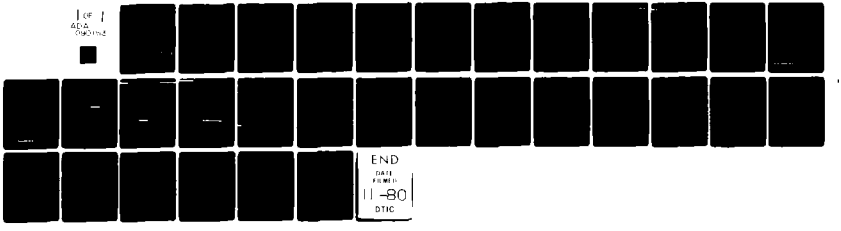
AD-A090 153 ARMY ADJUTANT GENERAL SCHOOL FORT BENJAMIN HARRISON IN F/G 5/10
THE USE OF LOGIC TREES IN MILITARY PERFORMANCE TESTING,(U)
AUG 71 R L ERICKSON

UNCLASSIFIED NL



THE USE OF LOGIC TREES IN MILITARY PERFORMANCE TESTING

by

Raymond L. Erickson

Presentation to
1971 Military Testing
Association Conference
Washington, D.C. September 1971

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INTRODUCTION

The creation of an effective performance test is normally the culmination of exhaustive analysis and planning. Innumerable methods have been devised to ease the test design effort, and all doubtlessly contribute to the development of realistic, objective and comprehensive tests which are capable of providing feedback specific enough to control instructional quality. Despite the plethora of test design techniques, the United States Army Adjutant General School has found one analytical tool to be far superior to all others in the construction of valid instruments for the measurement of student achievement. At the Adjutant General School, the first significant step in the creation of a performance test is the construction of a Logic Tree.

DEFINITION

The Logic Tree is formally defined as a schematic representation of a mental decision making process and the actions that result from such decisions. Quite simply, the Logic Tree is a decisional flow chart. The Logic Tree is decisional in that it graphically depicts each of the decisions which must be made in the performance of the task being analyzed, from the initiation to the completion of that task. The Logic Tree is a flow chart since each of the decisions in the performance of the selected task is placed in its most logical sequence. Consequently, to Logic Tree a task is merely to list all the decisions which must be made in the performance of that task, from start to finish, in their most logical order.

LOGIC TREE CONSTRUCTION

The structure of a Logic Tree can be best described by dividing the analytical tool into its two component elements: 1) the cover sheet; and, 2) the decisional schematic.

The cover sheet of a Logic Tree performs the same function as the table of contents in a textbook. The properly completed cover sheet should disclose information sufficient enough to inform the reader whether or not this is the Logic Tree he desires to read. Figure number 1 demonstrates the content and format of a cover sheet. At the top of the cover sheet is found the necessary statements of a Training Objective. The Training Objective will identify the task being analyzed and the conditions (givens) under which the task is to be performed.

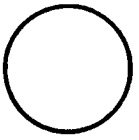
The conditions segment of the Training Objective must also include the cue or the stimulus which causes the task to be initiated. Also to be noted on the cover sheet is the listing of the Source Data. Such a listing ensures that the reader can check upon the accuracy of the Logic Tree's content.

The decisional schematic of the Logic Tree is merely a collection of blocks and directional lines. Figure number 2 depicts the structure of a Logic Tree schematic. As noted in that Figure, the Logic Tree is composed of four types of symbolic blocks, each having a separate function and meaning.

The oval represents either the beginning or the ending of the task being analyzed. It is worthy of comment that the Start or beginning of the task block incorporates by definition the "conditions/cues" statement of the cover sheet. By means of this rule of construction, the beginning of the task and all the necessary conditions and cues are firmly established.

All the decisions to be made in the selected task will be found within the confines of a hexagon. From Figure number 2, it is readily apparent that each decision is written in the form of a question answerable only by "yes" or "no". Consequently, the decisional block must have two exit, and only two exit, paths; one for the "yes" and the other for the "no" decision. Any information required to answer a decisional question represents knowledge necessary to the performance of the task.

Rectangular blocks contain information or instructions helpful to the continuance or to the completion of the task being analyzed. Since no decisions are to be found within a rectangle, such blocks will have but one path of exit.



Finally, the circle represents an exit or a jump to another portion of the Logic Tree. Through the use of this block, the reader may jump over any unnecessary steps in the performance of the task to that location in the Logic Tree where the task procedure again becomes relevant to him. Obviously, the circle has no exit path since it contains written instructions as to where in the schematic the reader should proceed.

All that remains of the Logic Tree schematic to be described are the connecting lines and the directional arrows. These elements do nothing more than graphically depict the various decisional paths open to the

reader. By means of such guidelines, the possibility of the reader departing from the logical sequence of the decisions is effectively precluded.

RULES OF LOGIC TREE DESIGN

The rules of Logic Tree design are intended to ease the effort of Logic Tree construction and to enhance the clarity and usefulness of the schematic itself. Common sense in the design of Logic Trees dictates that the more elementary the schematic, the more beneficial the Logic Tree will be to the student, the instructor and the training analyst.

At this stage, it demands little comment that Logic Trees can be constructed only to depict tasks and never to graphically describe a subject or general topic. The task can be mental, physical or a combination of the two, but it must have a definite starting point, a definite ending, and must be performed because of certain conditions or circumstances which are found to exist.

As well, the Logic Tree schematic should be so designed so as not to refer the user to any regulation or outside informational source, if at all possible. The Logic Tree is intended to supplant such informational sources.

Equally important, exceptions to the general rule and decisions or actions common to all major decisional branches should be placed near the beginning of the Logic Tree, thus eliminating the needless repetition of such blocks in each of the different trunk-lines of the Tree. Also with reference to exceptions to the general rule, the user will immediately find the exception and if it is relevant to him, can follow the decisional path pertaining to that exception without first traversing the decisions of the entire Tree.

Finally, by keeping the "Yes" and "No" beside the decision block at the very beginning of the exit line, by refusing to cross one directional line over another, by using sufficient directional arrows, and by numbering the symbolic blocks from left to right and from the top to the bottom of the page, the clarity and simplicity of the Logic Tree will be greatly enhanced.

THE LOGIC TREE AND MILITARY PERFORMANCE TESTING

The properly constructed Logic Tree has numerous uses in the process of course design, and obviously, each of these uses contributes somewhat to the development of effective performance testing devices. However, due to the limited scope of this paper, only those uses of the Logic Tree which are essential to test design will be discussed.

In accordance with the Systems Training concept as established by CONARC Regulation 350-100-1, the training analyst must minutely analyze the various tasks which he has selected for training. Such a Task Analysis is undertaken to disclose all the decisions which are essential to the performance of the task being analyzed.

At the Adjutant General School, the Logic Tree functions as the Task Analysis step in the Systems Engineering process primarily because it compels disciplined, logical thinking. Through the use of the Logic Tree, the analyst can readily determine the exact nature of the task and what skills and knowledges the student must master in order to perform the selected task.

The Logic Tree has inherent advantages over other Task Analysis methods namely because it requires the analyst to express each mental element of the task in the form of a question. By further requiring each question to be answered by a "yes" or a "no", the analyst is compelled into considering all possibilities and he can consequently uncover aspects of the task which would not have been so apparent under a less methodical approach.

Once the Logic Tree has been prepared, the creation of the performance test itself becomes vastly simplified. Since the Logic Tree graphically depicts every decision within the task and every end result of that task, the analyst need only pick the appropriate decisions and results he considers worthy of testing. By drawing a line through the chain of decisions so tested, the analyst need not worry about over-testing any particular variation of the task. In one procedure then, the training analyst has placed all the elements of the task before his evaluatory eye, and has ensured a comprehensive and valid examination. Less methodical approaches function chiefly as a means of documenting the analysis which has been undertaken, while the Logic Tree not only documents such analysis but constitutes the analytical tool itself.

To demonstrate the use of a Logic Tree in the development of a performance test, consider again the Logic Tree schematic shown at Figure number 2. This Logic Tree graphically represents a block of instruction presented in the Adjutant General School's Instructor Training Course.

It is the policy of the Adjutant General School that every instructor must not only command the training platform with confidence, but must also be able to continuously evaluate the effectiveness of his instruction. In pursuance of this policy, each instructor is given computer print-outs covering the students' performance on that instructor's examination. In particular, the instructor must be able to evaluate the students' responses to each question/problem included in the examination as disclosed by the Item Analysis print-out. Figure number 3 depicts a typical Item Analysis print-out. Note on that figure that items number 4 and 8 have miss rates in excess of ten percent, i.e. more than ten percent of the students in the class failed to answer those questions correctly. At the Adjutant

General School such miss rates are considered unacceptable and demand the immediate attention of the instructor.

When confronted by an excessive miss rate, the instructor can consider that one of two contingencies caused the problem: 1) his instruction was unclear and ineffective; or, 2) the test instrument was misleading and invalid. Since the instructor has in his possession a copy of the answer key, a copy of the test instrument and his own personal lesson plan, each of the causative factors can be explored. For those who would also add the possibility that the excessive miss rate was due solely to student lack of effort, the countervailing argument seems far too strong to allow such consideration. The School allows up to ten percent of the class to miss a question due to such causative factors of poor student motivation as headaches, poor scheduling of an examination, Spring Fever and whatever else would distract a student's attention from successful performance on an examination. Should a higher percentage of students be so distracted by such personal causative factors, then a re-evaluation of the entire course would seem warranted.

In the Instructor Training Course, the student is first presented the foregoing instructional information and is then presented with a practice version of the performance examination in order that he might practice his skill of self-evaluation. This practice version of the examination is shown at Figure number 4. Note that the examination first places the student in the position of an instructor of the administrative review of Disposition Forms, and that the Instructor Training student is given all the tools normally possessed by an incumbent instructor in the Adjutant General School. The student is then required to evaluate the Item Analysis print-out as found on the practice test instrument and determine if the excessive miss rates were due to ineffective instruction or due to errors in the design of the administrative review test which they administered to a hypothetical class.

