emergency medical kits. Employees may come into contact with cleaning agents following their application by airline cleaning personnel between flights, and in the event of a spill or passenger emergency during flight that requires an employee's immediate attention. Vapors from jet fuel and de-icing chemicals may enter an aircraft cabin, presenting a potential hazard to persons inside the cabin. Employees may come into contact with compressed oxygen or certain medications in the event of an emergency. **5.** Aviation Safety. The effect on aviation safety of the application of OSHA's Hazard Communication Standard.

The team concludes that compliance with OSHA's Hazard Communication Standard would not compromise aviation safety. Under the various circumstances that the team has considered, employers could comply with the requirements of the standard, while remaining sensitive to flight safety concerns.

Issue Six: Anti-Discrimination Provisions

Application of OSHA's Anti-Discrimination Provisions (29 U.S.C. § 660(c)) to Employees on Aircraft in Operation (other than flight deck crew)

1. OSH Act Provisions. Summary of the OSH Act's Anti-Discrimination Provisions.

Section 11(c) of the OSH Act prohibits any person from discharging or otherwise discriminating against an employee who files a complaint related to the OSH Act, testifies in a proceeding related to the OSH Act, or exercises any right afforded by the OSH Act. Activities protected pursuant to § 11(c) are defined further by the Secretary of Labor in regulations (29 C.F.R. § 1977.9-12) and include, but are not limited to, the filing of a complaint with OSHA, participating in an inspection, testifying in an OSHA proceeding, and complaining to the employer, a co-worker, a union, another government agency, or to others about occupational health or safety. An employee's refusal to work under conditions that a reasonable person would believe to pose a risk of death or serious injury may also be a protected activity. *See* 29 CFR § 1977.12(b)(2); *Whirlpool Corp. v. Marshall*, 445 U.S. 1 (1980)). In addition, protected activities include compliance with the requirements of an OSHA standard or a demand that an employer supply appropriate personal protective equipment.

If an employee believes that he or she has been discharged or otherwise discriminated against by any person in violation of § 11(c) of the OSH Act, the employee may file a complaint with the Secretary of Labor within 30 days from the date on which the employee first learns of the discriminatory act. Once a complaint is received, OSHA conducts an investigation and produces a recommendation for further action. If a complaint is deemed to be meritorious, the Secretary may initiate an action seeking appropriate relief, which may include, but is not limited to, the rehiring or reinstatement of the employee to his or her former position with back pay, expunging disciplinary reports from the employee's personnel record, and/or enjoining an employer from hindering the employee's pursuit of alternative employment. The OSH Act provides no private right of action for employees who believe that they have been discharged or discriminated against in violation of § 11(c) of the OSH Act.

2. State OSHA Program Variations. State regulatory variations on the OSH Act's Anti-Discrimination Provisions.

Thirteen of the twenty-three states that operate OSHA-approved state plans have discrimination protection provisions that are identical to those contained in the OSH Act. However, five of these 13 states also permit employees to file a private action in a state court. The 10 remaining states (Alaska, Arizona, California, Hawaii, Kentucky, Nevada, New Mexico, North Carolina, Oregon, and Wyoming) have anti-discrimination provisions that vary to some degree from those contained in the OSH Act. Three of these 10 states also permit employees to file a private action in a state court. Federal OSHA has sole responsibility for enforcing a number of additional whistleblower statutes; this authority does not extend to the state plans. In addition, some states have other anti-discrimination statutes or common law wrongful discharge remedies that are not

directly related to the OSH Act, but which also may provide relief for employees who engage in certain activities that are intended to address perceived occupational health and safety hazards.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have relevant anti-discrimination provisions.

Congress recently enacted statutory protection for airline employees who engage in specified activities designed to further air carrier safety. (*See* 49 USC § 42121). The Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (the "AIR Act") provides that no air carrier, or contractor or subcontractor of an air carrier, may discharge or otherwise discriminate against an employee who provides information to his or her employer or to the federal government regarding a violation of an order, regulation, standard, or provision of federal law relating to air carrier safety. The AIR Act also provides protection to employees who initiate, or are involved in, proceedings relating to a violation of an order, regulation, standard, or provision of federal law relating to air carrier safety.

