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JOB AID MANUALS FOR PHASE I-ANALYZE OF THE INSTRUCTIONAL SYSTEMS DEVELOPMENT MODEL

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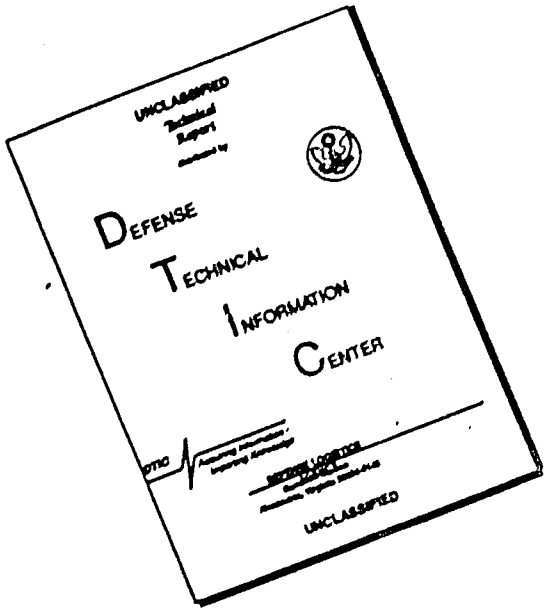
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A Field Operating Agency under the Jurisdiction of the Deputy Chief of Staff for Personnel

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The purpose of the research was to develop job aids ("How to do it" guidance) for the activities identified in the Instructional Systems Development Model (ISD, TRADOC Pamphlet 350-30). Job aids are available for each of the five phases of the ISD model - ANALYZE, DESIGN, DEVELOP, IMPLEMENT, and CONTROL. Each job aid is composed of a Descriptive Authoring Flowchart and a Job Aid Manual. This volume, covering Phase I-ANALYZE, contains an Introduction to the Use of the Job Aids and the Job Aid Manuals for Blocks I.2 through I.5. The Descriptive Authoring Flowcharts for Phase I are available in a companion document.

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FOREWORD

The Computer-Based Instructional Systems Team of the US Army Research Institute for the Behavioral and Social Sciences performs research and development in the area of educational technology that applies to military training. Of interest are methods for training individuals to develop and utilize instructional courseware in reasonable time, at acceptable cost. ARI research in this area is conducted under Army Project 2Q263743A794, FY 80 Work Program.

This Research Product is one of a series of 10 volumes designed to provide guidance on the application of the Instructional Systems Development model. The work was accomplished by Mr. Russel E. Schulz and Mrs. Jean R. Farrell, Human Resources Research Organization, Contract No. DAHC19-78-C-0010 and personnel of the ARI Manpower and Educational Systems Technical Area. Personnel from the Directorates of Training Development at Ft. Belvoir, VA and Ft. Gordon, GA provided assistance in the evaluation of the work.

JOSEPH ZEIDNER
Technical Director

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JOB AID MANUALS FOR PHASE I-ANALYZE OF THE INSTRUCTIONAL SYSTEMS DEVELOPMENT MODEL

BRIEF

Requirement:

To develop a series of job aids for the activities identified in the Instructional Systems Development Model (ISD, TRADOC Pamphlet 350-30).

Procedure:

A series of job aids were designed and developed for each of the five phases of the ISD model: ANALYZE, DESIGN, DEVELOP, IMPLEMENT, and CONTROL. Each job aid is comprised of Descriptive Authoring Flowcharts and a Job Aid Manual which provide specific guidance, examples, and references necessary to produce the product specified by the ISD Block it covers.

Utilization:

These job aids will be used by military training personnel in meeting the requirements of the ISD model.

JOB AID MANUALS FOR PHASE I-ANALYZE OF THE INSTRUCTIONAL SYSTEMS DEVELOPMENT MODEL

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WHAT ARE JOB AIDS?

- Job Aids are intended to be stand-alone, step-by-step procedural guides which we hope will permit you to turn out quality instructional products quickly and easily. We also hope that they will be equally useful to individuals at all experience levels of the instructional systems development process.

- Job Aids are intended to address real needs. Prior to the development of the Job Aids, instructional technology personnel (individuals like yourself) at the U.S. Army Signal Center and the U.S. Army Engineer School were surveyed to determine specific ISD needs—those areas in which they had the greatest need for assistance and information. Emphasis was placed on satisfying these needs in the development of the Job Aids.

- Job Aids use the same classification system for identifying the activities that must be performed in instructional systems development (ISD) as does TRADOC Pamphlet 350-30 (Interservice Procedures for Instructional Systems Development).

WHAT IS THE CLASSIFICATION SYSTEM USED IN TRADOC PAMPHLET 350-30 AND JOB AIDS?

- TRADOC Pamphlet 350-30 suggests that instructional systems development be conducted in five phases:
  - Analyze
  - Design
  - Develop
  - Implement
  - Control

- For those of you who are unfamiliar with TRADOC Pamphlet 350-30 we suggest you read the brief description of each phase of the ISD process as shown in Table 1. In the TRADOC Pamphlet each ISD phase is divided into specific activities called ISD blocks. Table 2 shows these ISD blocks and Table 3 shows the outcome of each block.

- Job Aids cover the activities required for the first three phases of the TRADOC Pamphlet (i.e., Analyze, Design, and Develop instructional systems). The Aids cover each ISD block within these phases except for ISD Block I.1, Analyze Job.

Table 1

FIVE PHASES OF INSTRUCTIONAL SYSTEMS DEVELOPMENT (ISD)

THE FIVE PHASES ARE:

PHASE I ANALYZE

Inputs, processes, and outputs in Phase I are all based on job information. An inventory of job tasks is compiled and divided into two groups: tasks not selected for instruction and tasks selected for instruction. Performance standards for tasks selected for instruction are determined by interview or observation at job sites and verified by subject matter experts. The analysis of existing course documentation is done to determine if all or portions of the analysis phase and other phases have already been done by someone else following the ISD guidelines. As a final analysis phase step, the list of tasks selected for instruction is analyzed for the most suitable instructional setting for each task.

PHASE II DESIGN

Beginning with Phase II, the ISD model is concerned with designing instruction using the job analysis information from Phase I. The first step is the conversion of each task selected for training into a terminal learning objective. Each terminal learning objective is then analyzed to determine learning objectives and learning steps necessary for mastery of the terminal learning objective. Tests are designed to match the learning objectives. A sample of students is tested to insure that their entry behaviors match the level of learning analysis. Finally, a sequence of instruction is designed for the learning objectives.

PHASE III DEVELOP

The instructional development phase begins with the classification of learning objectives by learning category so as to identify learning guidelines necessary for optimum learning to take place. Determining how instruction is to be packaged and presented to the student is accomplished through a media selection process which takes into account such factors as learning category and guideline, media characteristics, training setting criteria, and costs. Instructional management plans are developed to allocate and manage all resources for conducting instruction. Instructional materials are selected or developed and tried out. When materials have been validated on the basis of empirical data obtained from groups of typical students, the course is ready for implementation.

PHASE IV IMPLEMENT

Staff training is required for the implementation of the instructional management plan and the instruction. Some key personnel must be trained to be managers in the specified management plan. The instructional staff must be trained to conduct the instruction and collect evaluative data on all of the instructional components. At the completion of each instructional cycle, management staff should be able to use the collected information to improve the instructional system.

