Disclosures

Common “Unusual Circumstance” Disclosures

ASA-100 Section 5(D)

In addition, the distributor of surplus parts should have a procurement system which assures that:

1) a part known to have been subjected to conditions of extreme stress, heat or environment are so identified.

2) all Airworthiness Directives (AD's) that are represented as having been accomplished are

documented. Certification of compliance shall specify AD number, AD amendment number, date, and method of compliance, i.e.,” AD xxxx-xx terminated (date). Replaced shaft seal with P/N ___ shaft seal (signature)."

3) items identified as overhauled, repaired or modified have the appropriate signed and dated documentation attached to substantiate the condition of the part

Common "Unusual Circumstance" Disclosures

ASA-100 Section 10(B)

Additionally, a certified statement disclosing the following should be issued about the material or parts, certifying that they were or were not:

1) subjected to conditions of extreme stress, heat or environment,

2) obtained from the Government or military services.

"obtained from the Government or military services"

- This is meant to address public aircraft
- Rationale: Public aircraft are not held to the same standards as civil aircraft under ICAO standards. Parts that are flown on public aircraft may not have been maintained according to standards that are thought of as common for civil aircraft
- Current situation
  - In the United States, GSA ordered that aircraft of civilian types be registered with the FAA and be operated and maintained according to FAA standards in order to better maintain their value; military aircraft parts are permitted to be flow beyond life limits in times of war
  - FAA recommends disclosure if the part came from an aircraft without airworthiness certificate; i.e., public use, non-U.S., and military surplus aircraft
  - In other nations, public aircraft could be maintained to different standards than civil aircraft

"part known to have been subjected to conditions of extreme stress, heat or environment"

OLD RULE (before 2001)

145.45(e): A repair station must provide a system so that before working on any airframe, powerplant, or part thereof that has been involved in an accident, it will be inspected thoroughly for hidden damage, including the areas next to the obviously damaged parts.

CURRENT RULE

145.211(c) A certificated repair station must prepare and keep current a quality control manual in a format acceptable to the FAA that includes the following:

(1) A description of the system and procedures used for—

(iii) Inspecting all articles that have been involved in an accident for hidden damage before maintenance, preventive maintenance, or alteration is performed;

FAA Guidance

Eligibility, Quality, and Identification of Aeronautical Replacement Parts, FAA Order AC 20-62E, para 8(c) (Dec. 23, 2010)

c. Unusual Circumstances. If a particular part was obtained from any of the following, then it should be so identified by some type of documentation (i.e., maintenance record entries, removal entries, overhaul records).

(1) Noncertificated aircraft (aircraft without airworthiness certificate; i.e., public use, non-U.S., and military surplus aircraft).

(2) Aircraft, aircraft engines, propellers, or appliances subjected to extreme stress, sudden stoppage, heat, major failure, or accident.

(3) Salvaged aircraft or aircraft components.

[*emphasis added*]

Aircraft Accident

- NTSB Regulation: 49 C.F.R. § 830.2
- Aircraft accident means an occurrence associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight and all such persons have disembarked, and in which any person suffers death or serious injury, or in which the aircraft receives substantial damage

Incident

- NTSB Regulation: 49 C.F.R. § 830.2
- Incident means an occurrence other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operations

Serious Incidents (defined in 49 C.F.R. §830.5(a)

(1) Flight control system malfunction or failure;

(2) Inability of any required flight crewmember to perform normal flight duties as a result of injury or illness;

(3) Failure of any internal turbine engine component that results in the escape of debris other than out the exhaust path;

(4) In-flight fire;

(5) Aircraft collision in flight;

(6) Damage to property, other than the aircraft, estimated to exceed $25,000 for repair (including materials and labor) or fair market value in the event of total loss, whichever is less.

(7) For large multiengine aircraft (more than 12,500 pounds maximum certificated takeoff weight):

(i) In-flight failure of electrical systems which requires the sustained use of an emergency bus powered by a back-up source such as a battery, auxiliary power unit, or air-driven generator to retain flight control or essential instruments;

(ii) In-flight failure of hydraulic systems that results in sustained reliance on the sole remaining hydraulic or mechanical system for movement of flight control surfaces;

(iii) Sustained loss of the power or thrust produced by two or more engines; and

(iv) An evacuation of an aircraft in which an emergency egress system is utilized.

(8) Release of all or a portion of a propeller blade from an aircraft, excluding release caused solely by ground contact;

(9) A complete loss of information, excluding flickering, from more than 50 percent of an aircraft's cockpit displays known as:

(i) Electronic Flight Instrument System (EFIS) displays;

(ii) Engine Indication and Crew Alerting System (EICAS) displays;

(iii) Electronic Centralized Aircraft Monitor (ECAM) displays; or

(iv) Other displays of this type, which generally include a primary flight display (PFD), primary navigation display (PND), and other integrated displays;

(10) Airborne Collision and Avoidance System (ACAS) resolution advisories issued either:

(i) When an aircraft is being operated on an instrument flight rules flight plan and compliance with the advisory is necessary to avert a substantial risk of collision between two or more aircraft; or

(ii) To an aircraft operating in class A airspace.

(11) Damage to helicopter tail or main rotor blades, including ground damage, that requires major repair or replacement of the blade(s);

(12) Any event in which an operator, when operating an airplane as an air carrier at a public-use airport on land:

(i) Lands or departs on a taxiway, incorrect runway, or other area not designed as a runway; or

(ii) Experiences a runway incursion that requires the operator or the crew of another aircraft or vehicle to take immediate corrective action to avoid a collision.

What does the FAA say?

- The FAA has never recommended certification that the part was *not* involved in an accident or incident
  - This is a commercial request
- The FAA recommends that persons disclose exposure to unusual heat or stress
  - This disclosure permits a hidden damage inspection
  - Many engine overhaul manuals seem to have incorporated hidden damage inspection into their normal overhaul requirements