AD-A145 721			REQ	UIREME	NTS PA	ROCESS	TO DI QUIREM	RECTOR	RATE O	F LOGI TELLE	STICS	ws	1/	1
	UNCLAS	SIFIED) LHR	SUH	- U U	JUGHN	28 MHY	82 F3	\$3600-	81-0-0	613 F/G 1	.5/5	NI,	
			1 5 3											
				END HOMED										
				• –										
Ň														1







AD-A145 721

to

DIRECTORATE OF LOGISTICS MANAGEMENT SYSTEM REQUIREMENTS (XRB) DCS/PLANS AND PROGRAMS AIR FORCE LOGISTICS COMMAND WRIGHT-PATTERSON AFB, OHIO 45433

May 28, 1982

by

C. O. Coogan

DISTRIBUTION STATEMENT A Approved for public release; Distribution Unlimited FINAL REPORT

No. States of the

94. 3 3

Ś

1

1. 2. 4 A

3

3

ŝ

2

a state of the second

<u>____</u>

on

REQUIREMENTS PROCESS

to

DIRECTORATE OF LOGISTICS MANAGEMENT SYSTEM REQUIREMENTS (XRB) DCS/PLANS AND PROGRAMS AIR FORCE LOGISTICS COMMAND WRIGHT-PATTERSON AFB, OHIO 45433

May 28, 1982

Ъy

C. O. Coogan

Contract No. F33600-81-C-0613

BATTELLE Columbus Laboratories 505 King Avenue Columbus, Ohio 43201

UNCLASSIFIED

22.20

ja.



. <u>.</u> .

SECURITY CLASSIFICATION OF THIS PAGE

	REPORT DOCUM	ENTATION PAGE			
1. REPORT SECURITY CLASSIFICATION UNCLASSIFIED		16. RESTRICTIVE MA	RKINGS		
28. SECURITY CLASSIFICATION AUTHORITY N/A		3. DISTRIBUTION/AVAILABILITY OF REPORT			
20. DECLASSIFICATION/DOWNGRADING SCH	26. DECLASSIFICATION/DOWNGRADING SCHEDULE				
4. PERFORMING ORGANIZATION REPORT NUN	MBER(S)	5. MONITORING ORG	ANIZATION RE	EPORT NUMBER	5)
6. NAME OF PERFORMING ORGANIZATION	6b. OFFICE SYMBOL (If applicable)	78. NAME OF MONITO	ORING ORGANI	ZATION	
BATTELLE LABORATORIES		HQ AFLC/XRQ	tate and 71P Cad		
COLUMBUS, OHIO 43201		WPAFB, OHIO	45433		
S. NAME OF FUNDING/SPONSORING ORGANIZATION	86. OFFICE SYMBOL (11 applicable)	9. PROCUREMENT IN F33600-81-C-(ISTRUMENT ID	ENTIFICATION N	UMBER
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNI	DING NOS.		
		PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT NO.
11. TITLE (Include Security Classification)		1 1		}	1
REQUIREMENTS PROCESS					
12. PERSONAL AUTHOR(S)					
134 TYPE OF REPORT		14. DATE OF REPORT	T (Yr. Mo. Davi	15 PAGE C	
FINAL FROM _	TO	1982, May 28	· · · · · · · · · · · · · · · · · · ·	51	
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES	18. SUBJECT TERMS (Continue on reverse if nec	essary and identi	fy by block numbe	r)
15 05	Recoverable It	em Requirements Planning Model			
19. ABSTRACT (Continue on reverse if necessary of This document provides recoverable items. The des determine future requirement inputs and outputs are deso process and other processes ally excluded because of the	and identify by block numbers a description of acription is in t ints based on curr cribed as a means a. The details of the many options f	of the Requireme erms of what me ent and histor: of defining the of how requireme for accomplishing	ents Proce ust be don ical data. he interfa ents are c ng the fun	ss as it per e to effect The neces ces between omputed are ction.	rtains to ively sary this intention-
20. DISTRIBUTION/AVAILABILITY OF ABSTR	ACT	21. ABSTRACT SECU	RITY CLASSIFIC	CATION	
UNCLASSIFIED/UNLIMITED	T. C DTICUSERS	UNCLASSIFIED			
220. NAME OF RESPONSIBLE INDIVIDUAL		225. TELEPHONE NU	MBER	22c. OFFICE SYN	BOL
GUST PAPALIOS		513 257-4147		HQ AFLC/XR	QC
DD FORM 1473 83 APP	EDITION OF 1 JAN 73	IS OBSOLETE.	IN	CLASSIFIED	
			SECURI	TY CLASSIFICATI	ON OF THIS PAGE

TABLE OF CONTENTS

Page No.