PHASE V CONTROL

Evaluation and revision of instruction are carried out by personnel who preferably are neither the instructional designers nor the managers of the course under study. The first activity (internal evaluation) is the analysis of learner performance in the course to determine instances of deficient or irrelevant instruction. The evaluation team then suggests solutions for the problems. In the external evaluation, personnel assess job task performance on the job to determine the actual performance of course graduates and other job incumbents. All collected data, internal and external, can be used as quality control on instruction and as input to any phase of the system for revision.

Table 2

ISD BLOCKS IN EACH OF THE FIVE ISD PHASES

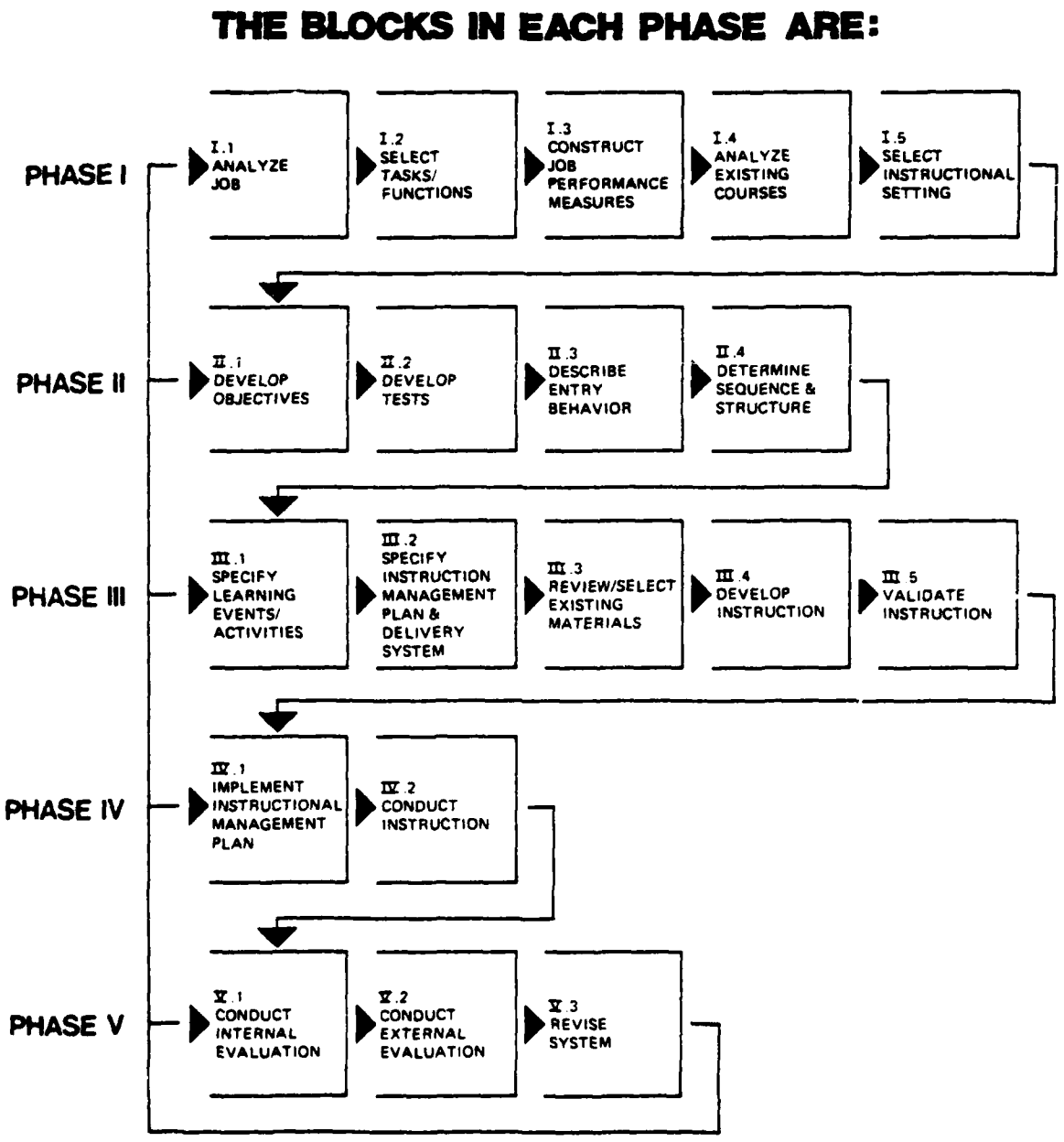


Table 3

OUTCOMES OF ISD BLOCKS

THE OUTCOMES OF THE BLOCKS ARE:

I

- .1 . . . a list of tasks performed in a particular job.
- .2 . . . a list of tasks selected for training.
- .3 . . . a job performance measure for each task selected for instruction.
- .4 . . . an analysis of the job analysis, task selection, and performance measure construction for any existing instruction to determine if these courses are usable in whole or in part.
- .5 . . . selection of the instructional setting for task selected for instruction.

II

- .1 . . . a learning objective for and a learning analysis of each task selected for instruction.
- .2 . . . test items to measure each learning objective.
- .3 . . . a test of entry behaviors to see if the original assumptions were correct.
- .4 . . . the sequencing of all dependent tasks.

III

- .1 . . . the classification of learning objectives by learning category and the identification of appropriate learning guidelines.
- .2 . . . the media selections for instructional development and the instructional management plan for conducting the instruction.
- .3 . . . the analysis of packages of any existing instruction that meets the given learning objectives.
- .4 . . . the development of instruction for all learning objectives where existing materials are not available.
- .5 . . . field tested and revised instructional materials.

IV

- .1 . . . documents containing information on time, space, student and instructional resources, and staff trained to conduct the instruction.
- .2 . . . a completed cycle of instruction with information needed to improve it for the succeeding cycle.

V

- .1 . . . data on instructional effectiveness.
- .2 . . . data on job performance in the field.
- .3 . . . instructional system revised on basis of empirical data.

WHAT SOURCES OF INFORMATION WERE USED IN THE DEVELOPMENT OF JOB AIDS?

- Job Aids are not just a re-hash of TRADOC Pamphlet 350-30. We use the same classification system for ISD phases and the blocks within the phases as does the TRADOC Pamphlet. However, the guidance and information provided in the Job Aids come from a variety of sources, the TRADOC Pamphlet being only one such source. We have gathered information from any source that we could locate. If the information was judged to be good it was included in the Job Aids. In some instances the information in the Job Aid is based solely on the educational technology experience of the project staff.

- It is not within the scope of this Introduction to list all sources of information examined or used in the development of the Job Aids. However, in addition to TRADOC Pamphlet 350-30 examples of other sources of information would include the following types:

  - TRADOC Circulars
  - DA Pamphlets
  - Printed Guidance prepared by TRADOC Schools (e.g., U.S. Army Signal Center)
  - Army Research Institute Documents
  - HumRRO publications
  - Other military and civilian agencies

WHAT JOB AIDS ARE PRESENTLY AVAILABLE AND WHAT DO THEY CONSIST OF?

- There are thirteen Job Aids presently available. Each Job Aid is comprised of two documents. A brief description of each is provided below: (A complete description of how to use each is given on the pages that follow.)

  — Descriptive Authoring Flowcharts. The Descriptive Authoring Flowcharts (usually referred to as Flowchart Manuals) are the primary documents used in the Job Aids. They direct the user to specific guidance, examples and references provided in the Job Aid Manuals.

