



Flight Safety Notification

Airworthiness

Flight Safety Notifications (FSNs) are not mandatory in nature, but provide means such as guidance, methods, procedures and practices acceptable to the Authority for complying with regulations and other requirements in a systematic manner. These are not necessarily the only means of compliance. FSNs may also contain explanations of regulations, other guidance material, best practices or information useful to the aviation community. Unless incorporated into a regulation by reference, FSNs are not regulatory and do not create or change a regulatory requirement. A change of a regulatory requirement may come in the form of a Directive. A Flight Safety Notification is not a Directive.

Aircraft - Storage and Return to Service

Reason for Revision

Standardization of format to all Flight Safety Notifications. The title of the FSN has been changed from Aircraft-Long Term Storage and Return to Service to Aircraft-Storage and Return to Service.

Purpose

The purpose of this Flight safety Notification is to provide operators with guidance for the storage, maintenance during storage and the subsequent return to service of aircraft.

Removing an aircraft from service and parking it for any period of time requires that it be protected from potentially harmful environmental effects. Accordingly, returning a parked aircraft to service after a lengthy downtime requires extensive restoration of its systems. While the airworthiness of an in-service aircraft is proven, the airworthiness of an aircraft after extended downtime must be certified before it resumes operations. As a result, the process for returning an aircraft to service after extended downtime for maintenance or parking must include attention to controlled, repeatable maintenance processes.

References

N/A.

Applicability

All Jamaican AOC holders and operators of Jamaican registered aircraft.

flight before the aircraft can be returned to service. In some cases, a functional check flight is required before the aircraft can begin revenue service.

3. Aircraft Returning from Parking

An aircraft may be parked for more than a day because of business or operational factors such as overcapacity, company restructuring, market conditions, or regulatory action. Deterioration of aircraft structure, surface finish, aircraft systems, and components can occur if preservation procedures to protect the aircraft are not followed. If exposed to the outside environment, an aircraft can be damaged by heat, humidity, cold, ice snow, rain, lightening, hail, wind, sandstorms, and insects. The aircraft must also be protected from damage or debris contamination of pitot probes, static ports, total air temperature probes and angle-of-attack sensors. External openings on the aircraft such as the outflow valve relief valves, vents, ports and openings must be closed and sealed against environmental effects.

Because of the inactivity of the aircraft systems and the lack of regular maintenance checks during parking, the following may also occur:

- (1) component mechanisms may lose lubrication,
- (2) batteries may be discharged,
- (3) contamination of potable water systems or fuel tanks may occur, and
- (4) some systems or components (such as oxygen cylinders, tires, hydraulic system, and landing gear shock struts) may lose pressure.

Although the aircraft is inactive during parking, it is important to maintain the engine, auxiliary power unit, and cargo fire extinguishing system and all portable fire extinguishers, in fully serviceable condition in case of a fire. The aircraft must also be grounded while it is parked in order to reduce the possible build-up of static electricity.

Operator experience shows that dispatch reliability is higher and maintenance problems are fewer for aircraft in regular service when compared to aircraft used sporadically (e.g., infrequent charter flights or parked aircraft). When the aircraft is in service, flight crews are monitoring aircraft system performance from the flight deck; maintenance personnel are performing preventative maintenance, regular inspection, and repair procedures; and the on-board computing systems and electronics unit are performing internal diagnostics to monitor systems health. The regular use of an aircraft maintains its systems and components in a condition conducive to airworthiness.

Parking creates the risk that an aircraft may not be properly protected or that system functionality may not be properly restored. The increased integration and complexity of both hardware and software in aircraft systems means greater care and attention must be paid to

protecting and restoring the aircraft after parking. The procedures established to preserve an aircraft during parking and later restore it to in-service condition are extensive and lengthy, but are necessary to ensure airworthiness. Specific procedures exist for servicing and protecting an aircraft parked for different periods of time. The aircraft manufacturer's recommended maintenance practices for parking can be found in Chapter 10 of the Aircraft Maintenance Manual (AMM).

Summary

Increased emphasis on aviation safety has required operators and maintenance personnel to exercise greater care and vigilance in all aspects of aircraft maintenance. Any aircraft being returned to service after extended downtime requires additional attention, because in many cases a lengthy period of time has passed since the aircraft last flew. Any time an aircraft is in extended downtime for maintenance, either system modifications or configuration changes may have been implemented. When an aircraft is parked, protective maintenance must be performed to prevent damage to the aircraft. The aircraft may have been airworthy prior to the period of extended downtime, but no assumptions should be made about the airworthiness of the aircraft after the downtime, especially if protective measures, and the manufacturer's recommended maintenance instructions, have not been carried out. When an aircraft is returned to service after parking or maintenance downtime, the appropriate checks and tests must be performed to ensure its airworthiness. All aircraft systems that were disturbed during maintenance should be operationally tested according to the aircraft manufacturer's instructions or equivalent operator instructions. Following these fundamental practices can help a maintenance organization to ensure the airworthiness of an aircraft returned to service after extended downtime.

Approved by: _____



Date: April 15, 2016

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