A DOM DOM DOM D

•		1
	PURPOSE	3
	SYSTEM DESCRIPTION	4
	General	4
	Functions of the System	4
	Determine Future Usage	4
	Compute Future Needs	6
	Evaluate Current Assets	6
	Define Buy Requirements	10
	Define Excesses	10
	SYSTEM CHARACTERISTICS	13
	SYSTEM INTERFACES	14
	FCMS DATA SHEETS	18
	LAG LEVEL	19
	PROCESS LEVEL	20
	ENTITY LEVEL	25
		47
	CLOSSARY OF ABBREVIATIONS	48
		40
	LIST OF FIGURES	
	FIGURE 1. RECOVERABLE ITEMS REQUIREMENTS: LAG 14	F
	FIGURE 2. DETERMINE FUTURE USAGE	י ר
	FICHER 3 COMPUTE FUTURE NEEDS	/
	FICURE / FULLUATE CURRENT ACCETC	8
	FIGURE 4. EVALUATE CURRENT ADDETS	9
	RELATION TO THE OWNER WAY DEPARTMENTS	

TABLE OF CONTENTS (Continued)

The reaction of the second second

Š

1

53

国語

a date the second

Page No.

LIST OF FIGURES (Continued)

FIGURE 6.	EXCESS ASSET DISPOSITION	12
FIGURE 7.	RECOVERABLE ITEM REQUIREMENTS INTERFACES	15

LIST OF TABLES

TABLE 1.	RECOVERABLE ITEM LAG INTERFACES WITH OTHER PROCESSES	
	AND PERSPECTIVES	16

1

Ş

1

- 2

1000

N

on

REQUIREMENTS PROCESS

to

DIRECTORATE OF LOGISTICS MANAGEMENT SYSTEM REQUIREMENTS (XRB)

from

BATTELLE Columbus Laboratories

May 28, 1982

INTRODUCTION

This document provides a description of the Requirements Process as it pertains to recoverable items. The description is in terms of what must be done to effectively determine future requirements based on current and historical data. The necessary inputs and outputs are described as a means of defining the interfaces between this LAG and other LAGs. The details of how requirements are computed are intentionally excluded from this LAG description because there are many options for accomplishing the same function, and the LAG definition should be sufficiently robust to encompass all or most of those options. There are, however, basic functions that must be accomplished for all options. It is the intent of this description to address these basic functions.

This LAG description is in five parts as follows:

- 1. Purpose A brief statement of purpose for the Recoverable Item LAG
- 2. System Description A definition of the scope and functions of the Recoverable Item LAG
- 3. System Characteristics A definition of the characteristics of this LAG that differentiate it from other LAGs.
- 4. System Interfaces A definition of the inputs and outputs of the system at the critical interfaces

5. A set of data sheets for input to FCMS.

The effective use of this LAG as a management tool for LMS system evaluation requires that the interfaces be carefully defined and controlled using effective interface control methods. The details interior to the LAG should be provided wide latitude for change unless the interface criteria are breached. In those cases, the interface should be redefined and then controlled in the new configuration.

PURPOSE

The purpose of the Recoverable Item LAG is to provide a means of determining future requirements for recoverable items that meet the future needs of operational commands. An ancillary purpose is to provide an effective means of forecasting the materiel requirements of alternative force structure or operational scenarios under a variety of budget options. The output products must be rational, defensible statements of requirements that are time-phased to meet fiscal and operational needs.

していたい いいい したたたた いち ち し

2. 65555565

3

1. N. S. S.

Î

ß

5

2

2

2

(LES)

3

General

The Recoverable Item requirements process involves the use of approved weapon system utilization data developed by the Air Staff, end-item-peculiar historical data, and industry capacity information to define the time-phased requirements for each of the AFLC-managed recoverable items. The process requires the consideration of many historical data elements, some of which are outside the direct control of AFLC and depend upon worldwide systems for input. Virtually all levels of AFLC are involved in either input of data on evaluation of the results of computation.

NEW DESCRIPTION

Figure 1 provides a generalized description of the key elements of the Recoverable Item process and some of the interrelationships between the functions. An important note is that the scope of the requirements process as depicted in Figure 1 does not include the activities associated with deciding to buy, nor the evaluation of impacts of not buying a given requirement.

Functions of the System

In this section the major functions of Recoverable Item requirements determination are discussed. Figure 1 provides an overview of the major functions and could serve as a top level diagram of the Recoverable Item LAG. At this level of detail, the major inputs and outputs are defined. In order to differentiate between methods of accomplishing the function, a much greater amount of detail is required. In support of that objective, each of the major functions have been decomposed one level of detail. These are presented in Figures 2 through 6.

In order to determine the need to acquire recoverable items, there are five basic functions that must be performed regardless of how they are performed. The basic functions are:

1. <u>Determine Future Usage</u>. There must be a determination of how and how frequently the systems that contain the recoverable items will be used. This may be determined from formal planning documents such as published by the

1

LAN.

100

6



Air Staff or could result from "What if" questions by senior AFLC staff members. In order to compute a defensible buy quantity, the source must be formal, approved documents such as the PD. The determination of future usage must include a definition of the items that make up a system and a definition of new systems and their recoverable components. The period of interest for future usage is the lead time for the items in the case of a buy computation and lead-time-plus-budget cycle for budgetary computation.