  — Job Aid Manuals. As stated above, the Job Aid Manuals provide the specific guidance, examples and references necessary to produce the product specified by the ISD Block they cover. In addition, each Job Aid Manual contains one or more Worksheets to use in the development of the product.

- Another important part of the Job Aids package is of course the document you are presently reading, Introduction to the Use of Job Aids and Job Aid Resource Manual.

- The specific Job Aids available are: (Flowchart Manual and Job Aids Manual for each).

  — Job Aid for Selecting Tasks for Training (ISD I.2)

  — Job Aid for Conducting Task Analysis (ISD I.3)

  — Job Aid for Analyzing Existing Courses (ISD I.4)

  — Job Aid for Selecting Instructional Settings (ISD I.5)

  — Job Aid for Developing Objectives (ISD II.1)

  — Job Aid for Developing Tests (ISD II.2)

  — Job Aid for Describing Entry Behavior (ISD II.3)

  — Job Aid for Determining Sequence and Structure (ISD II.4)

  — Job Aid for Specifying Learning Events and Activities (ISD III.1)

  — Job Aid for Specifying Instructional Management Plan and Delivery System (ISD III.2)

  — Job Aid for Review and Selection of Existing Materials (ISD III.3)

  — Job Aid for Developing Instruction (ISD III.4)

  — Job Aid for Validating Instruction (ISD III.5)

WHAT ARE THE MAIN PARTS OF THE FLOWCHART MANUAL?

- Scan through a few pages of your Flowchart Manual. Observe the following:
  - — Flowchart symbols used
  - — Instructions or questions within the flowchart symbols
  - — Supplemental information opposite most of the flowchart symbols
  - — Flowchart block and page numbering system
- For a complete description of each of the main parts of the Flowchart Manual see the pages that follow.

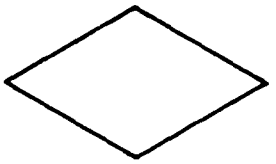
WHAT FLOWCHART SYMBOLS ARE USED IN THE FLOWCHART MANUAL?

- **Flowchart Symbols**

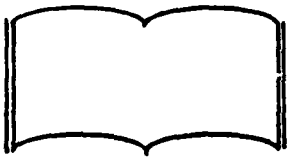
  — Only five symbols are used in the Flowchart Manual. These symbols and the instructions within them act as a road map to lead you step-by-step through the process of developing your particular product. We believe that after you have gotten used to using the Flowchart Manual you will find it a very useful control document. The five symbols used are as follows:



Start-Stop Symbol — Indicates either the start or stop of the activities called for in the Flowchart Manual.



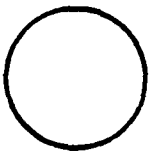
Decision Symbol — Indicates that you must make a decision at this point which will determine the path that you take thru the Flowchart Manual.



Manual Symbol — Indicates that you are to refer to the Job Aid Manual for specific additional guidance or instruction shown in the symbol.



Rectangle Symbol — Indicates an activity that must be performed but does <u>not</u> require specific additional guidance or instruction in the Job Aid Manual. (In some cases the user is given the option of going to the Job Aid Manual to see a completed example of the activity called for in the rectangle symbol).



Go To Symbol — Indicates a branch to some other flowchart block. The branch will either be to a previously encountered block or will jump you over blocks that can be omitted.

WHAT INSTRUCTION IS PROVIDED WITHIN THE FLOWCHART SYMBOLS?

- Each flowchart symbol except the Decision Symbol contains a brief statement of the activity that you are to perform. If this activity requires the completion of part of a Worksheet the specific part of the Worksheet will be identified (remember, each Job Aid includes one or more Worksheets). Decision blocks always contain a question that can be answered with a yes or no answer. The branch you take after the decision block will depend upon your answer.

WHAT IS THE PURPOSE OF THE SUPPLEMENTAL INFORMATION PROVIDED IN THE FLOWCHART MANUAL?

- The supplemental information that is located beside most of the flowchart symbols serves the following purposes:

  — Provides a more complete description of the steps or activities that must be performed in the ISD Block you are working in than does the flowchart itself.

  — Refers you to specific pages within the Job Aid Manual for specific guidance, examples and references needed for completing the activity called for in the flowchart block. (This is associated with the Manual symbol.)

  — For some flowchart blocks (rectangle symbol) examples of the completed activity are shown in the Job Aid Manual. The supplemental information indicates the specific page in the Job Aid Manual containing the example. However, the user has the option of going to the Job Aid Manual to see the example. (The Manual symbol, on the other hand, requires the user to go to the Job Aid Manual.)

  — Acts as an executive summary which will allow commanders and supervisors to obtain a picture of the activities required by the Job Aid without reading the entire Job Aid Manual.

WHAT IS THE FLOWCHART BLOCK AND PAGE NUMBERING SYSTEM?

- The flowchart block and page numbering system is as follows:

  — Flowchart blocks are numbered so that they can be easily referred to.

  — The page numbers in each of the 13 Flowchart Manuals are preceded by an identifying letter unique to a specific ISD Block. (E.g., The Flowchart Manual pages for ISD Block I.2 go from A-1 to A-15 whereas for ISD Block I.3 the Flowchart Manual pages go from B-1 to B-15.) This same page numbering system is also used in the Job Aid Manuals.

HOW DO I USE THE JOB AID MANUAL AND WHAT ARE THE MAIN PARTS OF IT?

- It is unlikely that you will need to refer to every page in the Job Aid Manual. As previously stated, the Job Aid Manuals are used as supplements to the Flowchart Manuals that direct you to specific pages within the Job Aid Manuals. Therefore, DO NOT ATTEMPT TO USE THE JOB AID MANUALS INDEPENDENTLY OF THE FLOWCHART MANUALS.

- Scan through a few pages of your Job Aid Manual. Observe the following:

  — Partial flowcharts shown at the top of pages

  — Questions written in script that appear on most pages

  — Completed, or partially completed examples of Worksheets

WHAT IS THE PURPOSE OF THE PARTIAL FLOWCHARTS AT THE TOP OF SOME PAGES OF THE JOB AID MANUAL?

- When you are referred to the Job Aid Manual you will find a partial flowchart at the top of the Job Aid Manual page. You are to remain working with the Job Aid Manual until you come to another partial flowchart. Then return to the Flowchart Manual.

- The partial flowcharts are identical to those shown in the Flowchart Manual. They serve as an additional reminder of the activity being dealt with at the moment.

WHAT IS THE PURPOSE OF THE QUESTIONS WRITTEN IN SCRIPT THAT APPEAR ON SOME PAGES OF THE JOB AID MANUAL?

- The questions written in script are our way of telling you what follows. They highlight such things as:

  — The purpose of performing a certain activity

  — How the activity is performed

  — What sources are available for performing the activity and how good they are

  — What the Worksheet looks like after the activity is performed

WHAT IS THE PURPOSE OF THE COMPLETED OR PARTIALLY COMPLETED EXAMPLES OF WORKSHEETS?

- As previously stated, every Job Aid Manual uses one or more Worksheets (located in a pocket at the back of the Manual). The Worksheets permit you to produce (and document) the product called for in the ISD Block.

- Whenever you are required to make an entry on a Worksheet an example of that type of entry will be shown in the Job Aid Manual and will usually be circled so as to make it stand out. It is hoped that these examples will give you a clear idea of what is required on the Worksheet.

WHAT DOES THIS ALL MEAN AND WHAT DO I DO NOW?