Pursuant to the AIR Act, an employee who believes that he or she has been discharged or otherwise discriminated against in violation of the AIR Act may file a complaint with the Secretary of Labor within 90 days from the date of the alleged discriminatory act. The Secretary of Labor is charged to conduct an investigation into the complaint (this duty has been delegated to OSHA) and, if the Secretary concludes that there is a reasonable basis to believe that a violation has occurred, the Secretary is required to order preliminary relief. This relief could include, where appropriate, reinstatement, back pay, and compensatory damages. Within 30 days following the date on which the Secretary of Labor issues findings and a preliminary order, either the complainant or the alleged discriminating party may request a hearing before an administrative law judge. The decisions of the administrative law judge may be appealed to the Secretary of Labor, whose final decision may be reviewed in the appropriate U.S. Court of Appeals.

The AIR Act also permits civil penalties to be assessed against persons who violate the new whistleblower protection provisions (see 49 U.S.C. § 46301(a)(1)(A)) and contains a provision that relates to frivolous complaints. If the Secretary of Labor finds that a complaint is frivolous, or has been filed in bad faith, the Secretary of Labor may award a reasonable attorney's fee to the employer, not exceeding \$1,000.

4. Hazards to Employees.

This section is not relevant to OSHA's anti-discrimination provisions, which do not regulate working conditions *per se*, but rather prohibit discrimination against employees who engage in protected activities.

5. Aviation Safety. Effect that application of the OSH Act's Anti-Discrimination Provisions may have on the safety of an aircraft in operation.

The team has considered the potential application of six OSHA standards on aircraft in operation. OSHA's § 11(c) anti-discrimination provisions could be applied with respect to the

hazards contemplated in this report to employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. The fact that the OSH Act has been interpreted to provide employees with the right to refuse to perform work tasks in certain, limited situations, which may pose a risk of death or serious injury, hypothetically may affect the safety of an aircraft in operation, if the employee refuses to perform an aviation safety related duty. However, the team can conceive of few scenarios in which a safety or health hazard associated with a standard contemplated in this report would present the immediacy and degree of danger required to justify a work refusal that would be protected under the OSH Act.

Issue Seven: Employee Access to Exposure and Medical Records

Application of OSHA's Access to Exposure and Medical Records Standard (29 CFR § 1910.1020) to Employees on Aircraft in Operation (other than flight deck crew).

1. OSHA Regulations. The provisions and requirements of OSHA's access to Employee Exposure and Medical Records Standard.

a. Current application of OSHA's access standard.

OSHA's access standard, 29 CFR § 1910.1020, governs retention of and access to employee medical and exposure records. The purpose of the standard is to improve detection, treatment, and prevention of occupational disease. The standard does not regulate "working conditions." Section 4(b)(1) of the OSH Act preempts the OSH Act's application to "working conditions" over which other federal agencies have exercised their statutory authority. Therefore, the access standard is not subject to preemption under § 4(b)(1) and is applicable to employees on aircraft in operation.

b. What does OSHA's access standard require and what must an employer do to comply with the provisions of the standard?

The following discussion is a general overview of the standard's requirements that likely could be most pertinent to employees on aircraft in operation (other than flight deck crew). This discussion is not intended to modify, supplement, or replace the requirements specifically listed in the standard. (See 29 CFR § 1910.1020.)

OSHA's access to employee exposure and medical records standard requires that employers maintain employee medical and exposure records that they develop of their own volition or in compliance with other occupational safety and health requirements. Employers also must provide access to these records to employees, their designated representatives, health professionals, and OSHA. The requirements of § 1910.1020 are triggered by the employee's exposure to toxic substances or harmful physical agents. If an employee has not been exposed, then § 1910.1020 does not apply, and the employer does not need to maintain or provide access to exposure or medical records under the standard. In addition, this standard does not require the creation of any medical or exposure records.

