# DATA ITEM DESCRIPTION

Form Approved OMB No. 0704-01

| 2. TITLE | 1. IDENTIFICATION NUMBER |
|---|---|
| SPARE PARTS USAGE REPORT | DI-ILSS-80483 |

3. DESCRIPTION/PURPOSE

3.1 The Spare Parts Usage Report reflects the status of the inventory, its usage history and an analysis of turnover including a prediction of trends. The report is used to manage the range and depth of depot stock and to estimate future funding requirements.

| 4. APPROVAL DATE (YYMMDD) | 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) | 6a. DTIC APPLICABLE | 6b. GIDEP APPLICAI |
|---|---|---|---|
| 871030 | N/PMS417 | | |

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 to contracts requiring the contractor to provide spare parts support for a configuration item including stockage, issues, ordering and repair and to maintain the resulting usage data.

| 8. APPROVAL LIMITATION | 9a. APPLICABLE FORMS | 9b. AMSC NUMBER |
|---|---|---|
| | | N4264 |

10. PREPARATION INSTRUCTIONS

10.1 Format. The report shall be in contractor's format.

10.2 Content. The report shall contain the following:

10.2.1 Section A - Spares on order. Identifies all spares on order for support of the configuration item (CI), in part number sequence, from inception to date.

10.2.2 Section B - Awaiting authorization. Identifies all spares received awaiting authorization for repair for the support of the CI, in part number sequence, from inception to date.

10.2.3 Section C - In repair. Identifies all spares in the repair cycle for support of the CI, in part number sequence for the reporting period.

10.2.4 Section D - Unfilled requisitions. Identifies all open, unfilled Military Standard Requisition and Issue Procedure (MILSTRIP) requisitions for support of the CI in part number sequence.

10.2.5 Section E - Supply management section. This section shall consist of the following: (see Figure 1 for a sample format).

10.2.5.1 Part number. A multiple line listing of associated part number references.

a. Prime part number - Coded with (R) if repairable.
b. Cognizance Code/National Stock Number/Special Material Identification Code (COG/NSN/SMIC) of prime part number.

(Continued on Page 2)

11. DISTRIBUTION STATEMENT

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

10.

Block 10, Preparation Instructions (Continued)

c. Alternative part numbers - coded with (K).
d. Make from part numbers - coded with (MF).

10.2.5.2 Nomenclature. First 20 characters of item name.

10.2.5.3 Where used. A two character representation of the major system where the part has usage.

10.2.5.4 Requirements.

10.2.5.4.1 Back orders (B/O) - Quantity of the part number presently on back order.

10.2.5.4.2 Quarterly Demand (1 QTR DEMAND) - Average quarterly requirement, as calculated from the quarterly demand (QD) formula, represents the part usage for a 3 month period rounded up to the next whole number.

10.2.5.4.3 Three year demand (13 QTR DEMAND) - Quarterly demand times 13 specifies the requirement for a three year period plus one quarter for generation lead time.

10.2.5.4.4 Planned program - Specifies the planned requirements for Installation and Checkout (I&C) interim Onboard Repair Parts/Maintenance Assistance Module (OBRP/MAM) or other kits to be assembled from the depot shelf stock in the next one, two and three year time periods. Planned program requirements are in addition to, and do not include 13 QTR DEMAND requirements.

10.2.5.4.5 Requirement total - Represents the total required quantity for the next three years. It is the sum of B/O, 1 QTR DEMAND, 13 QTR DEMAND, and 1 YR, 2 YR, and 3 YR planned program.

10.2.5.5 Assets.

0.2.5.5.1 Ready for issue (RFI).

a. On hand (O/H) - Quantity of the part number that is in the Government furnished material (GFM) depot inventory.
b. On order (O/O) - Quantity of the part number that is on order.

10.2.5.5.2 Not ready for issue (NRFI).

a. Predicted return (RTN) - Represents the expected total carcass returns (for repairables only) and is calculated by (1 QTR DEMAND x13 x .8).
b. Awaiting authorization (AWAIT) - Quantity, if repairable, of the part number waiting for authorization to start repair.
c. In repair (INREP) - Quantity, if repairable, of the part number in the repair cycle.
d. Reclamation (RECLM) - Quantity of parts in used equipment that has been returned to the depot. May require retesting.

10.2.5.5.3 Asset total - Available known assets for indicated part number. The sum of RFI and NRFI.

Block 10, Preparation Instructions (Continued)

10.2.5.6 Delta - The requirement total minus the asset total. A plus delta indicates an anticipated excess stock for the next three year period. A minus delta indicates a repair action or reorder is required.