- In this Introduction we have attempted to explain the following:
  - What Job Aids are
  - The classification system (ISD Phases and Blocks) used in the Job Aids
  - Sources of information used in the development of Job Aids
  - Job Aids presently available
  - A description of Flowchart Manuals
  - A description of Job Aid Manuals
- If you feel that you have an adequate understanding of the above, return to the Flowchart Manual now. You will be referred to specific pages in the Resource Manual (the remainder of this document) as you need the information contained in them. Do not attempt to read the Resource Manual now.

RETURN TO THE FLOWCHART MANUAL NOW

JOB AIDS RESOURCE MANUAL

HOW CAN THE RESOURCE MANUAL HELP ME?

The purpose of this resource manual is to assist you in the formation of a data-based system for decision making in the Analysis Phase of the Instructional Systems Development (ISD). In order to make logical and objective decisions based on conditions and needs in the field, you must collect, organize, analyze, and document job significant data (information). Such data includes many specifics under the broad categories of job background data, target population data, and critical task data. The specifications of specific data requirements and sources of this data should be part of the overall Job Analysis Plan.

WHAT ARE SOME SOURCES OF JOB SIGNIFICANT DATA?

There are many sources of data to support a job analysis.

These sources include such things as:

- Technical Manuals
- Field Manuals
- Army Regulations
- Circulars and Phamplets
- Programs of Instruction
- Soldier's Manuals
- Previous Task Lists
- Documentation from the Systems Engineering Era
- Reports from outside agencies, i.e., Army Research Institute, HumRRO, and other military and civilian research organizations
- Internal Research Reports
- Tables of Organization and Equipment and Tables of Distribution and Allowances
- Civilian Publications (technical journals and professional publications)
- Equipment Modification Work Orders
- CODAP (Comprehensive Occupational Data Analysis Programs)
- Field Surveys
- Panels of Experts

WHICH SOURCES OF DATA ARE INCLUDED IN THE RESOURCE MANUAL?

Each of the sources listed is useful for fulfilling specific needs in the Analysis Phase of ISD. The Job Analysis Plan should specify exactly which items of data will be needed and the recommended source(s) for each item. In this way all the data can be accessed and ready for use as soon as it is needed. The last three sources on the list, CODAP, Field Surveys, and Consensus Groups or Panels, are frequently cited in the Job Aids for specific items of information. How to use these sources is the subject of this manual.

CODAP

WHAT IS CODAP?

To provide personnel managers and training managers with the reliable job data needed for job and task analysis, the Deputy Chief of Staff for Personnel has selected the occupational survey questionnaire for data collection and CODAP (Comprehensive Occupational Data Analysis Programs) as the system for processing, reporting, and analyzing this data. The combination of questionnaire and CODAP is currently being used by all the U.S. Armed Forces to support their occupational survey and job analysis efforts. This automated data system provides information in such areas as: duties and tasks performed by job and duty incumbents; types of equipment, tools, and vehicles used and maintained; special skills and knowledge which must be met by job incumbents; quality and quantity of training received or required; physical and mental demands; and special items pertaining to personal and job background information, work environment, and job satisfaction.

WHEN SHOULD CODAP REPORTS BE USED?

Whenever data has already been prepared by CODAP it should be used in preference to school conducted surveys in order to prevent duplication of effort. CODAP has the capability of supplying all your data needs. It is the responsibility of each Army service school to initially provide the Army Occupational Survey Program with the input it must have to supply your job analysis needs, and also to develop a job analysis plan which allows sufficient time to access the necessary data.

Of particular use in job analysis are Group Summary Reports. The Job Aids suggest that you obtain these reports for documenting such information as: tasks performed in each duty position (ask for GPSUM6 report for your MOS), and percentage of soldiers in the skill level performing each task (ask for GPSUM 2).* Given sufficient lead time CODAP can also make up special reports to provide ratings on task selection factors such as, time to train OJE, consequences of inadequate performance, and probability of emergency performance (ask for FACSUM report).

HOW ARE CODAP REPORTS OBTAINED?

In order to obtain CODAP data you should first check with your supervisor to see if the information you need has already been accessed. If it has not, write to:

Commander
US Army Military Personnel Center
ATTN: DAPC-MSP-D
2641 Eisenhower Avenue
Alexandria, VA 22311

or call:

325-9272/9493 (AUTOVON 221-9272/9493).

Allow at least three weeks for the reports to arrive at your school. The necessary lead time could be much longer if you are requesting special information which CODAP has not yet collected. It is recommended that you obtain the two official guides from MILPERCEN: the US Army Military Occupational Data Bank, and the US Army Occupational Survey Program.

*Keep in mind that these percentages are based on the peacetime conditions in which soldiers are presently being surveyed. Adjustments should be made for combat tasks.

FIELD SURVEYS

WHAT IS A FORMAL FIELD SURVEY?

A formal field survey is similar to the type of questionnaire survey conducted by the Army Occupational Survey Program, only it is conducted by instructional development personnel within an Army service school.

The use of questionnaires permits the job analysis team to make limited contact with large numbers of personnel; thus large amounts of information can be collected at a relatively low cost. Questionnaires can be mailed to personnel who are asked to complete and return them, or they can be administered to groups of job incumbents and/or supervisors by local personnel who have the responsibility and authority to make sure all questionnaires are completed and returned.

WHEN SHOULD FORMAL FIELD SURVEYS BE USED?

Whenever time does not allow you to access information from the Army Occupational Survey Program, an alternate data collection method may be used. Formal field surveys are suggested as an alternate data source in the ISD Job Aids. Should you decide to conduct a formal field survey be sure to obtain permission from MILPERCEN in accordance with the guidelines in AR 600-46.

HOW IS A FIELD SURVEY QUESTIONNAIRE DESIGNED?

- **Types of Questionnaires**

There are two types of questionnaires, the closed form and the open form. We suggest using the closed form, which contains a list of possible items to be selected or blanks to be filled in with words or numbers. (For an example of a closed form questionnaire, see Appendix A.) This form has several advantages over the other alternative, the open form. It is likely to take a minimum amount of time to fill out, thus increasing the chances that it will be completed and returned. The process of tabulating and summarizing responses is simpler and less time consuming than with an open form questionnaire. Machine tabulation and computer analysis of the completed forms are practical when a large number of questionnaires is used.

A properly designed closed form questionnaire is difficult to prepare. The designer must be sure to include all possible responses expected from any of the soldiers who will complete the questionnaire. The items must be constructed on the form so that they clearly communicate to the user exactly what the designer is trying to ask. The greatest single problem with research methods is improperly worded questionnaires, as they produce faulty data. If you intend to design your own questionnaires we suggest consulting the following guides:

Morsh, J.E. and Archer, W.B. *Procedural guide for conducting occupational surveys in the United States Air Force* (PRL-TR-67-11). Lackland Air Force Base, Texas: Personnel Research Laboratory, Aerospace Medical Division, Air Force Systems Command, September 1967.

Jacobs, T.O. *Developing questionnaire items: how to do it well.* Human Resources Research Organization (HumRRO), 300 North Washington Street, Alexandria, Virginia 22314.

WHAT SHOULD BE INCLUDED ON THE QUESTIONNAIRE?

The details of the forms you use will be determined by:

1. how you will tabulate and summarize the results, and
2. what information you wish to collect.

