

DATA ITEM DESCRIPTION

Form Approved
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Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503

TITLE

Loads Environmental Spectra Survey (LESS) Data Report

2. IDENTIFICATION NUMBER

DI-MGMT-81450

3. DESCRIPTION / PURPOSE

3.1 The purpose of this report is to provide a description of the actual operational loads environment of the aircraft as it is being definitized from collected recorder data. When sufficient usage differences are apparent and statistical stability of the data has been achieved, update of the baseline values with current operational spectra can be accomplished.

4. APPROVAL DATE
(YYMMDD)

950123

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

F/ASC-ENFS

6a. DTIC APPLICABLE

6b. GIDEP APPLICABLE

7. APPLICATION / INTERRELATIONSHIP

7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.

7.2 This DID is applicable in any contract where an Aircraft Structural Integrity Program (ASIP) fleet tracking program is required.

(Continued on Page 2)

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

F7103

10. PREPARATION INSTRUCTIONS

10.1 *Format.* Contractor format is acceptable.

10.2 *Content.* This periodic report shall contain the following information: all flight time during the reporting period for LESS equipped aircraft only and a total of all flight time since aircraft delivery. (Note: for items c, d, and e below, the data shall be compiled as cumulative occurrences or exceedances based upon 1000 flight hours.)

a. The number of flight hours logged by each LESS instrumented aircraft, the number of hours of recorded data received for each aircraft, and a listing and explanation of the causes of lost, unusable, or invalid data.

b. The criteria used to determine statistical stability and the analysis used to determine statistical stability. An updated baseline spectrum, when flight recorder data has changed enough to warrant update and when the statistical stability criteria has been satisfied.

(Continued on Page 2)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release, distribution is unlimited.

Block 7, Application/Interrelationship (Continued)

7.3 This DID interrelates with DI-T-30731, Individual Aircraft Tracking (IAT) Data Report and DI-S-30584, Force Structural Maintenance Data Requirements Methodology Report.

7.4 This DID supersedes DI-S-30583.

Block 10, Preparation Instructions (Continued)

c. Comparisons of the recorder data with the baseline spectra by mission type and mission segment broken out by base and all bases combined.

d. To ensure the LESS aircraft sampling represents the fleet, comparison of the LESS flight recorder data for each LESS instrumented aircraft (vertical load factor at the center of gravity (N_z), number of flights, flight hours and mission descriptions broken out by mission type and mission segment and total flight hours) with the IAT data. A similar comparison (of LESS flight recorder data) for the entire fleet compiled both by base and all bases combined.

e. Presentation of significant parameters (e.g., pressure cycles, ground-air-ground cycles, strains, N_z and lateral load factor at the center of gravity (N_y) (with maneuver separated from gust), rates, accelerations, surface deflections, and wing sweep for various gross weight, airspeed and altitude combinations) as follows:

(1) Exceedances of significant parameters (in tabular and graphical form) versus by mission type and mission segment with flight time and number of flights and composites for individual aircraft (by tail number), base, fleet, and other significant groupings.

(2) Tabulations of time in airspeed and altitude blocks by weight blocks by mission type and mission segment.

f. Multiparameter (e.g., N_z versus corresponding roll rate, roll acceleration and other significant parameters) data (in tabular and graphical form), shall be presented as distributions of parameter peaks by mission type and mission segment with time and number of flights in each mission type and mission segment.