10.2.5.7 Buy recommendation made - The quantity that has previously been recommended to be purchased but an order has not been placed.

10.2.5.8 Action required (ACT REQ) - A code in this field will identify that an action is required. The following are some representative situations requiring action to be taken:

a. Indicates stock out condition. [O/H <= 1 QTR DEMAND)
b. Indicates repair vs. buy decision.
[DELTA <= 0 & BUY REC MADE = 0 wait > 0]
c. Expedite on-order parts to alleviate a low on-hand.
[O/H <= 1 QTR DEMAND and O/O >0]
d. Quarterly demand increasing or decreasing. Print last report's QTR DEMAND under this report's QTR DEMAND if greater/less than 50%.
e. Back orders increasing. Print last report's back order quantity under this report's back order quantity if greater than last report.

10.3 Format calculations.

10.3.1 Quarterly demand (QD) - The calculated part usage for a 3 month period rounded up to the next whole number.

10.3.1.1 USAGE - The quantity of repaired or failed parts over the last K months where K represents the number of months.

$$QD=\left[\frac{\text{Usage} \times 1.7 \times 3 \times L}{K}\right] + \left[\frac{(1.7 \times AD \times LT)+(2 \times N) \times M}{4}\right]$$

TABLE I. L and M weighted factor

| MONTHS | L | M |
|---|---|---|
| 1-12 | 0 | 1 |
| 13-24 | .5 | .5 |
| 25 on | 1 | 0 |

Where N is the low demand safety factor. IF AD < + 0.5 then N=1; else N=0.

10.3.1.2 Annual demand (AD) - Predicted failure rate x operating hours per year divided by 1,000,000 x quantity per end item x number of systems to be supported within the lead time.

10.3.1.3 Lead time (LT) - The average time from release of an order to the item's manufacturer, to delivery of the item by the manufacturer, plus 180 days.

Block 10, Preparation Instructions (Continued)

10.4 General.

10.4.1 The text portion of the documentation shall be typewritten on 8 1/2" x 11" (metric size A4) white paper (other colors may be used to illustrate or highlight features).

10.4.2 Charts, graphs, drawings, sketches, etc., may be included either in the body of the text or in an appendix to clarify or explain the text. Oversize material shall be arranged to fold within the document without protruding and shall be limited to one-way horizontal foldout.

10.4.3 Large size display charts/posters, vu-graphs, and film slides may be a part of the documentation by reference.

10.4.4 All material presented shall be sufficiently clear and sharp for further reproduction as required. If intended as a visual aid, it must be easily readable at a minimum distance of 25 feet (8 meters).

10.4.5 The document shall be bound in the most economical manner.

# SUPPLY MANAGEMENT REPORT

RUN DATE:

| PART NUMBER (COG/NSN) | NOMENCLATURE | WHERE USED | REQUIREMENTS | | | | | | | ASSETS | | | | | | | DELTA | BUY RFC MADE | ACT REQ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | B/O | 1 QTR DEMAN | 13 QTR DEMAN | PLAN PGM 1 YR | PLAN PGM 2 YR | PLAN PGM 3 YR | TOTAL | RFI O/H | RFI O/O | NRFI RTN | NRFI AWAIT | NRFI INREP | NRFI RECLM | TOTAL | | | |
| PRIME (R) (COG/NSN/SMIC) | | | | | | | | | | | | | | | | | | | |
| ALT P/N = (K) | | | | | | | | | | | | | | | | | | | |
| MAKE FROM = (MF) | | | | | | | | | | | | | | | | | | | |
| ◄---------- 1 ---------- | | ►2◄ | ►3◄ | | | | | | | ►4◄ | ►5◄ | | ►6◄ | ►7◄ | ►8◄ | | | | |

1. PART NUMBER MASTER FILE (PNMF)
2. PROVISIONING FILES
3. REQUISITION FILE (REPORT "IPSJP4DL")
4. INVENTORY ON HAND QUANTITY
5. SPARES ON ORDER STATUS SYSTEM (TOTAL QUANTITY OF OPEN ORDERS)
6. REPAIR STATUS SYSTEM (REPORT "REPJ505")
7. REPAIR STATUS SYSTEM (REPORT "REPJ611")
8. ON HAND QUANTITY (PROGRAM CODE = 2)

R = REPAIRABLE PART
K = TRUE OR ALTERNATE PART NUMBER
MF = MAKE FROM PART NUMBER

FIGURE 1. Sample supply management report

10 Preparation Instructions (Continued)

DI-ILSS-80483

Page 5 of 5 Pages