How you will tabulate and summarize results will be determined by whether you have available a computer and other automated data handling equipment and by the number of people surveyed. **To determine what information you wish to collect, you should consider the total data requirement for the training development process. These data requirements should be predetermined in the job analysis plan so that as much information as possible can be obtained in a single questionnaire survey effort.**

One note of caution about the design of your questionnaire is that you should keep the questionnaire as short as practical. In general, the forms should be designed so they can be completed in two hours or less. One way you can save time on a complex task inventory is to list all tasks under their appropriate duty position title. This will permit the soldier to rapidly scan groups of tasks not performed and then proceed to the next duty position.

WHAT TYPE OF INSTRUCTIONS FOR COMPLETING AND ADMINISTERING THE QUESTIONNAIRES SHOULD BE PREPARED?

After the formal field survey questionnaires have been written, the instructions for completing and administering the questionnaires should be prepared. These instructions should include:

- For the user
  - an introduction explaining the purpose and importance of participating in the field survey.
  - general instructions explaining how the questionnaire is to be completed.
- For the project officer
  - general instructions regarding responsibilities.
- (When questionnaire is not self-administered)
  - specific instructions for administering the questionnaire in a controlled environment.

For examples of these types of instructions, see Appendix B.

HOW IS A SURVEY SAMPLE SELECTED?

You are now ready to select organizations and individuals to provide you with the needed job data. The complexity of the MOS, the availability and quality of published sources of job information, and the number of people in the particular job will determine how much and what kinds of information you need to collect. This will strongly influence the make-up and size of your sample. If the complexity and amount of required data are great, the number of organizations and individuals interviewed will increase. As a general rule, your survey sample should be as large as possible. This is particularly true if you do not have personnel available with the responsibility and authority to assure that most of your questionnaires will be completed. You should make an attempt to obtain a sample that represents the distribution of individuals in the MOS according to command and skill level. Review of personnel records, either by personnel employees, members of your job analysis team, or your field representatives who will conduct the survey will be required to obtain data upon which to base choices for your survey.

- In selecting UNITS for sampling, you should select units that:
  1. have at least a small number of job holders and supervisors who do the particular job to be analyzed. Preferably, you should choose some units that have a relatively small number of job holders, and some that have large numbers.
  2. are geographically and environmentally representative.
- In selecting INDIVIDUALS within the units, you should select a group made up of individuals who:
  1. perform and supervise the job being analyzed
  2. perform with average satisfactory proficiency
  3. are representative in terms of length of time on the job
  4. are representative in terms of training.

For certain types of information you will also want to choose at least a few job holders or supervisors who are acknowledged experts at the job.

HOW IS A QUESTIONNAIRE SURVEY CONDUCTED?

- **Trial Run (Validation of Instruments)**

Before sending out the total number of questionnaires you intend using, you may wish to send out a small number. This will permit you to check the initial results and possibly make some changes in your questionnaires or instructions. Then you will send out what you hope will be the total number of questionnaires required.

- **Group Administration**

The ideal way to administer questionnaires is group administration. Where the local responsible official and his assistants schedule the administration he should do the following:

— Make certain that only eligible individuals are seated in the administration area

— Read the administrative instructions

— Provide any necessary assistance in completing the questionnaires

— Return the completed questionnaires to the school

- **Individual Administration**

Often, particularly with individuals at remote stations, group administration is impractical. In these cases, it is sometimes effective to send the questionnaires to a responsible officer and request that they be returned by a reasonable suspense date. Careful attention should be paid to the instructions for administration or self-administration. If your command has no authority to require that a suspense date be met, then you must either obtain the concurrence of a command with that authority, or be willing to accept a reduced percentage return.

- **Return of Questionnaires**

How much confidence can you have in the validity of your questionnaire if you get less than a 100 percent return? Less and less confidence can be expected with each reduction in the percentage returned. What can you do if you are not satisfied with the percentage of returns of the questionnaires? We suggest you try the following:

1) Send out more forms to different people and hope for better results.

2) Recontact some of the first sample and try to encourage them to return the questionnaires.

3) Visit a random sample of those who did not respond and compare their forced responses with the voluntary responses. Then you and your supervisors will have to decide how much chance you are willing to take that the data you have received presents a sufficiently accurate picture of the job as it really exists.

PANELS

WHAT IS A PANEL OF EXPERTS?

With this method a group of personnel, selected for their experience and knowledge of the job, is brought together to confer about the required job analysis data. Panels may be made up of one or more of the following types of members:

1) Subject Matter Experts (SMEs)

   These are personnel found at your school who are acknowledged experts in the tasks, duty positions or MOS you are analyzing. They may be found among instructors or ISD personnel who hold the MOS. SMEs may or may not have had recent field experience.

2) Job Incumbents

   This group includes those who are presently holding the jobs/performing the tasks/ you are interested in, or who have recently held the jobs. The more recent the better. More than three years away from the field would disqualify a potential panel member.

3) Job Supervisors

   This group includes those who are presently or have recently (within the past three years) supervised soldiers in the jobs/tasks you are interested in.

Job incumbents and job supervisors may be found on the post where your school is located or at other locations. Check the TOEs and TOAs to find out where personnel may be assigned. While personnel assigned to your post are most conveniently assembled, they may not be completely representative of job incumbents/supervisors serving in other locations. Also, they probably have been heavily burdened by school surveys, panels, etc., already due to their proximity to the school. Therefore, personnel from other locations may have to be used.

WHEN IS A PANEL USED?

Panels of experts are a good alternate data source when:

- CODAP is not available
- time and funds are inadequate for conducting a field survey
- the type of information required can be reliably provided by a small group

WHEN ARE SUBJECT MATTER EXPERTS USED?

With this method, a group of highly experienced personnel is brought together to record and organize the required job analysis data. This method is particularly useful in collecting job data on new jobs or on managerial and supervisory jobs where many of the most critical behaviors are not directly observable. Since the members of a panel of SMEs are experts in the MOS being analyzed, their collective effort should be decisions about the requirements of the job. In general, their greatest effectiveness is in evaluating and making decisions about job data that have been collected from other sources by other means.

WHEN ARE RECENT JOB INCUMBENTS AND/OR SUPERVISORS USED?

With this method, a group of job incumbents, job supervisors, or a combination of these, is brought together to provide information about their jobs. The primary function of this type of panel is to provide information about their jobs, not to make decisions. Another name for this type of panel is Consensus Group.

HOW IS A PANEL ASSEMBLED?

The panel is a relatively inexpensive and easy approach to collecting data. Three to seven persons is the number recommended to make up the panel. Whenever possible, you want panel members to be representative of different locations and types of units in the field. While many experts may be available within your school it is critical that their views be balanced by those of persons serving presently or recently in the field. If all of the panel members come from schools, there may be a tendency for the outcome to reflect what exists in training rather than what actually exists on the job.