The major output of this function is use-by-item for all items based on the system use input. (See Figure 2 for details.)

2. <u>Compute Future Needs</u>. This function uses end item use and current factors (such as maintenance factor, base repair cycle time, depot repair cycle time, order and shipping time, not-reparable-this-station rates, condemnation rates, negotiated levels, safety level factors, and modification information) to compute the number of assets necessary to fill the requirement. This computation can be done independently of the current asset position if the output is considered a raw need. Instances of repair can also be computed in this function and, in fact, are a byproduct of the asset requirement computation. The actual method of computations. The input data are the same regardless of the method of computation. Correctness of these inputs is a key determinant in the accuracy of the computation. Therefore, there must be an effective means of updating these inputs and carefully controlling the input values to preserve the credibility of the output. (See Figure 3 for details.)

3. Evaluate Current Assets. This function involves establishing a current assessment of the worldwide asset position for each recoverable item. The primary ingredients are the status of on-hand assets at each of the bases, the depots and in-transit, due-in assets from maintenance and as a result of previous buys, and the status of modification programs which produce assets of a new configuration while consuming the assets of a prior configuration. Modification programs frequently require turnaround assets which must be included in the overall asset assessment. The output is a current picture of the worldwide asset position for use in comparison to future needs. (See Figure 4 for details.)

6

, j

1

X

53

2

1

Ę

Ĩ

Ð

E

2

5

J

3

3



2.23 Ę 3 S Ę NY.



COMPUTE FUTURE NEEDS FIGURE 3.



EVALUATE CURRENT ASSETS FIGURE 4.

4. Define Buy Requirements. Given a future need by end item by quarter and an asset position, it is possible to compute the shortfall by quarter and therefore the need to buy by quarter. The assets must be procured lead time away from actual need. Therefore, it is necessary to define the buy requirements at need date minus administrative and production lead time. The requirement, as output from this function, should be in terms of numbers of each item, delivery schedule, value, and priority. Since there are not always sufficient funds available to procure all required items, the priority and funding constraints must be input to this function as well as the cost of each item. (See Figure 5 for details.)

5. <u>Define Excesses</u>. In the process of determining shortfalls, some cases of excess will be identified. After verification of the factors used in computation, the excess assets must be identified to management for possible disposal. In a future system it may be possible to use excess assets as a resource to modify factors for shortfall items. For example, excess F-4 radar units might be used to realign the depot repair cycle at Warner Robins ALC so that priority is given to F-15 radar repairs, thus shortening F-15 radar depot repair cycle and increasing F-4 depot repair cycle times. In such a case the excess assets would be used as a pool to enable factor adjustments by the Equipment Specialists. (See Figure 6 for details.)

10

33

3

100

3

222

6

8

9

3

83





SYSTEM CHARACTERISTICS

The Recoverable Item Requirements LAG represents one of the most critical aspects of AFLC's business. Because of the relatively high cost of recoverable items, the extended value of the recoverable item inventory exceeds the value of all other inventories except aircraft systems. Recoverable items also represent the major element of AFLC annual budget. Of the 12 to 15 billion dollar annual budget for AFLC, approximately one half is applied to the procurement or repair of recoverable items.

Each of the five Air Logistics Centers (ALCs) is involved in determining the basic requirement for recoverable items under an arrangement where item management for each item is assigned to an ALC. Headquarters AFLC is directly involved in the process from the standpoint of establishing policies. computational methods, and resolving fiscal shortages.

The Recoverable Item Requirements Process is not a single-pass system. Even if all input data were perfectly accurate, the reality that sufficient funds are seldom available to buy all requirements dictates recomputations.

Dependency on outside agencies for input data, such as failure rates and base repair cycle times, requires extensive interaction between AFLC and other agencies in the course of validating inputs. Contingency plans and the need to support higher levels of command in the Air Force with logistics planning data causes elements of the Recoverable Item process to be exercised, at least in part, for more than buy determinations.

Support for Foreign Military Sales (FMS) customers present special problems to the Recoverable Item Requirements Process. Legal prohibitions against buying in anticipation of a sale, combined with agreements to support FMS customers from jointly-owned or Air Force assets, causes the need for a flexible method of requirements computation that can adjust to rapidly changing political conditions.

Introduction of concepts such as Variable Safety Level, Missionization of Aircraft, and Mod Metric causes the need to accomplish requirements computations for groups of items under a variety of contraints and to meet a variety of output conditions. In some cases there is a need to exercise parts of the requirements process to determine the impact of implementing a contingency option given the existing set of resources.