For example, item number 4 on the TEST RESULT PRINT OUT discloses a miss rate of 13%. Such a miss rate is unacceptable and demands immediate action on the part of the instructor. The instructor (Instructor Training student) must then check the ADMIN REVIEW ANSWER SHEET KEY to discover that item number 4 dealt with the FROM block on the Disposition Form. Next the Instructor Training student must check the ADMIN REVIEW TEST INSTRUMENT to determine if the unacceptable miss rates were caused by some error in the design of the test such as smudged or illegible printing. By merely looking at the FROM block on the ADMIN REVIEW TEST INSTRUMENT, the instructor can readily perceive that the printing is legible and if the hypothetical student who was administered the ADMIN REVIEW TEST INSTRUMENT had known the subject matter of administrative review, he would have recognized that the Disposition Form came from the Adjutant General and not from the Administrative Services Division. Obviously, if the test instrument is not defective, then ineffective instruction must have caused the excessive miss rate and a review of that portion of the lesson

plan covering the FROM block is in order. The Instructor Training student must then examine the abbreviated LESSON PLAN found on the test to determine which paragraph of that LESSON PLAN need be reviewed. In this particular case, paragraph number 4.d. needed review and the Instructor Training student would transfer that information to the Answer Sheet and mark the answer block opposite paragraph 4.d. in Column A (answer block number 4). Had the excessive miss rate been caused by an error in the test design, then block number 17 on the answer sheet would have been marked. Item number 12 on the TEST RESULT PRINT OUT concerns itself with a test design error, namely a missprinting in the Inclosures portion of the Disposition Form. Obviously, the test is not completed until the cause for each unacceptable miss rate has been isolated and identified. Following this practice test, the Instructor Training student is then required to complete a graded examination which takes exactly the same form and requires the execution of exactly the same task.

In relating this particular examination back to its parent Logic Tree, it becomes readily apparent that the Logic Tree depicted each of the three end results which were finally adjudged to be worthy of testing: 1) the training was effective as disclosed by an acceptable miss rate; 2) the unacceptable miss rate was due to ineffectual instruction; and, 3) the excessive miss rate was generated by faulty test design.

To denote that a particular end result had been tested, a colored line was drawn through the appropriate blocks in the Logic Tree. Each of the possible end results was tested at least once. For example, the first end result above was tested in item number 1 on the TEST RESULT PRINT OUT. That particular item tested blocks 1, 3, 9, 10, and 4 on the Logic Tree and a colored line denoted that decisional path. The second end result above was presented in item number 4 on the TEST RESULT PRINT OUT. Consequently, item number 4 tested blocks 1, 3, 9, 14, 18, 23, 19, 20, 24 and 21. A different colored line was drawn through that set of blocks. Finally, the last possible end result was presented to the student by item number 12 on the TEST RESULT PRINT OUT. That item tested blocks 1, 3, 9, 14, 18, 23, 19, 20, 16, 11 and 5. A third color was used to indicate this final decisional path. Through this technique of first discovering every possible decision within the task of evaluating an Item Analysis Print Out and every possible end result, the task in its entirety could be presented to the student both during the instruction and during the examination.

CONCLUSION

The Adjutant General School does not consider the Logic Tree as a panacea for all training problems, but consistently this analytical device has proven itself to be an efficient and valuable tool in the preparation of realistic, objective and comprehensive performance tests which are also capable of providing specific feedback information.

Figure No. 1

LOGIC TREE FOR:

EVALUATION OF TEST RESULT PRINTOUTS

Task: To utilize an Item Analysis test result print-out in order to eliminate deficiencies in instruction and test design.

Conditions/Cues: Receipt of an Item Analysis test result print-out, and access to the appropriate answer sheet key, Test Instrument and Lesson Plan.

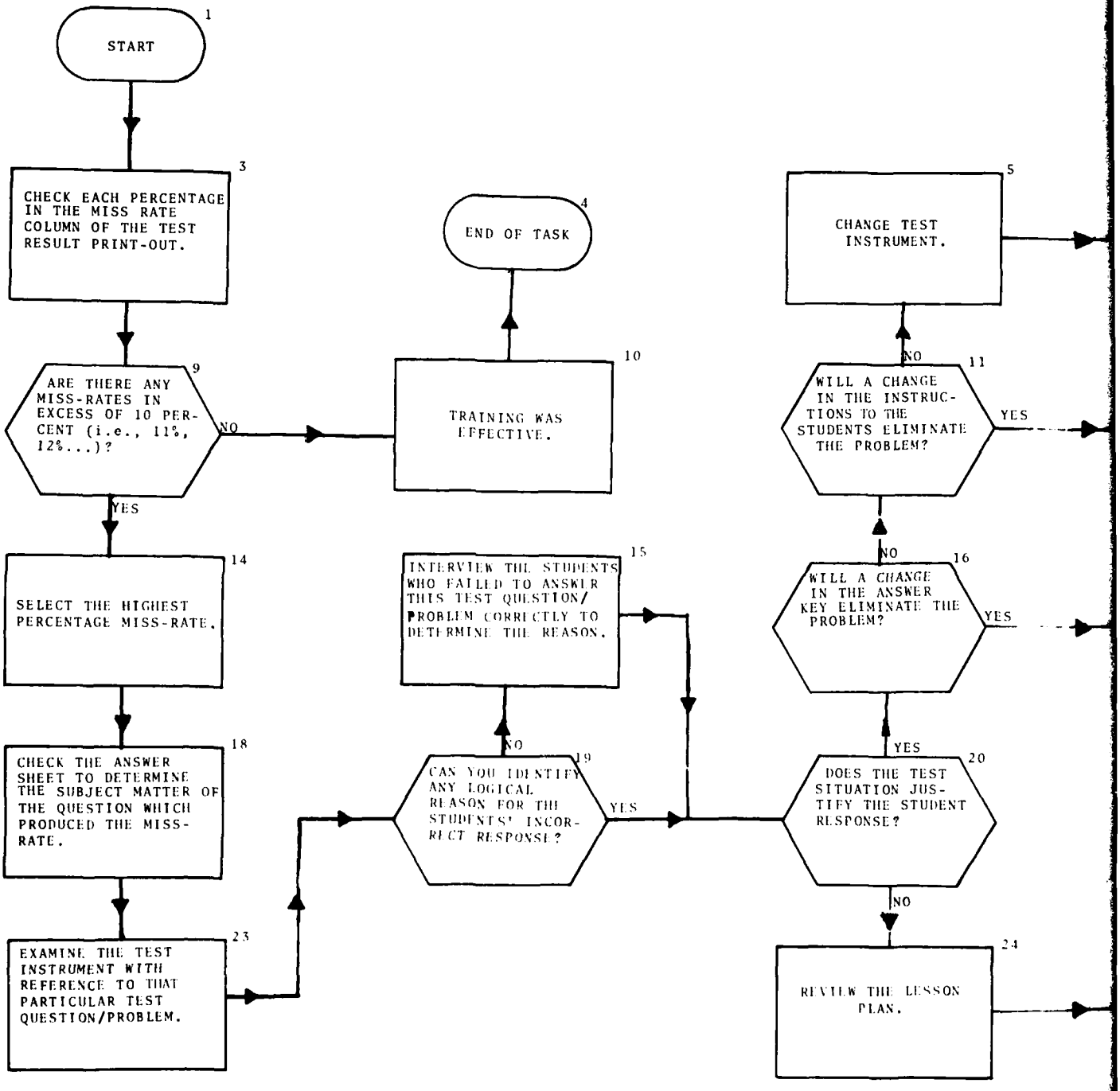
Source Data

USAAGS Reg 350-2, dtd 7 May 69 W/C1
USAAGS Reg 350-100, dtd 1 Jul 68 W/C1

SUPERSEDES: NA

25 Aug 71

FIGURE NO.


1
START
3
CHECK EACH PERCENTAGE IN THE MISS RATE COLUMN OF THE TEST RESULT PRINT-OUT.
4
END OF TASK
5
CHANGE TEST INSTRUMENT.
9
ARE THERE ANY MISS-RATES IN EXCESS OF 10 PERCENT (i.e., 11%, 12%...)?
NO
10
TRAINING WAS EFFECTIVE.
11
WILL A CHANGE IN THE INSTRUCTIONS TO THE STUDENTS ELIMINATE THE PROBLEM?
NO
YES
YES
14
SELECT THE HIGHEST PERCENTAGE MISS-RATE.
15
INTERVIEW THE STUDENTS WHO FAILED TO ANSWER THIS TEST QUESTION/ PROBLEM CORRECTLY TO DETERMINE THE REASON.
16
WILL A CHANGE IN THE ANSWER KEY ELIMINATE THE PROBLEM?
NO
YES
18
CHECK THE ANSWER SHEET TO DETERMINE THE SUBJECT MATTER OF THE QUESTION WHICH PRODUCED THE MISS-RATE.
19
CAN YOU IDENTIFY ANY LOGICAL REASON FOR THE STUDENTS' INCORRECT RESPONSE?
NO
YES
20
DOES THE TEST SITUATION JUSTIFY THE STUDENT RESPONSE?
YES
NO
23
EXAMINE THE TEST INSTRUMENT WITH REFERENCE TO THAT PARTICULAR TEST QUESTION/PROBLEM.
24
REVIEW THE LESSON PLAN.