Appendix A

EXAMPLE OF A CLOSED FORM QUESTIONNAIRE

JOB INVENTORY (DUTY-TASK LIST)	AFSC 921X0/922X0	Page 7 of 44 Pages

1. Check tasks you perform now (✓)
2. Add any tasks you do now which are not listed
3. In the "Time Spent" column, rate checked (✓) tasks on time spent in your present job

Time Spent Scale

1 - VERY MUCH BELOW AVERAGE
2 - BELOW AVERAGE
3 - SLIGHTLY BELOW AVERAGE
4 - ABOUT AVERAGE
5 - SLIGHTLY ABOVE AVERAGE
6 - ABOVE AVERAGE
7 - VERY MUCH ABOVE AVERAGE

C. FITTING AND MAINTAINING LIFE RAFTS AND PRESERVERS		✓ CHECK IF DONE IN PRESENT JOB	TIME SPENT DOING THESE TASKS IN PRESENT JOB
1. Clean life preservers	42		
2. Clean life rafts	43		
3. Condemn non-reparable life rafts or life preservers	44		
4. Fit life preservers	45		
5. Inspect life preservers	46		
6. Inspect life raft accessories	47		
7. Inspect life rafts	48		
8. Inspect or weight test carbon dioxide (CO_2) cylinders or cartridges	49		
9. Make entries on or review Life Preserver Data forms (AFTO Form 468)	50		
10. Make entries on or review Life Preserver Inspection Data Record forms (AFTO Form 336)	51		
. . . . .			
11. Make entries on or review Life Raft Inspection Record forms (AFTO Form 337)	52		
12. Make entries on or review User Certification Label forms (AFTO Form 27)	53		
13. Pack life preservers	54		
14. Pack life raft accessory containers	55		
15. Pack life rafts	56		
16. Perform functional tests of life preservers	57		
17. Perform functional tests of life rafts	58		
18. Perform inflation tests of life preservers	59		
19. Perform inflation tests of life rafts	60		
20. Perform minor repairs to life preservers such as patching rips, tears, or holes	61		
. . . . .			
(Continued next page)			

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JOB INVENTORY (DUTY TASK LIST)	AFSC 921X0/922X0	Page 8 of 44 Pages

1. Check tasks you perform now (✓)
2. Add any tasks you do now which are not listed
3. In the "Time Spent" column, rate checked (✓) tasks on time spent in your present job

Time Spent Scale

1 - VERY MUCH BELOW AVERAGE
2 - BELOW AVERAGE
3 - SLIGHTLY BELOW AVERAGE
4 - ABOUT AVERAGE
5 - SLIGHTLY ABOVE AVERAGE
6 - ABOVE AVERAGE
7 - VERY MUCH ABOVE AVERAGE

C. FITTING AND MAINTAINING LIFE RAFTS AND PRESERVERS (CONTINUED)		✓ CHECK IF DONE IN PRESENT JOB	TIME SPENT DOING THESE TASKS IN PRESENT JOB
21. Refill CO_2 cylinders	62		
22. Send life raft compressed gas cylinders to other agencies for test, refill, or inspection	63		
23. Store life rafts or life preservers	64		
IF A TASK THAT YOU PERFORM IS NOT LISTED ANYWHERE IN THE ENTIRE LIST, WRITE IT IN THE BLANK SPACES BELOW.			

AVAILABLE
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Appendix B

ADMINISTRATIVE PROCEDURES FOR CLOSED FORM QUESTIONNAIRE

1. Introduction (for user of questionnaire)
2. General Instructions (for user of questionnaire)
3. General Instructions (for project officer)
4. Specific Instructions for Administering Questionnaire (for project officer when questionnaire is administered in a controlled environment.

TO: USER OF QUESTIONNAIRE

INTRODUCTION

TO THE NONCOMMISSIONED OFFICER:

This questionnaire is part of a field survey designed to identify tasks for military police training. Its specific purpose is to obtain from you, the Noncommissioned Officer, information on task criticality and frequency of performance. Feedback gained from this questionnaire will play a major part in redesigning the Noncommissioned Officer Advanced Education System. The ultimate goal is to design training so that it reflects what we have learned from you in the field. This goal is possible only with your full cooperation. Consider each task listed in this questionnaire carefully and give your best response. Your contribution is essential to a successful survey.

TO: USER OF QUESTIONNAIRE

GENERAL INSTRUCTIONS

1. Complete this survey questionnaire within the time specified by your unit project officer and return it to him upon completion.

2. Because instructions for completing each part of this survey questionnaire are different, read all instructions carefully.

3. Part II requires that you supply biographical information. This information will be used to correlate feedback received from the field. Print all answers in the spaces provided on the appropriate survey questionnaire page.

4. In the upper right corner of each page of Part III, Task Inventory, of this survey questionnaire is a BOOKLET NUMBER block. Immediately to the left of this block is the individual booklet number. Print the individual booklet number in the BOOKLET NUMBER block on each page of the Task Inventory as demonstrated in the example.

EXAMPLE:

	BOOKLET NUMBER									
	0	1	2	■	4	5	6	7	8	9
(000345)	0	1	2	3	■	5	6	7	8	9
	0	1	2	3	4	■	6	7	8	9

5. Part III, Task Inventory, is divided into nine (9) separate sections (Sections I-IX). The content of these sections concerns tasks you may perform in your present duty assignment. You are asked to rate each task in accordance with three criteria - frequency of task performance, immediacy of task performance, and importance of task to mission success.

   Base all selections on your experience in your present duty assignment.

   a. Column A requires that you rate how often you perform each task on a scale from one to four. The criterion for this rating is the frequency of task performance. Those tasks performed most frequently will normally be rated four while those tasks not performed at all will be rated one.

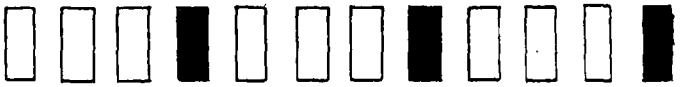
b. Column B requires that you determine how soon you must be capable of performing each task after reporting to your present duty assignment. The criterion for this rating is the immediacy of task performance. Of the four possible responses, select the one most nearly describing your requirements. Select response number four for those tasks which you must be capable of performing immediately upon reporting for duty. Select response number one for those tasks which you never perform.

c. Column C requires that you describe, in your opinion, how important each task is to mission success. The criterion for this rating is the importance of the task to the accomplishment of the unit mission. Those tasks that, in your opinion, are most important to mission success will be rated four while those tasks that you consider least important will be rated one.

6. After selecting, enter your responses for each task, using either a pen or pencil, in the answer portion adjacent to the appropriate task statement as demonstrated in the example.

EXAMPLE: The task PREPARE CORRESPONDENCE, if rated as performed FREQUENTLY in Column A, identified as must be capable of performing IMMEDIATELY in Column B, and determined by you to be MOST IMPORTANT in Column C, would be entered in the answer portion, as shown below.

PREPARE CORRESPONDENCE 1 2 3 4 1 2 3 4 1 2 3 4



7. After each section of Part III, Task Inventory, is a Write-In Section. These write-in sections are provided in order that you may comment on each task inventory section, or list any task(s) you think should be included in the Task Inventory. These sections also allow you to comment on those tasks that you find are the most difficult for you to perform.

TO: PROJECT OFFICER

GENERAL INSTRUCTIONS FOR PROJECT OFFICER

1. General. The Military Police School is currently involved in redesigning basic military police training to produce military policemen better equipped to perform when they reach the unit. The emphasis is toward training replacements in tasks actually being performed in the field. The questionnaires in this packet are designed to identify those tasks.

   The care with which you, the project officer, administer the questionnaires will determine the accuracy of field feedback and, consequently, the success or failure of this project.

2. Survey Packet Contents.

   a. Questionnaire

   b. Supervisor Questionnaire

   c. Project Officer Instructions

   d. Answer Sheets for Questionnaire

   e. Pencils for use on answer sheets.

3. Responsibilities.

   a. Unit Commander. The unit commander is requested to appoint a project officer and to monitor administration of the survey.

   b. Project Officer. The project officer is responsible for the control and handling of questionnaires, for the administration of the questionnaires, and for returning completed and unused questionnaires to the Military Police School.

   c. Questionnaire Administrator. The project officer may appoint someone to administer the questionnaire, if necessary. Normally, however, it is recommended that the project officer administer the questionnaire himself.