2. State OSHA Program Variations. *The variations on OSHA's recordkeeping requirements that have been adopted by states pursuant to 29 U.S.C.* § 667.

Twenty states enforce identical standards. California's definition of toxic substance or harmful physical agent also includes substances regulated by any California or federal law or rule due to a hazard to health. Michigan requires collective bargaining agents to obtain written employee authorization for access to records. Virginia did not adopt the federal 1988 amendments concerning records retention for short-term employees, microfilm storage of x-rays, disclosure of trade secrets, and access by union representatives to exposure records without employee consent.

3. Other Federal Agency Standards. Whether FAA or other federal agencies have standards or regulations that address employees' exposure to unsanitary or unhealthy working conditions.

FAA does not have a similar access to exposure and medical records requirement. FAA does not require the creation of medical and exposure records for non-flight deck employees on aircraft in operation

4. Hazards to Employees. The hazards to which employees on aircraft in operation may be exposed that would be covered by OSHA's access requirements.

As stated initially in this section, OSHA's access standard does not regulate working conditions or hazards, but instead serves to retain and provide access to information to apprise employers and employees of any and all potential workplace hazards to which their employees may exposed. Therefore, the potential hazards to which employees on aircraft in operation are exposed is discussed in the sections of this report on bloodborne pathogens exposure, occupational exposure to mise, sanitation, and hazard communication. FAA/OSHA Aviation Safety and Health team does not have sufficient data at this time to determine whether and to what extent employees are exposed to toxic substances or harmful physical agents on aircraft in operation. Potential exposures might include exposures to noise, carbon dioxide (CO_2), de-icing fluid, jet fuel, cleaning agents, and to bloodborne pathogens and other viral or bacterial agents.

5. Aviation Safety. The effect on flight safety of the application of OSHA's access requirements.

Since OSHA's access standard does not regulate working conditions or hazards, but rather serves to retain and provide access to employee medical and exposure records, application of these requirements would not compromise aviation safety.

Matters for Further Consideration

While the joint team has considered the effect that the application of specific OSHA regulations and standards would have on aviation safety, the joint team believes that the following issues merit further consideration in order to establish a procedure for coordinating and supporting enforcement of the OSH Act with respect to the working conditions of employees on aircraft in operation (other than flight deck crew) and for resolving jurisdictional questions:

- There is a need to determine the degree to which the OSH Act's territorial limitation to employment performed within the boundaries of the United States (29 U.S.C. § 653(a)) would affect OSHA's ability to provide effective protection for a significant percentage of crewmembers who work on flights that operate in part beyond the territorial boundaries of the United States.
- There is a need to determine whether it would be necessary for the respective agencies to engage in notice and comment rulemaking prior to applying the enumerated OSHA standards or regulations to employees on aircraft in operation, and, if so, the manner in which to most expeditiously promulgate standards that are applicable to aircraft in operation.
- There is a need to determine the manner in which OSHA and FAA would cooperate to assure that standards applicable to employees on aircraft in operation (other than flight deck crew), which may be promulgated at a future date, would not be written or enforced in a manner that could compromise the safe operation of an aircraft.
- There is a need to determine the effect that state jurisdiction and state plans (pursuant to 29 U.S.C. § 667) would have on FAA's ability to assure aviation safety.
- There is a need to determine the effect that state jurisdiction and state plans (pursuant to 29 U.S.C. § 667) would have on OSHA's ability to enforce standards applicable on aircraft that operate in, and over, a number of States.
- There is a need to determine and address the potential preemptive effect that FAA regulations and other federal agency regulations and standards may have on OSHA's authority to apply particular OSHA standards or regulations to an aircraft in operation.
- There is a need to determine whether it would be necessary to conduct OSHA inspections on an aircraft in operation in order to effectively enforce any applicable OSHA standards or regulations, and, if necessary, whether the process of conducting such OSHA inspections would affect aviation safety.
- There is a need to determine the manner in which OSHA would conduct its inspections on an aircraft in operation in order that such inspections would be conducted in accordance with the delegation of authority to the Secretary of Labor under the OSH Act and in order that such inspections be consistent with the procedures developed in

OSHA's Field Reference Inspection Manual (FIRM) (OSHA Instruction, CPL 2.103, September 26, 1994).