RE NO. 2

2

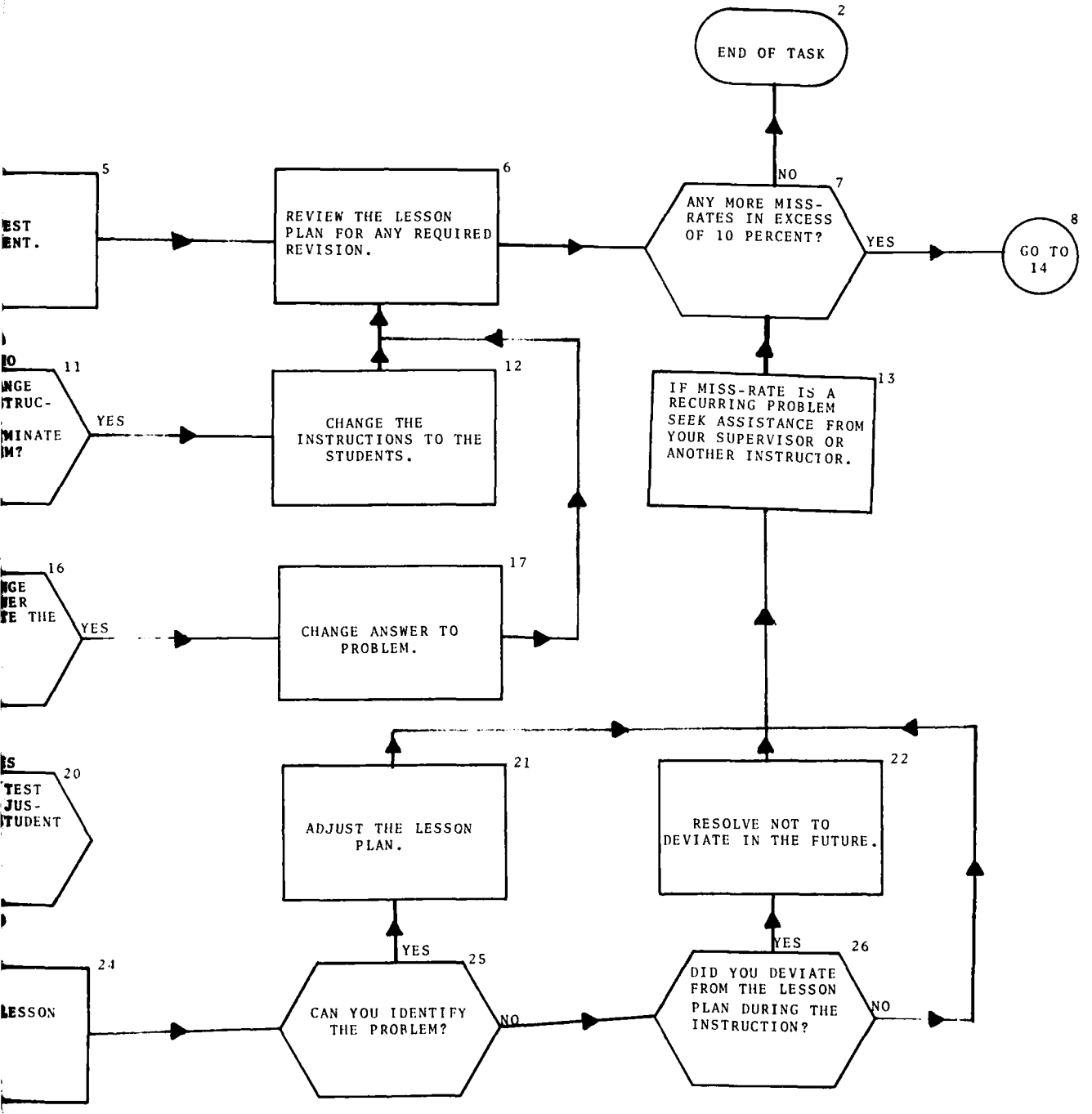

2
END OF TASK
NO
7
ANY MORE MISS-RATES IN EXCESS OF 10 PERCENT?
YES
8
GO TO 14
6
REVIEW THE LESSON PLAN FOR ANY REQUIRED REVISION.
5
EST ENT.
11
NGE TRUC- MINATE M?
YES
12
CHANGE THE INSTRUCTIONS TO THE STUDENTS.
13
IF MISS-RATE IS A RECURRING PROBLEM SEEK ASSISTANCE FROM YOUR SUPERVISOR OR ANOTHER INSTRUCTOR.
16
GE ER E THE
YES
17
CHANGE ANSWER TO PROBLEM.
20
TEST JUS- TUDENT
21
ADJUST THE LESSON PLAN.
22
RESOLVE NOT TO DEVIATE IN THE FUTURE.
24
LESSON
YES
25
CAN YOU IDENTIFY THE PROBLEM?
NO
YES
26
DID YOU DEVIATE FROM THE LESSON PLAN DURING THE INSTRUCTION?
NO

FIGURE NO. 3

ITEM ANALYSIS
DATE - 19AUG70

CARD NO. - 5 OF 5

COURSE - AGOBC
CLASS - 71-02
TEST - AD SVCS
SITUATION - AD REVIEW
CARD TYPE - B
RAW POSS - 25

ADMINISTRATIVE REVIEW CARD 5-5

QUES	PUN	UNPUN	MISS RATE
1	4	47*	7%
2	4	47*	7%
3	49*	2	3%
4	35*	16	31%
5	5	46*	9%
6	49*	2	3%
7	1	50*	1%
8	8	43*	15%
9	4	47*	7%
10	46*	5	9%
11	2	49*	3%
12	5	46*	9%
13	5	46*	9%
14	47*	4	7%

The * indicates a correct student response.

SUPPLEMENT 2-2-1

ADMIN REVIEW - DISPOSITION FORM

1.	Office Symbol	/1/
2.	Subject	/2/
3.	TO	/3/
4.	FROM	/4/
5.	DATE/Originator	/5/
6.	Paragraph 1	/6/
7.	Paragraph 2	/7/
8.	Paragraph 3	/8/
9.	Paragraph 4	/9/
10.	Authority Line	/10/
11.	Signature Block	/11/
12.	Inclosures	/12/
13.	Distribution	/13/
14.	Copies Furnished	/14/
15.	Page Number	/15/
16.	Number of Copies	/16/

ADMIN REVIEW ANSWER SHEET KEY

COURS
CLASS

ADMIN

QUES

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

LESSON PLAN

(Abbreviated for Test Purposes)

ADMINISTRATIVE REVIEW OF THE DISPOSITION FORM

A. Heading of the Disposition Form.
B. Body of the Disposition Form.

2

ITEM ANALYSIS
DATE - 190CT70

CARD NO. - 5 OF 5

COURSE - AGOBC
CLASS - 71-8

TEST - AD SVCS C
SITUATION - AD REVIEW

CARD TYPE - B
RAW POSS 32

ADMINISTRATIVE REVIEW CARD 5-5

QUES	PUN	UNPUN	MISS RATE
1	1	48*	7%
2	3	49*	5%
3	1	51*	1%
4	15*	7	13%
5	36*	6	11%
6	17*	5	9%
7	19*	3	5%
8		52*	
9		52*	
10	1	51*	1%
11	12*	10	19%
12	13	39*	25%
13		52*	
14		52*	
15		52*	
16	37*	15	28%

TEST RESULT PRINT OUT

AN

Purposes)

DISPOSITION FORM

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office

REFERENCE OR OFFICE SYMBOL: AETAG

SUBJECT: Sponsor for New Officer

TO: G3

FROM: ASD

DATE: 15 May 1974

2LT Campbell

3

ITC PT 1P

GENERAL SITUATION:

You are an instructor in the United States Army Adjutant General School and you have just received the test result print outs for the first class which you have instructed on the Administrative Review of Disposition Forms. You decide to evaluate the item analysis portion of the test results in order to determine which areas of the Lesson Plan should be reviewed. In addition, you decide to review the test instrument based on the information contained in the item analysis in order to determine if any corrections in the test are required.

REQUIREMENT:

Based on the information contained on this test supplement, place a check mark in the numbered block on the answer sheet under Column A to denote which paragraphs of the Lesson Plan should be reviewed, and under Column B to denote an error in the construction of the test instrument which contributed to the unacceptable miss rate.

ANSWER SHEET

Paragraphs of the Lesson Plan.	Column A Lesson Plan should be reviewed.	Column B Test instrument contains an error.
4.		
a.	/ 1 /	/ 14 /
b.	/ 2 /	/ 15 /
c.	/ 3 /	/ 16 /
d.	/ 4 /	/ 17 /
e.	/ 5 /	/ 18 /
5.		
a.	/ 6 /	/ 19 /
b.	/ 7 /	/ 20 /
c.	/ 8 /	/ 21 /
d.	/ 9 /	/ 22 /
6.		
a.	/ 10 /	/ 23 /
b.	/ 11 /	/ 24 /
c.	/ 12 /	/ 25 /
d.	/ 13 /	/ 26 /

SHEET KEY

TEST RESULT PRINT OUT

4

LESSON PLAN

(Abbreviated for Test Purposes)

ADMINISTRATIVE REVIEW OF THE DISPOSITION FORM

A. Heading of the Disposition Form.
B. Body of the Disposition Form.
C. Closing of the Disposition Form.

SECTION I-INTRODUCTION

1. Attention.

2. Motivation.

3. Objectives.

SECTION II-BODY

4. First Main Teaching Point. Heading of the Disposition Form.

   a. Office Symbol or Reference.
   b. Subject Block.
   c. TO Address.
   d. FROM Address.
   e. DATE/ORIGINATOR.

5. Second Main Teaching Point. Body of the Disposition Form.

   a. Detection of errors in spelling, grammar and punctuation in body of DF.
   b. Paragraph numbering.
   c. Use and lettering of subparagraphs.
   d. The Modified block style format.

6. Third Main Teaching Point. Closing of the Disposition Form.

   a. Use of the Authority Line.
   b. Format and use of the Signature Block.
   c. Identification of Inclosures.
   d. Use of Copies Furnished and the preparation of copies.
   e. Continuation Pages and page numbering.