4. About the Questionnaires.

   a. Questionnaire. This questionnaire is designed to identify tasks being performed by military policemen in the field and the frequency with which each task is performed.

   b. Supervisor Questionnaire. The supervisor questionnaire is programmed to provide feedback on task criticality, probability of deficient performance, and the frequency with which each task is performed.

5. Who Takes The Questionnaire. The project officer is responsible for selecting individuals to take the questionnaires (respondents) within their units. Those selected must meet the requirements listed below:

   a. The questionnaire respondent must:

      (1) Be in an M.P. duty assignment (actually performing M.P. duties)

      (2) Have been on the job at least 90 days

   b. The respondent to the Supervisor Questionnaire must:

      (1) Command or supervise M.P. personnel

      (2) Have been in a command or supervisory position in the unit for 90 days. (Assign questionnaires proportionately among officers and NCO's.) .

6. Questionnaire Administration.

   a. Questionnaire. The questionnaire will be administered in a controlled environment. Persons participating in the survey will be allowed two hours to complete the questionnaire and will turn the questionnaire and answer sheets in to the questionnaire administrator prior to leaving the survey area. Individual questionnaires and their accompanying answer sheets will be kept together.

      See attached item for the procedure to be followed in administering the questionnaire.

   b. Supervisor Questionnaire. Supervisors selected as respondents for this questionnaire will be allowed to sign for the questionnaire and take it with them. They will complete the questionnaire and return it to the project officer within a time frame he specifies. This time frame must be compatible with the suspense date to the Military Police School.

7. Questionnaire Handling. Questionnaires and answer sheets become FOR OFFICIAL USE ONLY when completed. For ease of accounting, each questionnaire and its accompanying answer sheets are numbered. All questionnaires must be returned to the Military Police School whether they are used or not. Instructions for returning the questionnaires to the Military Police School are contained in the basic letter. If you have any problems or questions, contact (NOTE: Give name or names, address, and telephone number).

TO: PROJECT OFFICER ADMINISTERING QUESTIONNAIRE IN A CONTROLLED ENVIRONMENT

ADMINISTERING THE QUESTIONNAIRE

A-1. Preparation. A classroom or training room equipped with desks will provide the most ideal site for administering the questionnaire. Questionnaires, answer sheets, and two electrographic pencils should be issued to participants after everyone who is to take the questionnaire has arrived. This ensures that everyone starts together.

A-2. Instructions. The questionnaire administrator will present the following instructions.

a. "Is there anyone here who is not working in an M.P. duty position? Is there anyone here who has not been assigned to their present duties at least 90 days? If so, please leave at this time."

b. "Will everyone at this time please read the first page in the questionnaire which has been issued to you."

(Note to the administrator: It must be emphasized that your enthusiasm for this project or lack of it will be contagious. It is important that you demonstrate a positive attitude to the participants. Allow time for the first page to be read and underline the importance of the questionnaire with the following statement.)

"I would like to stress the importance of this questionnaire. The Military Police School wants to design training to fit the job in the field. You are the only people who can tell them what they need to know. Please think through each question and give your best answers."

c. "Turn to Part I, Biographical Information, and answer questions 1-13. When you have finished, lay your pencil on the desk so I will know when to proceed to the next step."

d. "Now read the instructions found in Part II."

(Note to the administrator: Allow reasonable time for everyone to finish before moving to the next step.)

"Are there any questions?"

e. "As you read in the instructions, there are nine answer sheets accompanying your questionnaire. Take the answer sheets and number them one through nine to correspond to the first nine sections in Part III of the questionnaire. If you do not have nine answer sheets, raise your hand—I have extra ones. Use a separate answer sheet for each section. Answer only the number of questions listed in each and move to the next section and answer sheet. It is not necessary to write your name, rank, the date, or course at the top of the answer sheet. Also, disregard the blocks marked score, grade, extra points, and social security number."

f. "Because of the size of this survey, these answer sheets will be read by machine. You must use the special pencils provided so that the machine can read the answers. When marking your answer, take care to fill the vertical rectangle outlining the letter as shown by the example on page 4 of the instructions. Also, please be sure not to make any stray marks on the answer sheets. Finally, do not fold the answer sheets."

g. "All answers must be based on your experience in this your present unit. Do not call on experience in previous units. This means that if you do not perform a particular task in your present unit, you must mark 'do not perform this task' on your answer sheet."

h. "You may begin answering Part III. Remember Section ten, the written section. When you finish answering all questions, insert your answer sheets into the questionnaire and turn them in to me. You may leave when you are finished. Are there any questions?"

A-3. Conclusion. After everyone has taken the questionnaire, ensure that all questionnaires and answer sheets are accounted for. Collect the pencils provided so that they may be returned to the Military Police School along with the questionnaires and answer sheets.

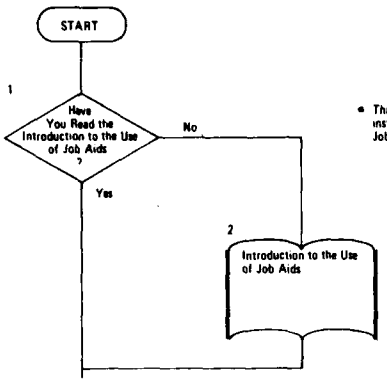
JOB AID FOR
SELECTING TASKS FOR TRAINING

ISD I.2

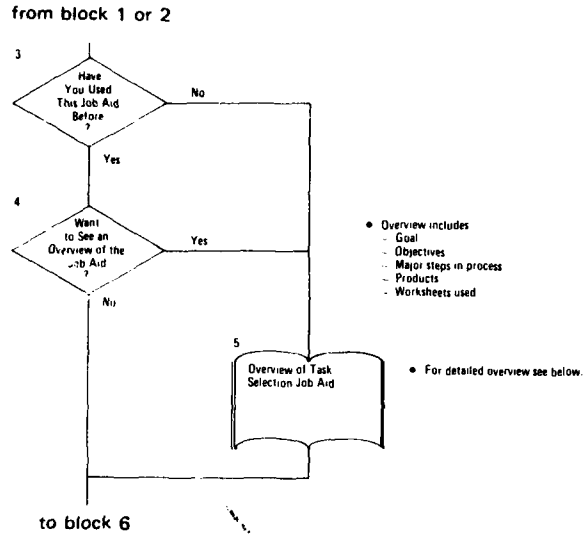
Manual

This is the 1st in a series of ISD Job Aids for use in instructional design and development. This volume is to be used as a supplement to the primary document, "Job Aids: Descriptive Authoring Flowcharts ISD I.2 Select Tasks for Training." The flowchart document will direct you to specific guidance, examples, and references provided in this volume. If you do not have the primary flowchart document, request it from your supervisor.

The wording in this manual should not be construed to discriminate between the sexes. In order to avoid a repetitious use of the terminology, "he/she," the terms, "he," "him," and "his," as well as "men," are intended to include both the masculine and feminine gender. Any exceptions to this usage will be so noted.



- This introduction provides the user with instruction on the basic structure of the Job Aids and guidance for their use.
- Refer to Introduction.



What is the Task Selection Job Aid all about?

• GOAL

— The purpose of this aid is to help you select tasks which require formal training, i.e., critical tasks.

Critical Tasks = Soldier's Manuals Tasks = Tasks to be Trained.