13

ዸኯኯዸቝዿኯኯዸዀዸዀዸዀጟዀጟቝጟቝ፟፟፟ዾዀኯዸዀቜዀቖ፝ዀቖቝጟቝጟቝጟቝ፟ዄቝ፟ዄዸ፟ዄ፝፝፟፟<mark>ዀ፟ዀ፟ዀ፟ዀ፟ዀዀዀዀዀዀዀዀ</mark>

なられ、「「「「「「」」」というないのです。

いたいのようで

A SALAN AND AND A

K

Land a free and the

いない 日日 日日 こう いまち あまち たい こうままちょう ちのち

3

Here

1

5

ŝ

5.5

· · · · · · · · · · · ·

SYSTEM INTERFACES

In this section the key interfaces of the Recoverable Item LAG are defined in terms of the inputs and outputs. For the purpose of this draft, the interfaces were kept relatively simple and stated in terms of the processes rather than each of the other LAGs. Ideally, the interface with each other LAG would be defined in this manner. Control of the LAG could then be exercised by control of the interface in a true systems engineering approach. Figure 7 shows a generalized view of the interfaces of recoverable items with other processes. The specifics of each interface are shown in the interface table (Table 1). An inspection of Table 1 compared to Figures 1 through 6 will show that outputs from the logic clusters of Figures 1 through 6 frequently go to more than one other LAG or process.

A proper interface specification for a LAG such as Requirements would define the level of detail, format, and frequency of each input/output that crosses the interface. The development of a proper interface cannot be done from the perspective of one LAG. It must result from interaction between LAGs in a systems engineering environment. Future efforts should be oriented to developing proper interfaces.

ij

F

33

3

2.0

53



PPB From Program Guidance Planned Usage by System Priority by System Base Assignments by System Constraints: War Plans Funds WRSK Policy Identification From FSN Application (Use on) Systems Deletions QPI Substitution Interchangeability New Information (Changes) Maintenance From Source of Repair Expected Repairs by: Depot Repair Cycle Time Depot Condemnation Rate New Item for Repair Average Cost of Depot Repair Base Repair Cycle Time Base Condemnation Rate Not Reparable This Station (NRTS) Rate Dedicated Assets (not Mock-Ups) Due in from Maintenance (DIFM) Assets **Repair Capacity** New Information (Changes) Item Operating/Usage Ratio Acquisition From Procurement Lead Time Quantity of Buy Production Lead Time Need Dates Expected Unit Cost Funds Contraints

3

3

83

2

3

3

R

2

Expected Loss of Source

GFE Requirements

New Systems (Initial Provisioning)

POM Requirements Budget Requirements by: System Item Year Shortfalls by: System Item Quarter

То

То

То

То

Quarter

Base/Depot

16

TABLE 1. **RECOVERABLE ITEM LAG INTERFACES WITH** OTHER PROCESSES AND PERSPECTIVES

17 TABLE 1. (Continued) Movement From То Order and Ship Times Number of Movements by Quarter Cost of Movement Locations for Movements New Information (Changes Expected Tonnage Airlift Requirements (Based on Critical Items) Accounting From То Funds Constraints for Obligation Need for Obligation Authority Obligation Authority Available Reports of Usage of Computation Progress of Obligations Capability Computational Capability Needs for Computational Capability New Information (Changes) Item Management From То Computing Methodology Item Buy Requirements: Number Negotiated Levels Schedule Operating Hours by Item Funds New Information (Changes) **Repair Actions** Foreign Military Sales Expected Excess Other Programs Expected Shortfalls Alternative Solutions Improvement From То Approved Changes: Effectivity Availability of Turnaround Assets Schedule Interchangeability Need for Turnaround Assets Custody From То Assets on Hand: Serviceable Expected Demands Reparable Expected Critical Items Assets Due in from: New Buy Expected Asset Position by Quarter Maintenance **Expected** Excess Safety Level Criteria

A CONTRACT OF A CONTRACT OF

Manuser Manuses Manuses Massesse Marcade Moder 2001 to sate of

(S. 5)

Ş

22

100

Ş.

1

S

2

5

3

3

8

Ţ

325

FCMS DATA SHEETS

The following section of this report contains sample data sheets which translate information in the text and figures to FCMS format.

The data sheets are at three levels. The first is at the LAG level and summarizes the entire LAG. The second set are at the process level, as defined by PSL/PSA conventions. The third set are at the entity level, as defined by PSL/PSA.

Each data sheet contains sufficient information to relate it to higher levels within FCMS, and other elements in the same level of FCMS. When this information has been entered into the FCMS data base it should be possible for the system to construct a diagram of the process. When the FCMS data base is complete for all LAGs, it should be possible to indicate any inconsistencies in interfaces as they are defined.