- There is a need to determine the method and manner for obtaining FAA approval of any OSHA abatement requirements that potentially affect aircraft safety prior to any abatement action by an employer/airline.
- There is a need to determine the method and manner in which OSHA inspectors would be trained concerning the application of relevant standards on aircraft in operation and the manner in which inspections would be conducted on aircraft in operation.
- There is a need to determine the manner and method for conducting outreach programs to airline employers and employees regarding the nature and scope of the OSH Act and any OSHA standards and regulations that may be applicable to aircraft in operation.

Appendix A.

MEMORANDUM OF UNDERSTANDING

between

THE FEDERAL AVIATION ADMINISTRATION U.S. DEPARTMENT OF TRANSPORTATION

and

THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION U.S. DEPARTMENT OF LABOR

I. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to enhance safety and health in the aviation industry.

II. BACKGROUND

A. Statutory Authority

The Federal Aviation Administration (FAA) exercises statutory authority pursuant to 49 U.S.C. § 44701 *et seq.*, governing aviation safety and may issue regulations that are related to flight safety.

The Occupational Safety and Health Administration (OSHA) exercises statutory authority pursuant to 29 U.S.C. § 651 *et seq.*, governing the occupational safety and health of employees.

B. Jurisdictional History and Clarification

On July 10, 1975, the Federal Aviation Administration (FAA) published a Federal Register Notice asserting FAA's complete and exclusive responsibility for the regulation of the safety of civil aircraft in operation, and asserting that FAA prescribes and enforces standards and regulations affecting occupational safety or health with respect to U.S. registered civil aircraft in operation. The Occupational Safety and Health Act contains a provision, found at 29 U.S.C. § 653(b)(1), known as Section 4(b)(1), which states that "[n]othing in this Act shall apply to working conditions of employees with respect to which other Federal agencies ... exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health."

FAA and OSHA recognize that it is important to work together to ensure that one agency does not unnecessarily block the application of the other agency's regulations. FAA and OSHA wish to clarify that FAA's 1975 Federal Register Notice affected only the application of OSHA requirements to the working conditions of employees on aircraft in operation. In this Notice, FAA stated that an aircraft is "'in operation' from the time the aircraft is first boarded by a crew member, preparatory to a flight, to the time the last crewmember leaves the aircraft after the completion of that flight, including stops on the ground during which at least one crewmember remains on the aircraft, even if the engines are shut down." With respect to other aviation industry employees, such as maintenance personnel and ground support personnel, OSHA has been enforcing, and will continue to enforce, OSHA requirements to the extent allowed under Section 4(b)(1) of the OSHA Act. FAA and OSHA wish to clarify that FAA's comprehensive regulation of the working conditions in the cockpit continues to completely and exclusively encompass the safety and health aspects of the work environment of the flight deck crew so in order to fully occupy and exhaust the field of flight deck crew occupational safety and health.

III. PROCESS FOR COORDINATION

This MOU sets forth a process that FAA and OSHA agree to follow.

FAA and OSHA will establish a procedure for coordinating and supporting enforcement of the OSHA Act with respect to the working conditions of employees on aircraft in operation (other than flight deck crew) and for resolving jurisdictional questions. Initially, a team made up of representatives from FAA and OSHA will identify the factors to be considered in determining whether OSHA requirements can be applied to the working conditions of employees on aircraft in operation (other than flight deck crew) without compromising aviation safety. The joint team will produce a first report within 120 days from the date of execution of the MOU, regarding whether and to what extent, OSHA's existing standards and regulations on recordkeeping, bloodborne pathogens, noise, sanitation, hazard communication, anti-discrimination and access to employee exposure/medical records may be applied. Thereafter, the application of other OSHA standards and regulations can be reviewed.