SECTION III-CONCLUSION

7. Questions.

8. Summary.

9. Closing.

LESSON PLAN

FIGURE NO. 4

ST RESULT PRINT OUT

5

DISPOSITION FORM

For use of this form, see AR 340-15; the proponent agency is The Adjutant General's Office

REFERENCE OR OFFICE SYMBOL	SUBJECT
AJAG	Sponsor for New Officer

TO G5 FROM ASD DATE 15 May 1974 CMT 1

2LT Campbell/kw/2935

1. We have just received the attached orders assigning CPT John C. Scott to the division. Since CPT Scott is tentative scheduled to be assigned to your section, we request you designate a sponsor for him.

2. In accordance with General Johns' policy, a letter and a division welcome packet will be forwarded to CPT Scott not later than 20 May 1974 and an information copy of the letter will be furnished this office.

1 Incl
as

W. W. GEMMILL
LTC, AGC
Adjutant General

DA FORM 1 FEB 62 2496 REPLACES DD FORM 96, EXISTING SUPPLIES OF WHICH WILL BE ISSUED AND USED UNTIL 1 FEB 63 UNLESS SOONER EXHAUSTED

INCL #1

FILE COPY: ASD

Cleared for Release:

ADMIN REVIEW TEST INSTRUMENT

FIGURE NO. 4

a.	10	23
b.	11	24
c.	12	25
d.	13	26

Cnf 1
/2935

ocker
py

FILE COPY: ASD

Cleared for Release:

NT

6

FBH 545 14 5 71 3(

CHECKLIST A

CRITERIA FOR OTHER REPORTS
(Par 2-2, d thru i, AR 623-105)

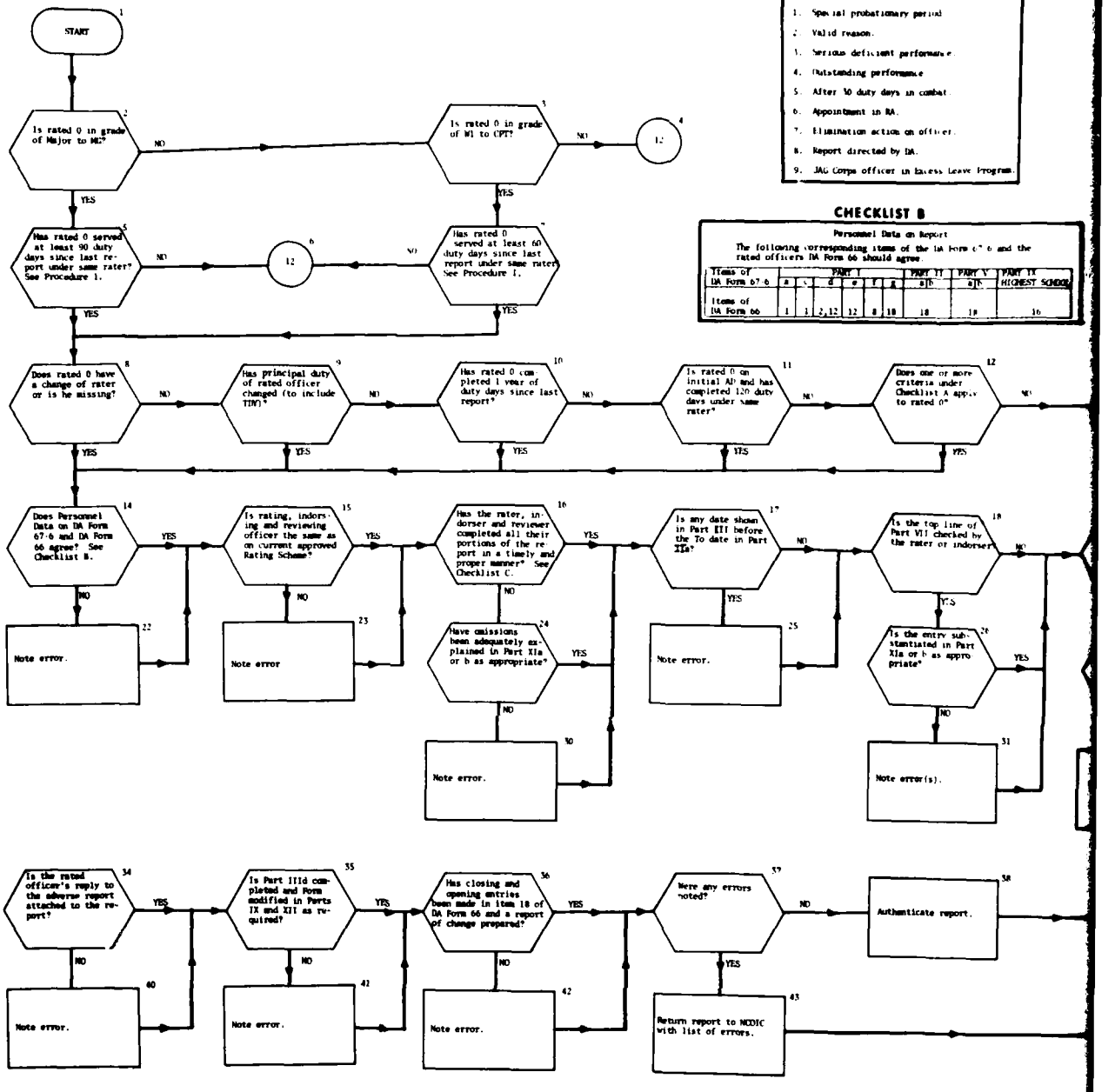
1. Special probationary period.
2. Valid reason.
3. Serious deficient performance.
4. Outstanding performance.
5. After 30 duty days in combat.
6. Appointment in RA.
7. Elimination action on officer.
8. Report directed by DA.
9. JAG Corps officer in Excess Leave Program.

CHECKLIST B

Personnel Data on Report

The following corresponding items of the DA Form 67-6 and the rated officers DA Form 66 should agree.

Items of DA Form 67-6	PART I						PART II	PART V	PART IX
	a	c	d	e	f	g	a|b	a|b	HIGHEST SCHOOL
Items of DA Form 66	1	1	2,12	12	8	18	18	19	16



CHECKLIST A

CRITERIA FOR OTHER REPORTS
A-2, d thru l, AR 623-105

Initial probationary period.

Cold reason.

Shows deficient performance.

Outstanding performance.

Over 30 duty days in combat.

Assignment in RA.

Information action on officer

Report directed by DA.

US Corps officer in Excess Leave Program.

CHECKLIST B

Personnel Data on Report

Corresponding items of the DA Form 67-6 and the DA Form 66 should agree.

PART I				PART II	PART V	PART IX
	g	f	g	a|b	a|b	HIGHEST SCHOOL
33	12	8	18	18	18	16

CHECKLIST C

REQUIRED ITEMS TO BE COMPLETED

Items of DA Form 67-5	RATER	INDORSER: Observed Rated 0 less than 60 duty days for Co Gr and WO and less than 90 duty days for other 0	INDORSER: Observed Rated 0 for 60 or more duty days for Co Gr and WO and for 90 or more duty days for other 0	Reviewer
Part IIc	X	X	X	
Part IIIa	X			
b		X	X	
c				X
Part IV	X		X	
Part VI	X		X	
Part VII	X		X	
Part VIII	X		X	
Part IX	X		X	
Part X	X		X	
Part XIa	X			
b		X	X	
Part XIIa	X		X	
b	X		X	

CHECKLIST D

Entries that constitute an Adverse Report and require referral to the rated officer for his reply.

a. A rating of 5 in Part IV, VI or X.

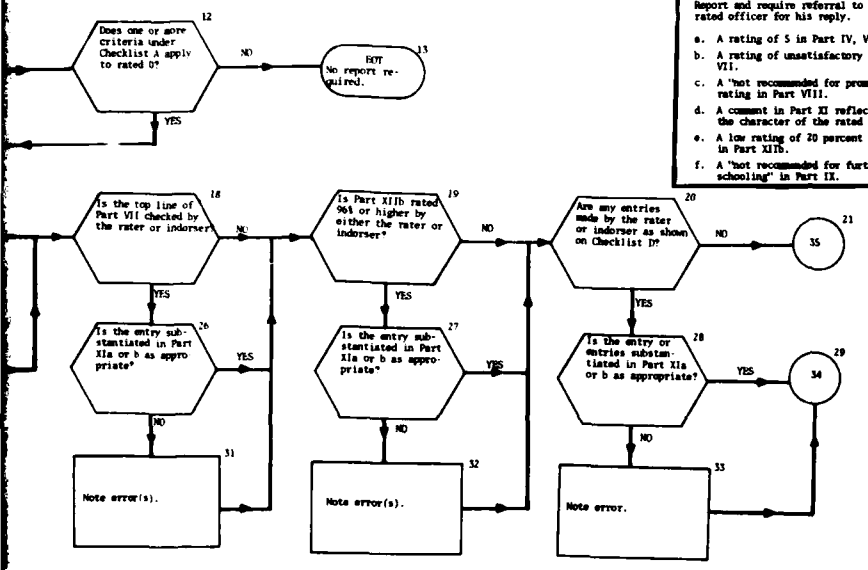
b. A rating of unsatisfactory in Part VII.

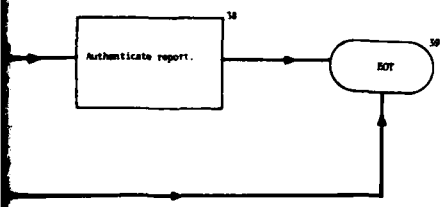
c. A "not recommended for promotion" rating in Part VIII.

d. A comment in Part XI reflecting on the character of the rated officer.

e. A low rating of 20 percent or below in Part XIIb.

f. A "not recommended for further schooling" in Part IX.





PROCEDURE 1

DETERMINATION OF PERIOD COVERED

Part IIa

1. FROM Date:

Step 1: Go up from last entry in "Type of Report" column to where an entry is shown as 6-6 or Acad.

Step 2: Go down one line from the above entry and read the date in the "effective date" column on that line. That date is the FROM date for the report.