LAG LEVEL

and the second of the second o

55

2

and the second sec

2.5	The state of the state		
	y r		19 DATA SHEET
N. N. N.			LAG LEVEL
		Define Process:	LMS LAG 14
11.11	1	Date of Last Cha	nge: <u>5/1/82</u>
		Synonyms Are:	Requirements LAG, Recoverable Items
		-	
		Description:	The Recoverable Item Requirements LAG provides a means of ture requirements for recoverable items based on historical
		data and futu	are program operating hours.
	8		
		Key Words Are:	Recoverable items Buy requirement
S. S. S.	P.C.		Repair requirements
	2	Sub-Parts Are:	Determine future usage - 14A
	3		Compute future needs - 14B Evaluate current assets - 14C
			Define buy requirements - 14D
2. N. K.	X		Define excess assets - 14E
		Part of:	LMS
1 5 7 7 7 7	22		
18. A.L.	E		
4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2		
		<u></u>	ዿኇፚኇዿዄዿኇዿጟጟኇጟጟጟዿጟዿጟዿጟዿጟዿጟዿጟዿጟዿጟዿጟዿጟጟጟጟጟጟጟዄፙፙፙፙፙፙፙፙፙፙ

PROCESS LEVEL

THE REPORT OF THE PARTY OF THE

States Constant and States

19. FR

55

1. C.S.

a sector of the sector a sector

	20
	DATA SHEET
	PROCESS LEVEL
	Define Process: 14 A
2	Date of Last Change: 5/1/82
	Synonyms Are: Determine Future Usage
	Description: This process uses approved program guidance and specific frem data to determine the future operating hours for each recoverable item.
	The period of interest is lead time for acquiring additional quantities
8	of each item.
	Program operating hours
33	Part of: LAG 14 (Recoverable Item Requirements LAG)
	Derives:Use by item
ŝ	
222	Employs: Item lead times
	Application data
K???	QPT New system Initial provisioning
5	Inputs: Program operating hours
	Outputs:
8	

	22	21
2		DATA SHEET
		PROCESS LEVEL
5		Define Process: 14B
25	6% C42	Date of Last Changes 5/1/82
Ş	8	Date of Last change: <u>3/1/82</u>
		Synonyms Are: Compute Future Needs
S. A.	3	
	3	Description: This process uses end item use and current factors to compute
		also computes the number of each item that will be repaired.
	्ड दुर्ह	
これよう	ୟ ସ	Key Words Are: Lead times
	ž	Repair times
1	3	Part of: LAG 14 (Recoverable Item Requirements LAG)
	3	Derives: Needs by item
	Ę	Kepair needs
2	Ē	
	23 23	
2 A	20 20	Employs: Current factors
		Negotiated levels
	2	
	3	Inputs:
	A	
A 3. 3.	3	Outputs:
-	57 73	
		ĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨĨ

Serve 1		22 DATA SHEET
1.1 5.1	3	
S.		PROCESS LEVEL
	22	Define Process: 14C
	33	Date of Last Change: 5/1/82
	FT	Synonyms Are:Evaluate Current Assets
Section 2		
		Description: This process provides a current assessment of the worldwide asset position for each recoverable item. It uses current inventory and
	8	due-in assets from both maintenance and previous buys to develop a
	63 67	comprehensive, worldwide asset position.
	8	Key Words Are: Lead times
N.N.	3	Repair times
	Ĩ.	Part of: LAG 14 (Recoverable Item Requirements LAG)
		Derives: Turnaround asset availability
5	8	Shortfalls Excess assets
	53 53	
Ç	5	
	ġ	Employs: Condition
	23	Worldwide assets
		Due-ins
	8	Inputs:
	:- 8	
المرجع في المرجع المرجع	N N	Outputs:
والمحالين والمحالي	• 3	
5	1 2. 67 8. 87 8. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4. 4.	\$

8787.07.07.97.97.0	23 DATA SHEET
	DRACESS I FUEL
	<u>PROCESS LEVEL</u>
Def	ine Process: 14D
Dat	te of Last Change: <u>5/1/82</u>
Syr	nonyms Are: Define Buy Requirements
Des -	asset position to compute the shortfall in assets expected lead time away.
Key	Words Are: Asset position Due-in assets
Par	ct of:LAG 14 Recoverable Item Requirements LAG)
Der	rives:Expected asset position
	Expected demands
	Expected critical items
	POM Budget input
Emt	blows: Shortfalls
Inj	puts: Priority
Out	tputs:
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

and the second of the

C

.

and and an are set of the	eren der		
2		24 DATA SHEET	Ľ
33		·	
33		PROCESS LEVEL	
5	Define Prod	cess: <u>14E</u>	
	Date of La	st Change: <u>5/1/82</u>	
8	Synonyms A	re: Define Excess Assets	
	Description	n: <u>This process uses asset needs versus asset position to identify</u> that are in excess position. This information is used to nominate	
	asset	s for disposal. Options for use of each item are considered prior	C.C.S.
	to di	sposal recommendation.	
60 F3	Key Words A	Are:Excess assets	
	Part of:	LAG 14 (Recoverable Item Requirements LAG)	
	Derives:	Excess item list	55223
	-		1111
ß	•		*->>
۲ ۲	Englands		- 12223
S	rmpioys:		
			-1777
2	Inputs:		
	_		1.1.1.1
3	Outputs:		112252
			E