 Consistent with the recommendations of the joint FAA-OSHA team, FAA will replace its 1975 Federal Register Notice with a new policy statement, published in the Federal Register, setting forth the circumstances under which the regulatory requirements of OSHA will apply to the working conditions of employees on aircraft in operation (other than flight deck crew). Interested members of the public will be invited to submit comments on the new policy statement. 2. Before proposing a standard that would apply to the working conditions of employees on aircraft in operation (other than flight deck crew), OSHA will consult with FAA to determine whether application of the requirement would compromise aviation safety.

IV. LEGAL EFFECT

Nothing in this MOU is intended to diminish or otherwise affect the authority of either agency to implement its respective statutory functions, nor is it intended to create any right or benefit, substantive or procedural, enforceable at law by a party against the United States, its agencies, its officers, or any other person. This MOU is effective upon signature by both parties.

Jane F. Garvey

Administrator Federal Aviation Administration U.S. Department of Transportation

cust 1 gold Date:

Charles N. Jeffress

Assistant Secretary Occupational Safety and Health Administration U.S. Department of Labor

ust 7,2000 Date: 92

Appendix B.

FAA Federal Register Notice, July 2, 1975

DEPARTMENT OF TRANSPORTATION

FEDERAL AVATION AMINISTRATION

NOTICE

Occupational Safety or Health Standards for Aircraft Crewmembers

The following information, concerning Federal Aviation Administration (FAA) regulation of occupational safety or health conditions affecting aircraft crewmembers; is set forth for the guidance of the general public, and for employees of air carriers and other aircraft operators in particular.

Pursuant to its complete and exclusive responsibility for the regulation of the safety of civil aircraft_operation under the Federal Aviation Act of 1958 (49-U.S.C. 1301, et seq.), herein called 'the Act," the FAA prescribes and enforces standards-and regulations affecting occupational safety or health with respect to U.S. registered civil aircraft in operation. For this purpose, an aircraft is "in operation" from the time it is first boarded by a crewmember, preparatory to a flight, to the time the last crewmember leaves the aircraft after completion of that flight, including stops on the ground during which least one crewmember remains on the aircraft, even if the engines are shut down.

Title VI of the Act (49 U.S.C. Chapter 20, Subchapter VI) contains the principal substantive provisions that authorize and require the FAA to promote the safety of civil aircraft operations by prescribing and revising standards and regulations governing, in the interest of safety, the design and materials (that is, the configuration), workmanship, construction, and performance of aircraft, maximum hours of periods of service of airmen and other employees of air carriers, and the transportation of dangerous articles.

With respect to civil aircraft in operation, the above mentioned safety regulatory responsibilities directly and completely encompass the safety and health aspects of the work environment of aircraft crewmembers. Aircraft design and operational factors are indivisible from occupational safety or health factors insofar as they affect the workplace of those crewmembers. Aircraft design and operational problems affecting the flight safety of crewmembers necessarily affect their occupational safety or health. Regulatory solutions to these problems necessarily involve practices, means, methods, operations, or processes needed to control the workplace environment of aircraft crewmembers.

Acting under its responsibility for the occupational safety or health of aircraft crewmembers, the FAA has issued numerous regulations directly affecting the workplace of pilots, flight engineers, cabin attendants, and other persons whose workplace is on aircraft in operation. These regulations (which are codified in 14 CFR Chapter I, Subchapters, C, F, and G) cover, among things, aircraft performance and structural integrity, safety equipment for emergency ditching and evacuation, fire protection, protective breathing rescue aids, and emergency exits used by crewmembers. Other regulations affecting the crewmember workplace have been issued with respect to cockpit lighting, crewmember seat belts, toxicity and other characteristics of materials in the crewmember workplace, and other environmental factors affecting that workplace, including noise reduction, smoke evacuation, ventilation, heating, and pressurization.

Maximum hours of duty and duty aloft for air carrier crewmembers are also regulated, as is the protection, of crewmembers, from radioactive and other hazardous materials.