2. TO Date: The date before the effective date of change of rater or change of duty of the rated officer.

3. Duty Days and Other Days

Step 1: Determine total number of inclusive calendar days between the FROM date and TO date.

a. Determine inclusive days in first month to end of month.

b. Determine the total number of days in any additional months of the period covered. Days for months are as follows:

Jan 31	Apr 30	Jul 31	Oct 31
*Feb 28	May 31	Aug 31	Nov 30
Mar 31	Jun 30	Sep 30	Dec 31

*29 days in 1972, 1976, 1980 and every following 4 years (Leap Year)

c. Add the days for the first month and the total days of the remaining months together.

Step 2: a. Add the number of non duty days shown in the "Non Duty Days" column in Item 18 of the DA Form 66, shown on and after the line where the FROM date was obtained.

b. Determine the number of days in the period covered, if any, that the rated officer had a different rater (other than the current rater) for periods of less than 60 days for company grade and WO and less than 90 days for other officers and was not rated.

c. The total of a and b above are OTHER DAYS.

Step 3: Subtract OTHER DAYS from the total calendar days. The remainder is DUTY DAYS.

FEB 69-1 1/71 1C

LOGIC TREE FOR:

AUTHENTICATION OF AN OFFICERS EFFICIENCY REPORT

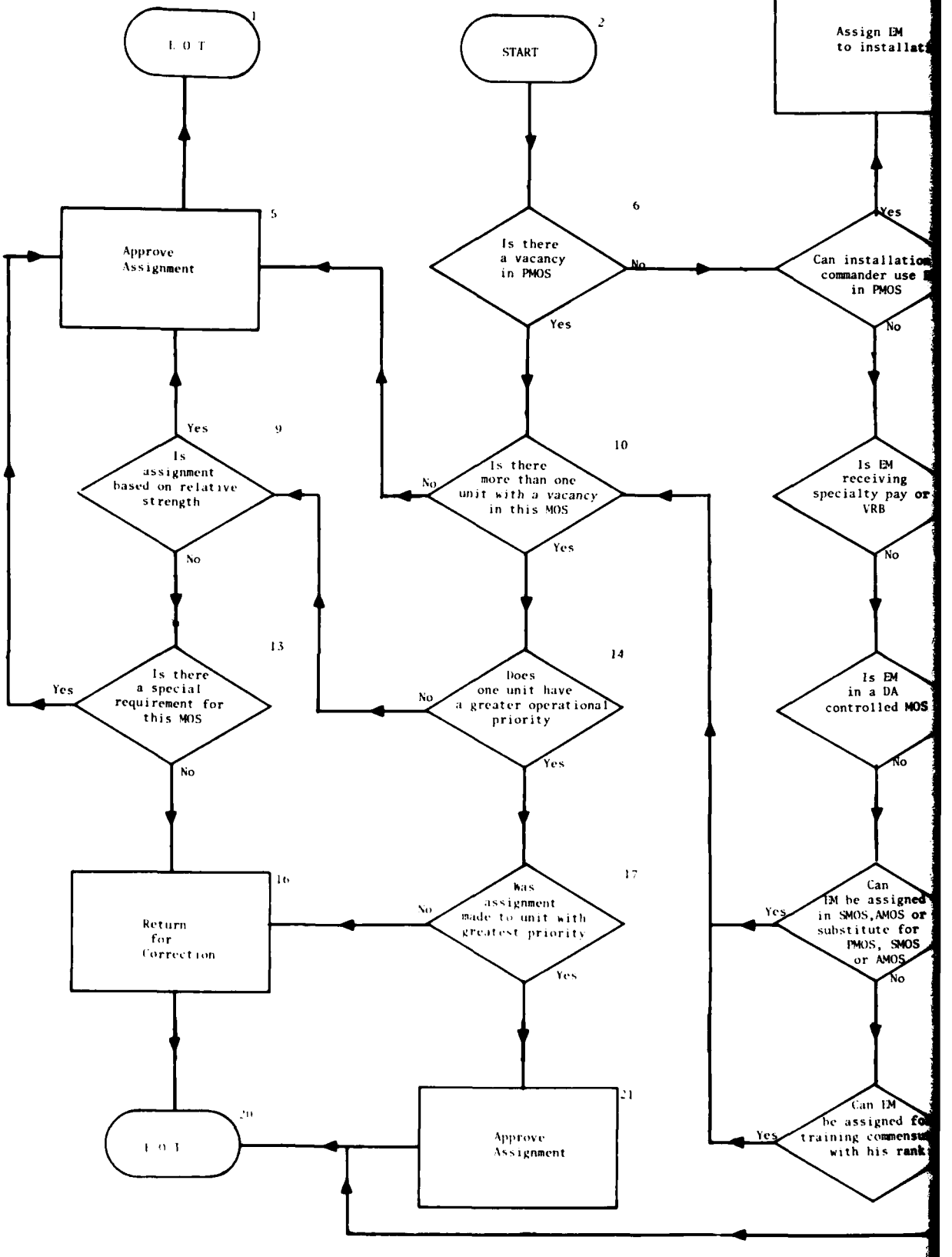
Task: Review a completed officers efficiency report for correctness.

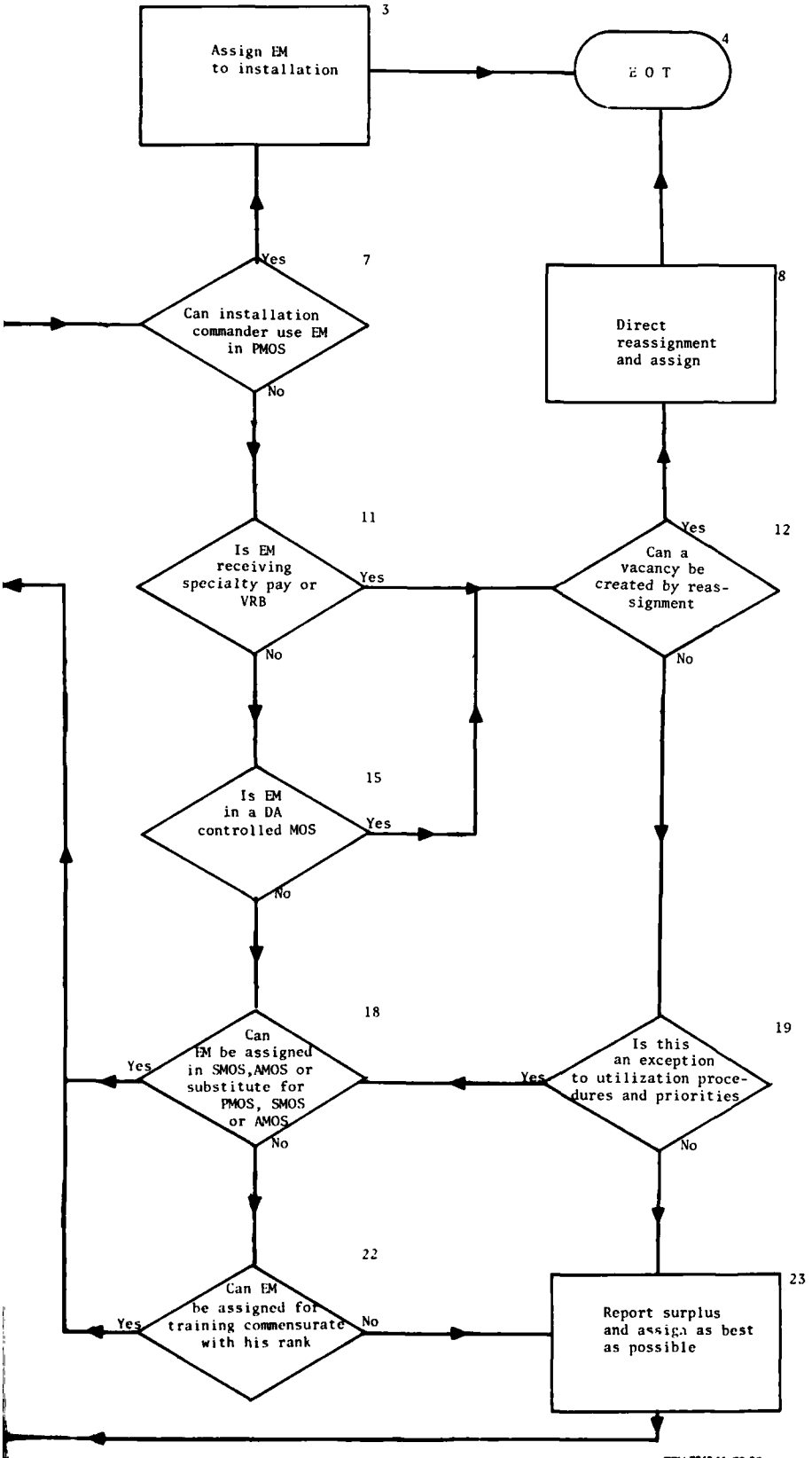
Conditions/Cues: Receipt of an officers efficiency report, officers DA Form 66 and the organization rating scheme.