## ENTITY LEVEL

PC CUTCLU

Ŝ

5

33

----

3 

22

3

いたい

----3

a best best with the second second

	?? ???????????????????????????????????	8-4-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8-8
3	DATA SHEET	
2) Cl	ENTITY LEVEL	
2		
222	Define Entity: Use By Item	
3	Date of Last Change: 5/1/82	
53	Synonyms Are:Item Usage	
<u>S</u>	Description: This data element gives the expected total operating hours for each item by quarter over the lead time for the item.	
	·	
2		
3	Key Words: National Stock List (NSL)	
8	Attributes: Item oriented	
8	Combined usage by item	
	Sub-Parts Are: Data output for each item	i I
R		
8		
5		
8	Source is: LAG 14A	
an M		
8 <b>.</b>	Use 1s: LAG 14B	
<b>X</b>		
5	መመምር መመምር የመምር የመምር የሚያስር የ የሚያስር መመምር የሚያስር	\ <b>*\</b> *\\!\!\ *\

の日本の

ì,

1. A. 1.

Contraction of the second of the second

	26 DATA SHEET	
K K	ENTITY LEVEL	
	Define Entity: Application Data	
	Date of Last Change: 5/1/82	
ž	Synonyms Are: Use on Code	
	Description:These data define the systems on which each item is used and	
	Attributes: National stock list oriented	
	Sub-Parts Are:       Use on code         QPI	
8	Source is: Provisioning data/SM requirements	
	Use is: LAG 14A	

	DATA SHEET
ġ	ENTITY LEVEL
3	Define Entity: Item Lead Time
<b>B</b>	Date of Last Change: 5/1/82
3	Synonyms Are: Acquisition Lead Time
	Description: The total lead time to order and receive an item given a decision to order.
3	
â	
8	Key Words: <u>Procurement</u> Administrative lead
3	
	Attributes: Calendar time in days
8	
5	Sub-Parts Are: Administrative lead Production lead
A	
2	
3	
3	Source is: Acquisition LAG
	Use is: LAG 14A
3	

and an an interaction of the second	
33	
	DATA SHEET
	ENTITY_LEVEL
De De	efine Entity: Program Operating Hours
Da	ate of Last Change: 5/1/82
S	ynonyms Are: Program Guidance
De	escription: The official Air Force program of operating hours for each system; contained in the P series documents.
g	
Ke Ke	ey Words: <u>Flying hours</u>
N	
AI	ttributes: Operating hours by system
N	Programmed equippage of AF units
Su Su	ub-Parts Are: Each weapon system
8	
8	
8	
So So	ource is: USAF PD
3 0	se is: LAG 14A
8	

	29
3	DATA SHEET
3	ENTITY LEVEL
3	Define Entity: Needs by Item
ş	Date of Last Change: 5/1/82
X	Synonyms Are: Raw Requirements
8	
	Description: This entity provides a definition of the total pipeline and safety level needs for recoverable items. Pipeline includes repair.
E.	order, and ship asset requirements.
FF.	
	Key Words: <u>Safety level</u>
	Order and ship
	Attributes: Requirements by quarter
8	Sub-Parts Are: Order and ship quantity
8	Depot repair cycle assets
R	Safety levels
	Negotiated levels
3	Source 1e: LAG 14B
<u>5</u>	
ia Nationalia	E. La la

	30
	DATA SHEET
	ENTITY LEVEL
1	Define Entity: <u>Repairs by Item</u>
	Date of Last Change: 5/1/82
	Synonyms Are: Incidents of Repair
8	Description: This entity contains a projection of the quantity of each
e a	item that will require repair in each quarter over the lead time and
	the dollar value of those repairs.
2	Key Words: Labor standard DMIF rate
	Attributes:
	Sub-Parts Are: List of repair by NSL items
<u></u> .	
	Source is: LAG 14B
R.	Use is:LAG 14C
<b>S</b>	
3	

3	31
3	DATA SHEET
- S	ENTITY LEVEL
	Define Entity: Negotiated Levels
	Date of Last Change: 5/1/82
- FR-3	Synonyms Are:Special Levels
	Description: This entity conveys the approved special or negotiated levels that must be honored over the lead time of each item.
NY L	
B	Key Words:
R	
	Attributes: By NSL item
3	
3	Sub-Parts Are: List by NSL item
	Source is:IM specialist (1996s)
2	Use is: LAG 14B
N.	
S.	