In addition. to regulations currently in effect, the FAA, in conjunction with its first Biennial Airworthiness Review Program, has issued, or will be issuing, notices of proposed rulemaking that include many proposals for further achieving safe and healthful working, conditions for aircraft crewmembers. These proposals, for example, involve, aircraft configuration and related design provisions such as pilot criteria to be used in cockpit design; galley designs to ensure proper retention of items of mass; placarding of serving carts and galley equipment for maximum load; location of flight attendant seats near exits increased accessibility of emergency equipment to flight attendants; design of flight attendant seats; crewmember seat belt and shoulder harness criteria; slip resistant floors in crewmember workplaces; crewmember safety provisions concerning lower deck galleys, alarms, signs, elevators, interphones, and escape routes; and other provisions such as improved requirements for portable oxygen. equipment. In a related action, the FAA has also proposed. flammability standards for flight attendant uniforms. These proposed regulations, if adopted, would also be added to 14 CFR Chapter I.

Every, factor affecting the safe and healthy working conditions of air craft crewmembers involves matters inseparably related to the FAA's occupational safety and health responsibilities under the Act. With respect to civil aircraft in operation, the overall FAA regulatory program, outlined in part above, fully occupies and exhausts the field of aircraft crewmember occupational safety and health.

The FAA invites broad public participation in the further development of its occupational safety and health regulatory program so as to assure, where possible, safe and healthful working conditions for all persons who serve as crewmembers on. U.S. registered civil aircraft in operation. Any interested person who believes that the Federal Aviation Regulations should be expanded or otherwise amended to better achieve this objective is requested to submit his comments to the FAA, Director of Flight Standards Service 800 Independence Avenue, SW, Washington, D.C. 20591.

Issued in Washington, D.C., on July 2, 1975

/s/ J.W. Cochran Acting Administrator

[FR DOC. 75-17859 Filed 7-9-75;8:45am]

Appendix C.

FAA Federal Register Notice, October 4, 1999

[4910-13]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Chapter 1

Docket No. FAA-1999-6342

Occupational Safety and Health Issues for Airline Employees

AGENCY: Federal Aviation Administration (FAA), DOT

ACTION: Notice of public meeting and request for comments

SUMMARY: The FAA prescribes and enforces standards and regulations affecting occupational safety and health with respect to U.S.-registered civil aircraft in operation. These regulatory responsibilities directly and completely encompass the safety and health aspects of the work environment of aircraft crewmembers. However, the FAA has not promulgated specific regulations that address all employee safety and health issues associated with working conditions on aircraft. The FAA will hold a public meeting on December 10, 1999, to gather information on issues that have not been previously regulated. If the results of the review suggest that specific regulations should be adopted in response to occupational safety and health issues for airline employees, the changes will be proposed through the regulatory process.

DATES: The public meeting will be on December 10, 1999, in Washington, DC. The meeting will begin at 9 a.m. Persons not able to attend a meeting are invited to provide written comments, which must be received on or before March 8, 2000.

ADDRESSES: The public meeting will be held at the Federal Aviation Administration, 800 Independence Avenue, SW., Washington, DC 20591 in the 3rd floor auditorium. Persons unable to attend the meeting may mail their comments in duplicate to: U.S. Department of Transportation Dockets, Docket No. FAA-1999-6342, 400 Seventh Street, SW., Plaza Room 401, Washington, DC 20590. Comments also may be sent electronically to the Dockets Management System (DMS) at the following Internet address: <u>http://dms.dot.gov/</u> at anytime. Commenters who wish to file comments electronically, should follow the instructions on the DMS web site. Comments may be filed and/or examined at the Department of Transportation Dockets, Plaza Room 401 between 10 a.m. and 5 p.m. weekdays except Federal holidays.

FOR FURTHER INFORMATION CONTACT: Requests to present a statement at the meeting or questions regarding the logistics of the meeting should be directed to Ms. Cindy Nordlie, Federal Aviation Administration, Office of Rulemaking, ARM-108, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-7627; fax (202) 267-5075.