Source Data

AR 623-105

OBC-PA-LT-2 (1 Mar 71)


1
L O T
2
START
Assign EM to installat
5
Approve Assignment
6
Is there a vacancy in PMOS
No
Can installation commander use in PMOS
Yes
No
Yes
9
Is assignment based on relative strength
10
Is there more than one unit with a vacancy in this MOS
No
Yes
Is EM receiving specialty pay or VRB
No
13
Is there a special requirement for this MOS
Yes
No
14
Does one unit have a greater operational priority
No
Yes
Is EM in a DA controlled MOS
No
16
Return for Correction
17
Was assignment made to unit with greatest priority
No
Yes
Can EM be assigned in SMOS,AMOS or substitute for PMOS, SMOS or AMOS
Yes
No
20
L O T
21
Approve Assignment
Can EM be assigned fo training commensu with his rank
Yes



FEH 734511 69 3C

OBC-PM-LT-1 (1 Nov 69)
Page 1 of 1 page

LOGIC TREE FOR:

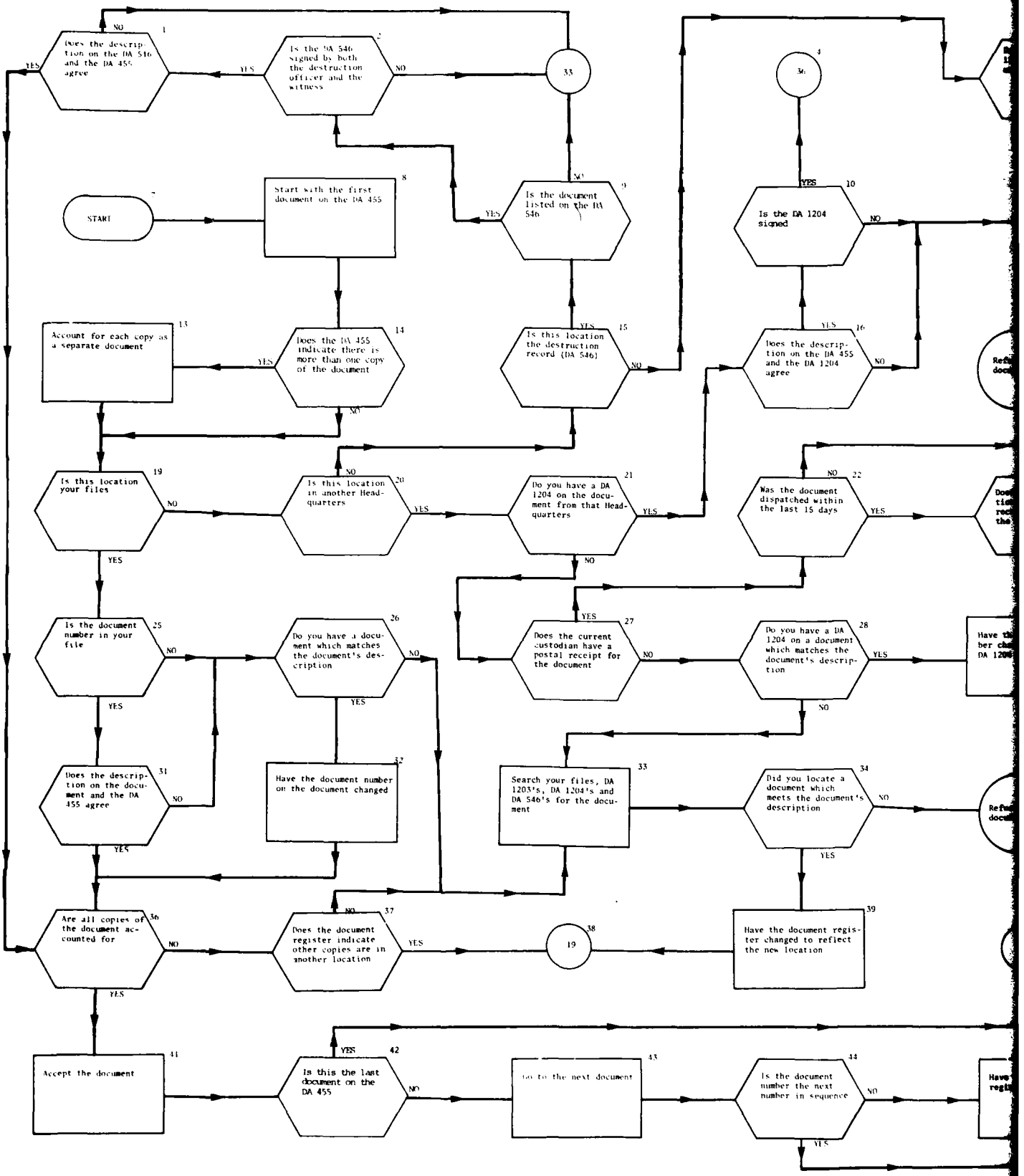
REVIEW OF INITIAL ASSIGNMENT OF PERSONNEL IN GRADES E2 THRU E6 (OBC-PM-LT-1)

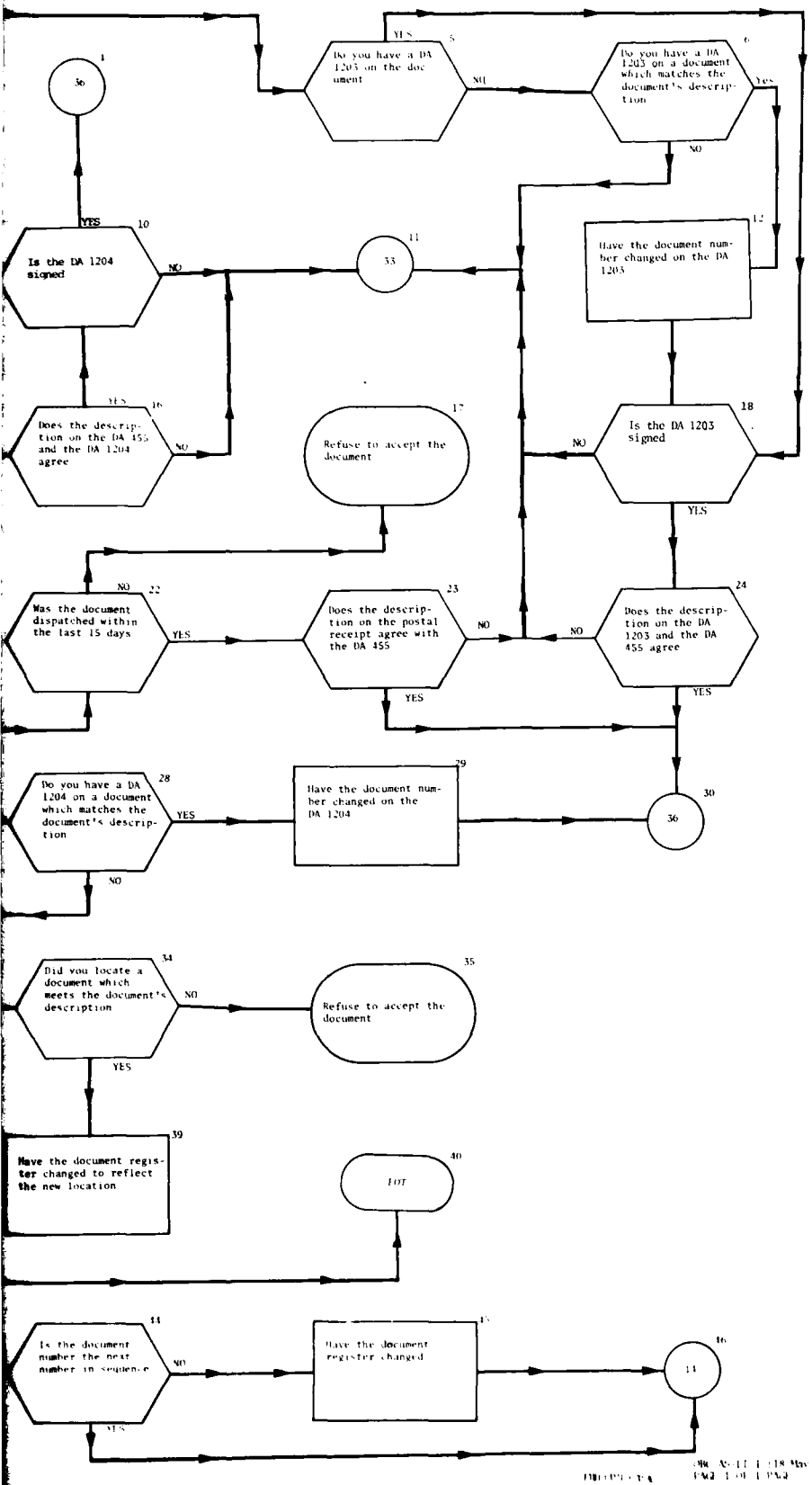
Task: To review initial assignment of personnel in grades E2 thru E6.

Conditions/Cues: Receipt of recommended initial assignment list and access to strength/MOS reports, operational priorities and special assignment requirements.

Source Data

AR 600-200, dtd 24 March 65
W/CI-33


1
Does the description on the DA 516 and the DA 455 agree
NO
YES
2
Is the DA 546 signed by both the destruction officer and the witness
YES
NO
33
3
36
4
5
START
6
Start with the first document on the DA 455
8
9
Is the document listed on the DA 546
NO
YES
10
Is the DA 1204 signed
YES
NO
13
Account for each copy as a separate document
14
Does the DA 455 indicate there is more than one copy of the document
YES
NO
15
Is this location the destruction record (DA 546)
YES
NO
16
Does the description on the DA 455 and the DA 1204 agree
YES
NO
19
Is this location your files
NO
YES
20
Is this location in another Headquarters
NO
YES
21
Do you have a DA 1204 on the document from that Headquarters
YES
NO
22
Was the document dispatched within the last 15 days
NO
YES
25
Is the document number in your file
NO
YES
26
Do you have a document which matches the document's description
NO
YES
27
Does the current custodian have a postal receipt for the document
YES
NO
28
Do you have a DA 1204 on a document which matches the document's description
YES
NO
31
Does the description on the document and the DA 455 agree
NO
YES
32
Have the document number on the document changed
33
Search your files, DA 1203's, DA 1204's and DA 546's for the document
34
Did you locate a document which meets the document's description
NO
YES
36
Are all copies of the document accounted for
NO
YES
37
Does the document register indicate other copies are in another location
NO
YES
38
19
39
Have the document register changed to reflect the new location
41
Accept the document
42
Is this the last document on the DA 455
YES
NO
43
Go to the next document
44
Is the document number the next number in sequence
NO
YES