1	▞▗▞▖▁▖▖▁▁▁▁▙▖▕▁▖▁▙▖▁▙▖▋▖▌▖▁▌▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖▁▙▖
3	32
	DATA SHEET
<b>S</b>	ENTITY LEVEL
<u>s</u>	Define Entity: Approved Changes
8	Date of Last Change: 5/1/82
R	Synonyms Are: Turnaround Assets; Modification Program
8	
E	<b>Description:</b> This entity conveys the time-phasing and asset requirement to to support modifications. It also defines the phase-out schedule of
S.	replaced items.
N.	
653	Key Words: Configuration control
R	
R.	Attributes:By NSL item
	Sub-Parts Are: Class V modification schedules
R	
8	
3	
	Source is: Improvement LAG
	Use is: LAG 14B

• 7 • 3

	29929929292929292929292929292929292929
	DATA SHELI
Ş	ENTITY LEVEL
	Define Entity: Current Factors
3	Date of Last Change: 5/1/82
S	Synonyms Are: DO41 Factors
	Description: This entity provides the approved values for all factors used in the requirements computation.
8 3	
	Key Words:
S.	
	Attributes:Data by NSL item
8	Sub-Parts Are. Maintonance factor
	Base repair cycle time
X.	Depot repair cycle time
	Order and ship time
	Not-reparable-this-station rate Condemnation rate
	Source is: Equipment specialist (IM)
8	Use is: LAG 14B
	·
Ş	

	34
3	DATA SHEET
3	ENTITY LEVEL
3	Define Entity:Turnaround Asset Availability
	Date of Last Change: 5/1/82
2	Synonyms Are:
8	Description: This entity identifies the assets that could be made available to support modifications. The list is generated for each item programmed
	for modification.
	Key Words: Modification
8	Attributes: Number of assets available
8	
	Sub-Parts Are: List by NSL item
2	
8	
	Source is: LAG 14C
8	Use is: Improvement LAG
Ş	

· Marchar hat hat	
	35
	DATA SHEET
<b>.</b>	
60 93	ENTITY LEVEL
3	
2	Define Entity: Shortfalls
10 A	
3	Date of Last Change: 5/1/82
3	
	Synonyms Are: Buy Option Quantity
65	
8	
29	Description: This entity conveys the total number of each item that must be
6 <b>3</b>	acquired to meet the projected operating hours.
59	
8	
	Key Words: Buy quantity
80	Dollar requirement
21	
a.	
\$	Attributes: List by NSL item
2	Attributes. List by Nob Item
7	
<b>8</b>	
2	Sub-Parts Are: List of all items that are short
	X
3	
3	
50	
<b>4</b> 5	
13	
23	
3	Source is: LAG 14C
33	
1	Use is: LAG 14D
12	
2	
	ĸĨĸĨŇĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸĨĸ

to the second		
	2	36 DATA SHEET
		·
		ENTITY LEVEL
202		Define Entity: Excess Assets
NOOK.		Date of Last Change: <u>5/1/82</u>
The second	22	Synonyms Are: Overage
		Description: This entity conveys a list of all items that are in long
		supply with the number of each asset that is excess.
	6.45	Key Words: Excess assets
	3	Long supply
	5	
		Attributes: By item
		Sub-Parts Are: List by NSL item
	3	
	575	
		Source is: LAG 14C
		Use is: LAG 14E

	DATA SHEET
	ENTITY LEVEL
Define Entity:	Worldwide Assets
Date of Last C	hange: <u>5/1/82</u>
Synonyms Are:	Inventory, Worldwide
Description:	This entity conveys the current worldwide asset position for
each reco	overable item. It defines the number, location, and condition
of each a	asset.
Key Words: <u>O</u>	n-hand
Re	eparable
<u></u>	erviceable
Attributes:	By item
-	
Sub-Parts Are:	Serviceable
	Reparable
	Depot stock
	Base stock
Source is:	IM specialist, item records
Use is:	LAG 14C

HELEVERY PROFESSION BATTACCA

State of the state

South and the second second

Carlos Concernent Carlos

1 × -1 × ×

	38 Data sheet
	ENTITY LEVEL
Define Entity:	Due-In's
Date of Last Cl	hange: <u>5/1/82</u>
Synonyms Are:	Expected Assets
Description: 	This entity conveys the quantity and schedule for the arrival that are "due in" from all sources.
	, ,
Key Words:	LFM
D	elivery schedule
Attributes:	By NSL item
Sub-Parts Are:	Due in from maintenance
	Due in from previous buys Return of turnaround assets
Source is:	1 specialist/Acquisition
Use is:L	AG 14C

39 DATA SHEET	S.
	2222
ENTITY LEVEL	
Define Entity: <u>Expected Asset Position</u>	
Date of Last Change: <u>5/1/82</u>	
Synonyms Are: Projected Asset Position	
	Trees.
Description: This entity portrays the asset position for each item for each quarter over the lead time of the asset.	
	1.2.2.1
Key Words: Asset	
	22.5
Attributes: By item	3274
	5553
Sub-Parts Are:	2222
	الدورة
Source is: LAG 14D	
Use is: IM specialist	1222