Questions concerning the subject matter of the meeting should be directed to Mr. Gene Kirkendall, Federal Aviation Administration, Flight Standards Service, AFS-220, 800 Independence Avenue, SW., Washington, DC 20591; telephone (202) 267-7701; fax (202) 267-5229.

SUPPLEMENTARY INFORMATION:

Background

In a 1975 Federal Register notice (40 FR 29114, July 10, 1975), the Federal Aviation Administration (FAA) stated that pursuant to its complete and exclusive responsibility for the regulation of the safety of civil aircraft, the FAA prescribes and enforces standards and regulations affecting occupational safety or health with respect to U.S.- registered civil aircraft in operation. (An aircraft was described as "in operation" from the time it is first boarded by a crewmember, preparatory to a flight, to the time the last crewmember leaves the aircraft after completion of that flight, including stops on the ground during which at least one crewmember remains on the aircraft, even if the engines are shut down.) The FAA added that, with respect to civil aircraft in operation, these regulatory responsibilities directly and completely encompass the safety and health aspects of the work environment of aircraft crewmembers. The FAA stated that aircraft design and operational factors are indivisible from occupational safety or health factors insofar as they affect the workplace of those crewmembers and that aircraft design and operational problems affecting the flight safety of crewmembers necessarily affect their occupational safety or health. The FAA also noted that regulatory solutions to these problems necessarily involve practices, means, methods, operations, or processes needed to control the workplace environment of aircraft crewmembers.

In the notice, the FAA stated that it had issued numerous regulations directly affecting the workplace of pilots, flight engineers, flight attendants, and other persons whose workplace is on an aircraft in operation. Such regulations included aircraft performance and structural integrity, safety equipment for emergency ditching and evacuation, fire protection, protective breathing rescue aids, and emergency exits used by crewmembers. Other regulations affecting the crewmember workplace have addressed cockpit lighting, crewmember seat belts, toxicity and other characteristics of materials in the crewmember workplace, noise reduction, smoke evacuation, ventilation, heating, and pressurization.

The FAA is now reviewing its regulatory oversight of occupational safety and health issues for airline employees. If the results of the review suggest that specific regulation of areas

involving occupational safety and health issues is appropriate for airline employees, the changes would be proposed through the regulatory process.

The FAA considered a number of alternative approaches to occupational safety and health concerns. During a preliminary review, the FAA considered delegating certain areas of responsibility to the Occupational Safety and Health Administration (OSHA), similar to what was developed by the Federal Railroad Administration in 1978. However, the FAA has determined that this would be impractical for several reasons including: (1) State OSHA requirements can be more protective than Federal OSHA requirements and can vary among states, resulting in multiple standards; (2) current OSHA requirements were not developed for aircraft in operation; and (3) OSHA's jurisdiction is limited to the United States and therefore would not apply to international operations. The FAA also considered voluntary programs by airlines, but questions whether voluntary programs would be adequate because there would not be standardization among the airlines regarding occupational safety and health issues.

Specific Issues for Public Comment

There are several specific issues on which the FAA seeks comment at the public meeting. These key issues are intended to help focus public comments on areas about which information is needed by the FAA in completing its review of the occupational safety and health issues for airline employees. The comments at the meeting need not be limited to these issues, and the FAA invites comments on any other aspect of occupational safety and health on aircraft in operation.

- (1) Are there specific crewmember occupational safety and health concerns? If so, what are they?
- (2) What recordkeeping data is available that documents injuries and illnesses related to crewmember and other employee occupational safety and health concerns? Should recordkeeping be standardized?
- (3) How are aviation employees other than crewmembers (such as ground service employees and maintenance workers) currently protected by FAA regulations, and should the working conditions of these employees be included in possible future rulemaking? Should the FAA modify its rules about maintenance manuals?
- (4) Describe how occupational safety and health hazards vary when the aircraft is airborne versus when it is on the ground.
- (5) Are there any safety issues related to operations on airport ramp areas that the FAA should address?
- (6) In the development of its own occupational safety and health standards, what, if any, OSHA standards should the FAA use as the basis for future FAA standards?