4
36
5
Do you have a DA 1205 on the document
YES
NO
6
Do you have a DA 1203 on a document which matches the document's description
Yes
NO
10
Is the DA 1204 signed
YES
NO
11
33
12
Have the document number changed on the DA 1203
16
Does the description on the DA 455 and the DA 1204 agree
YES
NO
17
Refuse to accept the document
18
Is the DA 1203 signed
NO
YES
22
Was the document dispatched within the last 15 days
NO
YES
23
Does the description on the postal receipt agree with the DA 455
NO
YES
24
Does the description on the DA 1203 and the DA 455 agree
NO
YES
28
Do you have a DA 1204 on a document which matches the document's description
YES
NO
29
Have the document number changed on the DA 1204
30
36
34
Did you locate a document which meets the document's description
NO
YES
35
Refuse to accept the document
39
Have the document register changed to reflect the new location
40
TOT
44
Is the document number the next number in sequence
NO
YES
45
Have the document register changed
46
14

2

LOGIC TREE FOR:

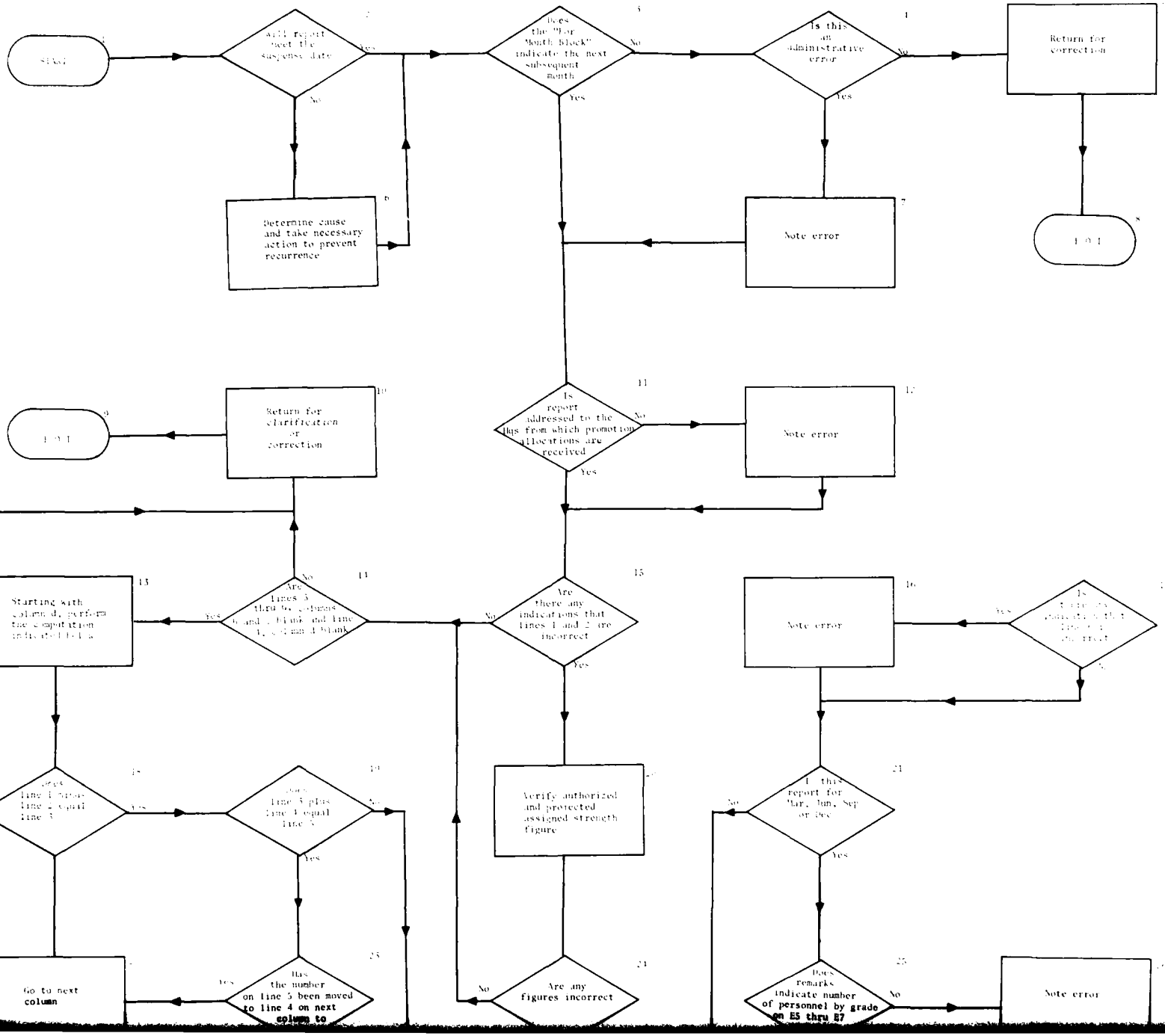
INVENTORY OF CLASSIFIED DOCUMENTS (OBC-AS-LT-1)

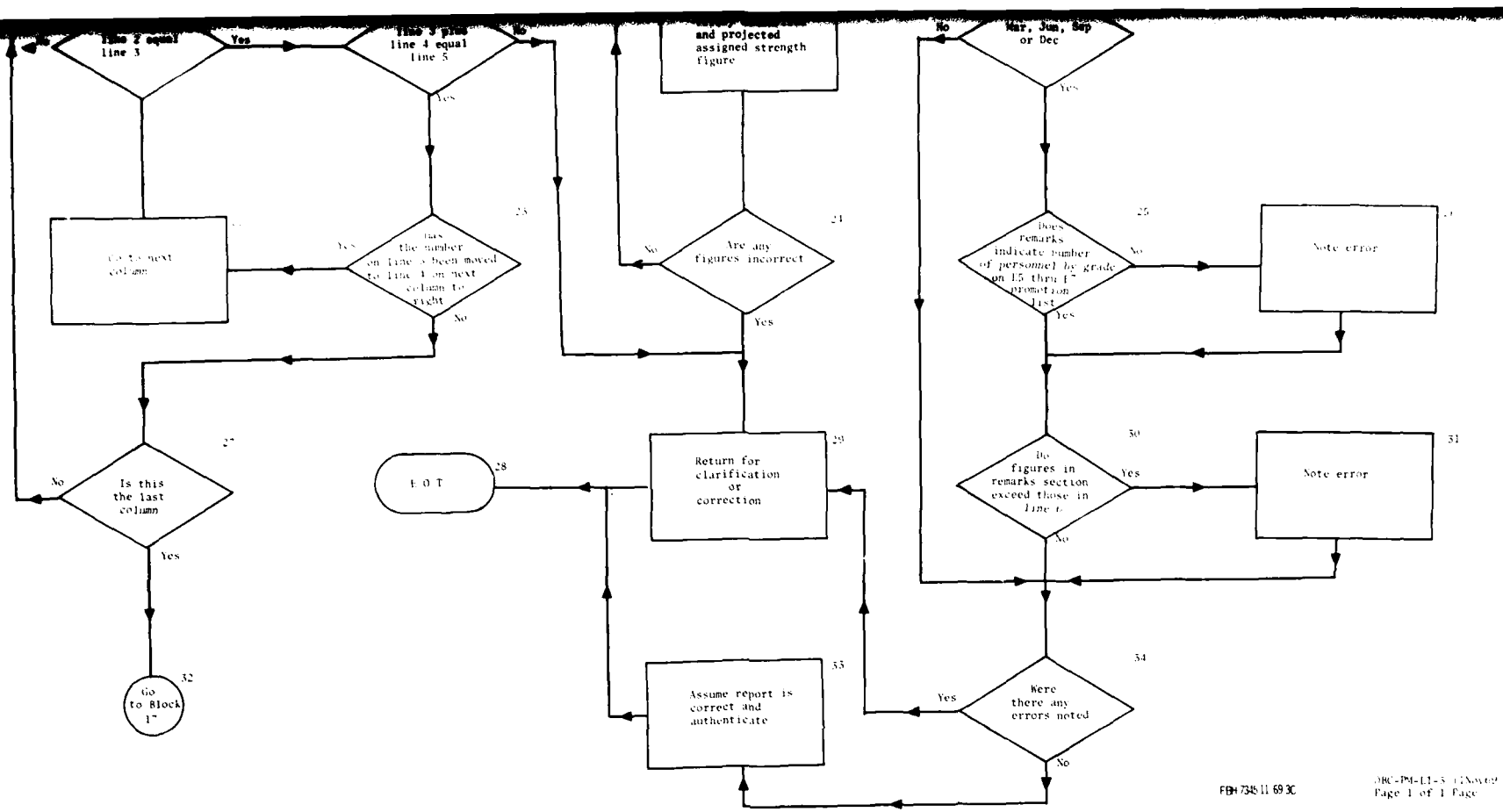
Task: To inventory classified documents prior to accepting or refusing to accept a classified document account.

Conditions/Cues: Receipt of orders assigning duties as classified custodian. Access to Document Register, classified document file, Destruction Record and classified document receipts.