1. X. 1. A.

8	40 DATA SHEET
्र 23	ENTITY LEVEL
Defin	e Entity: Expected Demands
Date	of Last Change: <u>5/1/82</u>
Synon	yms Are:
Descr	iption: This entity conveys the worldwide demand pattern for each item over the lead time for the item.
3	
Key W	ords: Demand rate
S.	
8 Attri	butes:
Sub-P	arts Are:
8	
S	
Sourc	e is: LAG 14D
Use 1	s: Movement LAG
	Custody LAG

17.0

1-3-18-0-4	
3	41 DATA SUFFT
3	
	ENTITY LEVEL
FXX	Define Entity: Expected Critical Items
	Date of Last Change: 5/1/82
	Synonyms Are: Critical Item Projection
	Description: This entity conveys the expected number of unfilled back orders
	to be expected over the item read time.
	Key Words: Fill rate
R	Back orders
	Attributes: Computed by quarter
	Sub-Parts Are: List by Federal Stock Number (FSN)
N B	
	Source 18: LAG 14D
<b>3</b> 53	Use is: IM specialist SM
	E Every and the second states of the second states of the second states of the second states of the second states

	42 DATA SHEET
N.	
	ENTITY LEVEL
	Define Entity: Buy Requirement
	Date of Last Change: 5/1/82
	Synonyms Are: Item Requirements
870	
3	Description: This entity is a list by FSN of each item that is to be procured within the approved budget.
ŝ	
875 S	
	Key Words: By option Budget constraint
N	
	Attributes: Modified by priority
X	
8	Sub-Parts Are:
*	
8	Source is: LAG 14D
	Use is:Acquisition LAG
3	

	43 DATA SHEET
	ENTITY LEVEL
Define Entit	y: <u>POM Budget Input</u>
Date of Last	Change: <u>5/1/82</u>
Synonyms Are	: Program Objective Memorandum Input
Description:	This entity projects AFLC's future dollar requirements for cable items and the impacts of not satisfying them.
<u></u>	
Key Words:	Budget
Attributes:	By item
	Extended value
Sub-Parts Ar	e:Dollars by fiscal year
	Impacts by system
Source is:	LAG 14D
Use is:	PPBS LAG
	SM LAG

<b>373 3</b> 73	
	DATA SHEET
	ENTITY LEVEL
	Define Frederic Priority
	Define Entity:
	Date of Last Change: 5/1/82
	Synonyms Are: Air Force Priority
	<b>Description:</b> This entity defines the priority of each weapon system in the
	Air Force and is used to apportion critical Air Force resources.
	Key Words: Force activity designator
	Mission essentiality
	Attributes: A numerical value by system
	ALLIPOULD ALLIPUID AL
	Sub-Parts Are: System priority
	Force activity designator
	Essentiality code
	Source is: PD series documents
	Use is:LAG 14D
,	
ļ	

7	45 DATA CUENT
	DATA SHELI
	ENTITY LEVEL
	Define Entity: Options for Disposition
	Date of Last Change: 5/1/82
	Synonyms Are: Other Requirements
ы 3	Description: This entity defines the alternative uses for items subject to disposal Examples are: foreign country needs training organizations etc.
9 1 1	
3	
S N	Key Words: Excess assets
	Disposal lists
	Attributes: Policy developed by DoD
	Sub-Parts Are: Foreign country needs
10 17	Schools
	Clubs
2 2 2	
	Source is: DoD policy
	Use is: LAG 14E
1	

an an an the state of the state of	46	
	DATA SHEET	
	ENTITY LEVEL	
	Define Entity:Excess Item List	_
	Date of Last Change: 5/1/82	
	Synonyms Are: Long Supply Items List	
	Decenterion. This entity defines the quantity of each item that is in long	_
	supply and provides recommended disposition of those items.	
		-
	Ver Verde:	-
	Attributes:	
	Sub-Parts Are: Items to be retained	
	Items to be disposed of	
	Source is: Law 14E	
	Use 1s:	

47 <u>CONCLUSIONS</u> The use of data sheets as demonstrated here should greatly facilitate the translation of descriptions developed by functional planners into FCMS for-mat. Further, the use of data sheets will standardize output and increase consistency in describing the functional areas. A suggested addition to these data sheets is the development of a sim-ple narrative description of each of the data elements required. This would allow functional planners to complete the sheets with a minimal amount of orient-ation.

1. 1. 1. 1.

5

🔪 المجارفة الم معرضة المحالم

States - - -

#### GLOSSARY OF ABBREVIATIONS

48

57.65

N.

10 3

هرم^ریز از ا

NO. 60 A

BRC	Base Repair Cycle
DRC	Depot Repair Cycle
DIFM	Due in from Maintenance
FCMS	Functional Configuration Management System
FMS	Foreign Military Sales
FSN	Federal Stock Number
GFE ,	Government Furnished Equipment
I&S	Interchangeability & Substitutability
LAG	Logical Application Group
LMS	Logistics Management System
NRTS	Not Repairable this Station
0&S	Order and Ship
PD	Program Document
PSL/PSA	Problem Statement Language/Problem Statement Analyzer
QPI	Quantity Per Installation
TA	Turnaround