- (7) What procedures should be established to identify and remedy issues not addressed by OSHA regulations?
- (8) Are any air carriers currently supporting occupational safety and health programs for their employees? If so, what do the programs include?
- (9) What are the potential impact and implementation problems associated with the FAA developing occupational safety and health standards to protect airline employee safety and health?

Input is encouraged from government agencies such as OSHA, the Environmental Protection Agency, the National Institutes for Occupational Safety and Health, and the Centers for Disease Control and from advisory groups such as the American Industrial Hygiene Association and the American Society for Safety Engineers.

Participation at the Meeting

Requests from persons who wish to present oral statements at the meeting should be received by the FAA no later than November 22, 1999. Such requests should be submitted to Cindy Nordlie, as listed above in the section titled **"FOR FURTHER INFORMATION CONTACT"** and should include a written summary of oral remarks to be presented and an estimate of time needed for the presentation. The FAA will prepare an agenda of speakers that will be available at the meeting. The names of those individuals whose requests to present oral statements are received after the date specified above may not appear on the written agenda. To accommodate as many speakers as possible, the amount of time allocated to each speaker may be less than the amount of time requested. Persons requiring audiovisual equipment should notify the FAA when requesting to be placed on the agenda.

Public Meeting Procedures

The FAA will use the following procedures to facilitate the meeting:

(1) There will be no admission fee or other charge to attend or to participate in the meeting. The meeting will be open to all persons who are scheduled to present statements or who register between 8:30 a.m. and 9 a.m. on the day of the meeting. While the FAA will make every effort to accommodate all persons wishing to participate, admission will be subject to availability of space in the meeting room. The meeting may adjourn early if scheduled speakers complete their statements in less time than is scheduled for the meeting.

(2) An individual, whether speaking in a personal or a representative capacity on behalf of an organization, may be limited to a 10-minute statement. If possible, we will notify the speaker if additional time is available.

(3) The FAA will try to accommodate all speakers. If the available time does not permit this, speakers generally will be scheduled on a first-come-first-served basis. However, the FAA

reserves the right to exclude some speakers if necessary to present a balance of viewpoints and issues.

(4) Sign and oral interpretation can be made available at the meeting, as well as an assistive listening device, if requested 10 calendar days before the meeting.

(5) Representatives of the FAA will preside over the meeting. A panel of FAA personnel involved in this issue will be present.

(6) The meeting will be recorded by a court reporter. A transcript of the meeting and any material accepted by the FAA representatives during the meeting will be included in the public docket. Any person who is interested in purchasing a copy of the transcript should contact the court reporter directly. Additional transcript purchase information will be available at the meeting.

(7) The FAA will review and consider all material presented by participants at the meeting. Position papers or material presenting views or arguments related to the occupational safety and health of crewmembers may be accepted at the discretion of the presiding officer and subsequently placed in the public docket. The FAA requests that persons participating in the meeting provide six copies of all materials to be presented for distribution to the FAA representatives; other copies may be provided to the audience at the discretion of the participant.

(8) Statements made by FAA representatives are intended to facilitate discussion of the issues or to clarify issues. Any statement made during the meeting by an FAA representative is not intended to be, and should not be construed as, a position of the FAA.

(9) The meeting is designed to solicit public views and gather additional information on the occupational safety and health of crewmembers and other issues discussed in this notice. Therefore, the meeting will be conducted in an informal and non-adversarial manner. No individual will be subject to cross-examination by any other participant; however, FAA representatives may ask questions to clarify a statement and to ensure a complete and accurate record.

Issued in Washington, DC on October 4, 1999.

/s/ Margaret Gilligan Deputy Associate Administrator for Regulation and Certification

Appendix D.

Public Law 91-596, 91st Congress, S.2193, December 29, 1970. Occupational Safety and Health Act Section 4 (b) (1)

Section 4

(b)(1) Nothing in this Act shall apply to working conditions of employees with respect to which other Federal agencies, and State agencies acting under § 274 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2021), exercise statutory authority to prescribe or enforce standards or regulations affecting occupational safety or health.