Source Data

AR 380-5


Start
All report meet the suspense date
Yes
No
Does the "For Month Block" indicate the next subsequent month
No
Yes
Is this an administrative error
No
Yes
Return for correction
Determine cause and take necessary action to prevent recurrence
Note error
1 0 1
1 0 1
Return for clarification or correction
Is report addressed to the DAS from which promotion allocations are received
No
Yes
Note error
Are lines 5 thru 9, columns b and c blank and line 4, col a and b blank
No
Yes
Starting with column d, perform the computation indicated below
Are there any indications that lines 1 and 2 are incorrect
Yes
No
Note error
Is
Yes
No
Does line 3 plus line 4 equal line 5
Does line 5 plus line 4 equal line 5
Yes
No
Yes
Verify authorized and protected assigned strength figure
Is this report for Mar, Jun, Sep or Dec
No
Yes
Go to next column
Has the number on line 5 been moved to line 4 on next colum to
Yes
Are any figures incorrect
No
Does remarks indicate number of personnel by grade on E5 thru E7
No
Note error



FBI 7345 11 69 3C

NBC-PM-LI-5 (Nov 69)
Page 1 of 1 Page

LOGIC TREE FOR:

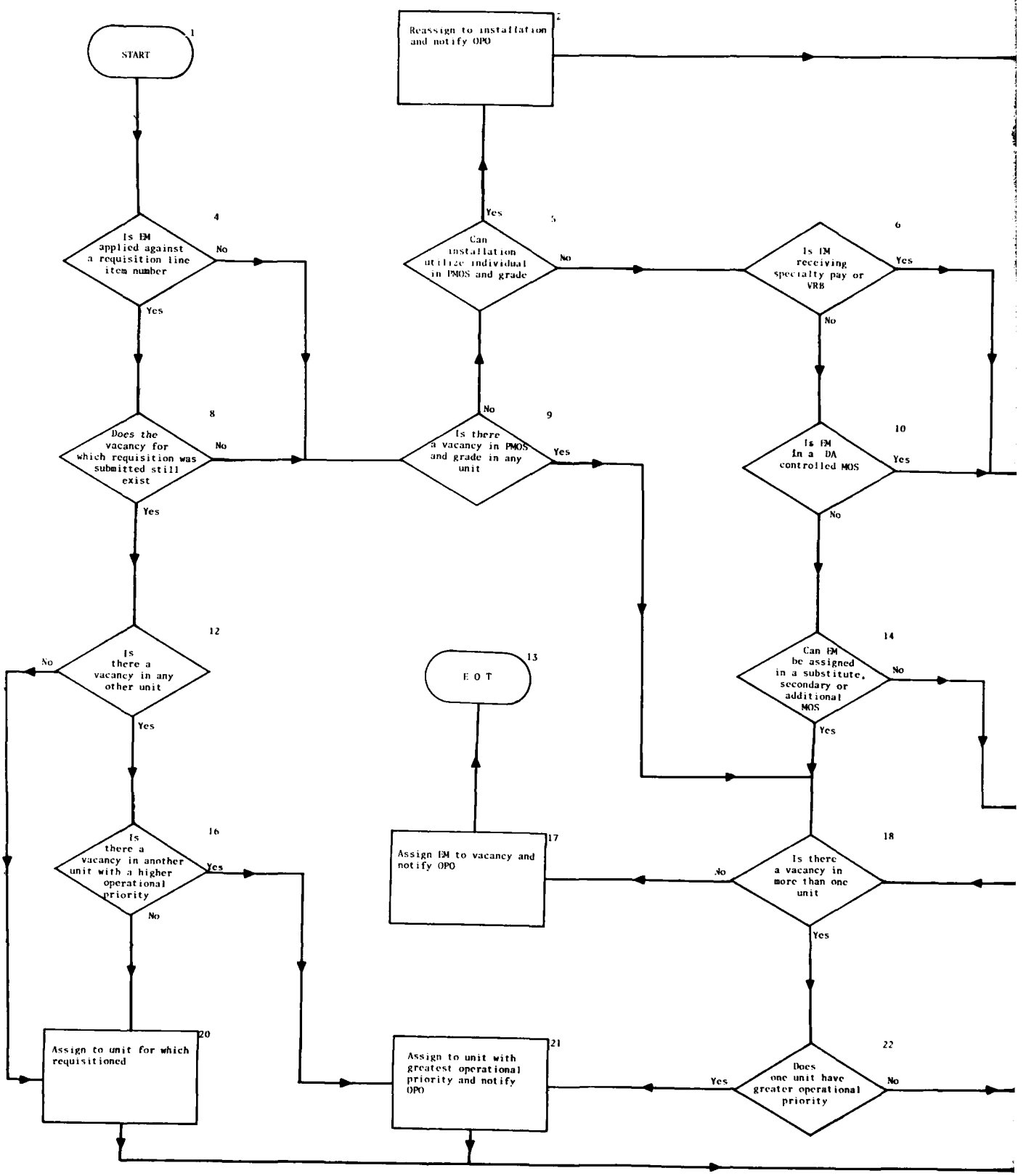
AUTHENTICATION OF ENLISTED PERSONNEL ELIGIBLE FOR TEMPORARY PROMOTION REPORT, DA FORM 2644-R (OBC-PM-LT-3)

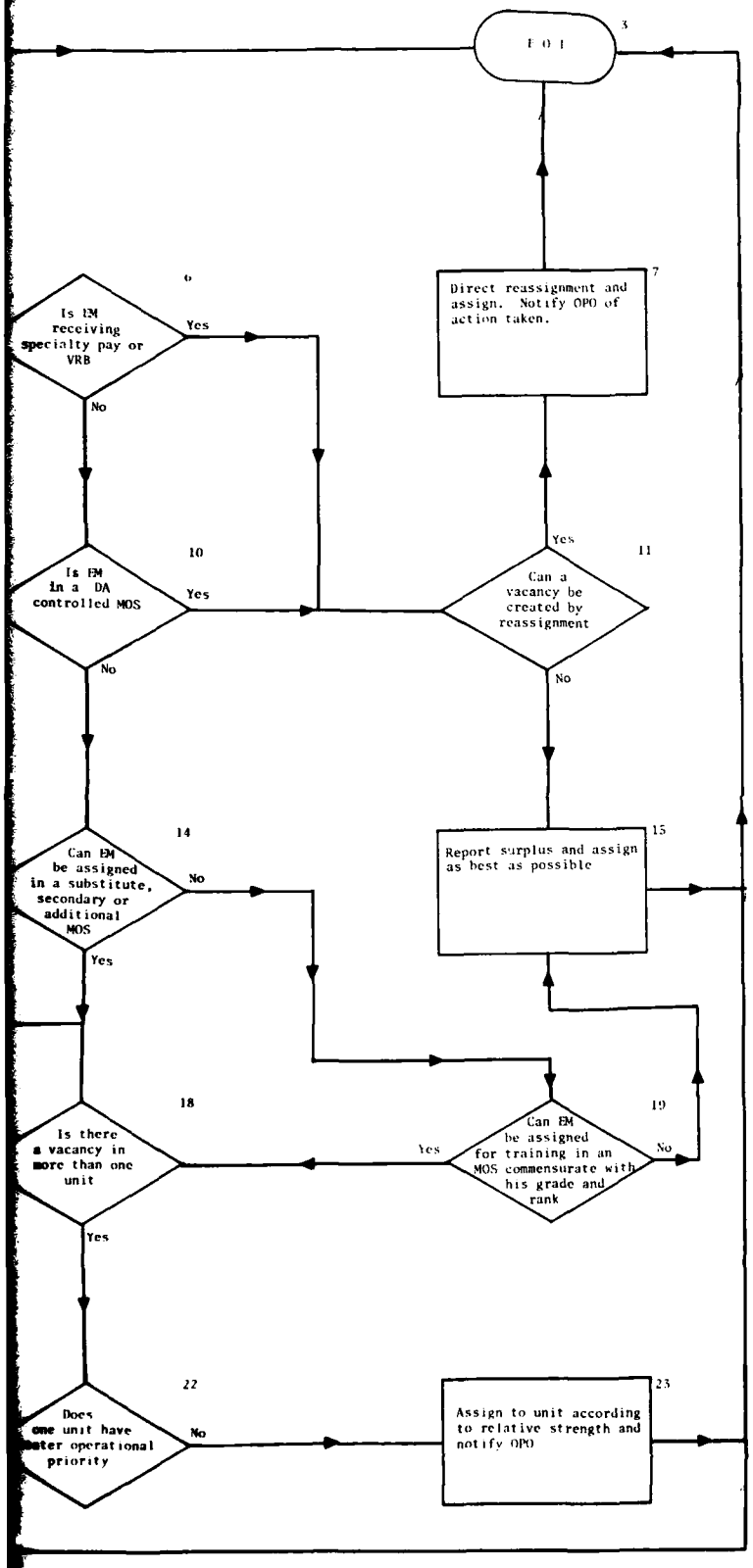
Task: To approve and authenticate DA Form 2644-R prior to dispatching to higher headquarters.

Conditions/Cues: Receipt of DA Form 2644-R.

Source Data

AR 600-200
AR 600-16
AR 600-17
DA Pam 600-8


1
START
2
Reassign to installation and notify OPO
4
Is EM applied against a requisition line item number
No
Yes
5
Can installation utilize individual in PMOS and grade
Yes
No
6
Is EM receiving specialty pay or VRB
Yes
No
8
Does the vacancy for which requisition was submitted still exist
No
Yes
9
Is there a vacancy in PMOS and grade in any unit
No
Yes
10
Is EM in a DA controlled MOS
Yes
No
12
Is there a vacancy in any other unit
No
Yes
13
E O T
14
Can EM be assigned in a substitute, secondary or additional MOS
No
Yes
16
Is there a vacancy in another unit with a higher operational priority
Yes
No
17
Assign EM to vacancy and notify OPO
18
Is there a vacancy in more than one unit
No
Yes
20
Assign to unit for which requisitioned
21
Assign to unit with greatest operational priority and notify OPO
22
Does one unit have greater operational priority
Yes
No


3
E O I
6
Is EM receiving specialty pay or VRB
Yes
No
7
Direct reassignment and assign. Notify OPO of action taken.
10
Is EM in a DA controlled MOS
Yes
No
11
Can a vacancy be created by reassignment
Yes
No
14
Can EM be assigned in a substitute, secondary or additional MOS
No
Yes
15
Report surplus and assign as best as possible
18
Is there a vacancy in more than one unit
Yes
Yes
19
Can EM be assigned for training in an MOS commensurate with his grade and rank
No
22
Does one unit have greater operational priority
No
23
Assign to unit according to relative strength and notify OPO

LOGIC TREE FOR:

ASSIGNMENT OF PERSONNEL IN GRADES E7 THRU E9 (OBC-PM-LT-2)

Task: To determine initial assignments of personnel in grades E7 thru E9.

Conditions/Cues: Arrival of personnel in grades E7 thru E9 and access to individuals personnel records, requisitions, MOS Inventory reports and operational priorities.

Source Data

AR 600-200, dtd 24 March 65
W/C1-33