— It is not efficient in terms of time, personnel, money and other resources to train every soldier to perform every task of his MOS in every position in the world. This block requires you to identify critical and non-critical tasks. This job aid will help you to systematically make the distinction between tasks which require formal training (critical) and those which do not (non-critical).

— Some of the reasons you may not select a task for training are:

(1) The task can easily be performed without formal training because most job incumbents have previous experience, or the task is easy to "pick-up" from daily on-the-job experience (OJE). Note the distinction between on-the-job experience and the instructional setting called supervised on-the-job training (SOJT). (For a description of SOJT, see Job Aid for ISD I.5 Select Instructional Settings.

(2) The task may be part of the job, but it is not essential to adequate job performance.

(3) The task may be quite similar to other tasks which require formal training. It may be that if a soldier is trained to do one of the tasks he will be able to perform the other similar tasks without further, formal training.

- **OBJECTIVES**

1. Given a list of tasks for a single skill level within an MOS, select the tasks which require formal training.

2. Given the appropriate worksheets and instructions on how to fill them out, record the basis for each task selection.

- **OVERVIEW OF MAJOR STEPS IN SELECTING TASKS FOR TRAINING:**

  Step 1. Each candidate task is rated according to three selection criteria:

  - Time to train by on-the-job experience (OJE)
  - Consequences of inadequate performance
  - Probability of emergency performance

  Step 2. Tasks with high selection criteria ratings are identified.

  Step 3. Tasks requiring training are examined for similarity of performance requirements.

  Step 4. Administrative review of tasks recommended for training takes place.

- **PRODUCTS**

  — The input for this block is a listing of all the tasks which are performed in a particular skill level of an MOS. The output, or products, include:

  - The list of critical tasks for which formal training is authorized.
  - The worksheets on which your task selection decisions are documented.

Keep in mind that:

—Formal training includes:

- Resident training (Institution)
- Supervised on-the-Job Training
- Self-Study

— Formal training does not include on-the-job experience (OJE)

— Instructional settings will be selected in ISD I.5 Select Instructional Setting

- **WORKSHEETS USED**

  — The tables on page A-8 and A-9 show examples of the front and back of a completed Critical Task Identification Sheet (CTI).

  — The table on page A-10 shows an example of a completed Critical Task Listing ordered by the numbering system authorized in TRADOC Circular 351-28, pp. 16-18.

- **DESCRIPTIVE FLOWCHART**

  — The flowchart on pages A-67 thru A-69 shows the steps in the use of the Job Aid for Selecting Tasks for Training. The flowchart will be useful to you in getting a clear picture of the overall process used in this job aid.

Table A-8

Page 1 of 5 Pages
Date Sept 21, 1978
Name SFC Allen Smith

ISD 1.2 Select Tasks for Training

CRITICAL TASK IDENTIFICATION SHEET (front)

MOS 83E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

Selection Factors	Task ID Numbers	0000 1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045
1	Time to Train OJE	-	7	2	5	3	2	3	7	4	1	3	3	4	7	5	3	3	4	2	4	6	4	1	4	2	1	2	6	7	5	3	2	6	7	2	3	7	5	-	-	-	2	4	6	-
2	Consequences of Inadequate Performance	-	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4	4	3	1	3	7	7	1	5	1	5	5	4	5	7	2	3	4	7	6	7	2	-	-	-	6	4	4	-
3	Probability of Emergency Performance	-	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	3	4	1	1	4	7	5	1	5	1	4	7	5	5	7	2	3	5	7	6	7	2	-	-	-	6	4	4	-
4	TOTAL VALUE (Total Rows 1, 2 and 3)	-	13	11	14	11	11	9	10	18	8	10	9	18	21	13	6	10	12	6	6	13	18	13	6	12	3	11	18	16	15	17	6	12	16	16	15	21	9	-	-	-	14	12	13	-
5	Training Required?	-	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	N	Y	N	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	N	-	-	-	Y	Y	Y	-
6	Similar to Another Training Required Task?	-	-	-	A	-	-	-	A	A	-	-	-	-	-	-	-	-	B	-	-	B	-	-	-	-	-	B	B	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-
7	Recommended for Training?	-	Y	-	N	Y	-	-	Y	N	-	Y	-	Y	Y	Y	-	-	N	-	-	Y	N	Y	-	Y	-	-	Y	N	Y	Y	-	Y	N	Y	Y	Y	-	-	-	Y	Y	Y	-
8	Percent Performing in Skill Level?	-	75	-	-	60	-	-	63	-	-	54	-	20	92	85	-	-	-	-	-	12	-	30	-	30	-	-	68	-	57	72	-	33	-	78	41	19	-	-	-	80	95	78	-
9	Critical Task?	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	Y	Y	N	N	N	N	Y	Y	Y	N

Rating Scales

TIME TO TRAIN OJE
4 Hrs or Less (1) | 5-8 Hrs (2) | 2.5 Days (3) | 2 Weeks (4) | 3-4 Weeks (5) | 5-8 Weeks (6) | 3 Mos or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT
No Effect (1) | (2) | (3) Some Critical Effect | (4) | (5) | (6) | (7) Disastrous Effect

PROBABILITY OF EMERGENCY PERFORMANCE
(1) Enough Time to Practice Before Doing | (2) | (3) Enough Time to Obtain Information or Assistance Before Doing | (4) | (5) | (6) | (7) Instant Response Required

Group	Grouping of Similar Tasks
A	1004, 1008, 1009
B	1018, 1022, 1028, 1029
C	1034, 1035

NUMBER OF TASKS RECOMMENDED 250
NUMBER OF TASKS AUTHORIZED 200
SUPERVISORS INITIALS [illegible]

Table A-9

ISD 1.2 Select Tasks for Training

CRITICAL TASK IDENTIFICATION SHEET (back)

Task Number	Percent Performing	Task Number	Percent Performing	Task Number	Percent Performing
061-151 1098	95%	1222	60%	1049	42%
1063	92%	1178	59%	1014	42%
1074	89%	1092	59%	1036	41%
1088	89%	1224	59%	1239	39%
1092	88%	1231	58%	1259	38%
1073	85%	1030	57%	1241	35%
1015	85%	1218	57%	1033	33%
1072	84%	1217	56%	1252	31%
1069	83%	1208	55%	1023	30%
1060	82%	1200	55%	1025	30%
1057	81%	1011	54%	1289	30%
1042	80%	1278	54%	1245	30%
1112	79%	1272	54%	1177	29%
1120	78%	1269	53%	1172	20%
1035	78%	1161	53%	1013	20%
1062	75%	1168	53%	1179	18%
1002	75%	1255	52%	1258	16%
1129	74%	1250	52%	1261	15%
1116	73%	1226	51%	1248	15%
1031	72%	1237	50%	1259	15%
1150	70%	1149	50%	1128	15%
1044	70%	1247	49%	1254	13%
1136	70%	1231	48%	1221	13%
1139	69%	1232	48%	1063	13%
1028	68%	1169	47%	1061	13%
1154	65%	1170	45%	1021	12%
1122	65%	1043	45%	1236	12%
1119	65%	1244	45%	1223	11%
1145	63%	1258	44%	1192	11%
1008	63%	1202	44%	1248	11%
1005	60%	1213	43%	1199	10%
1127	60%	1237	42%	1260	10%
1120	60%	1046	42%	1251	10%

Table A-10

ISD I.2 Select Tasks for Training

CRITICAL TASK LIST

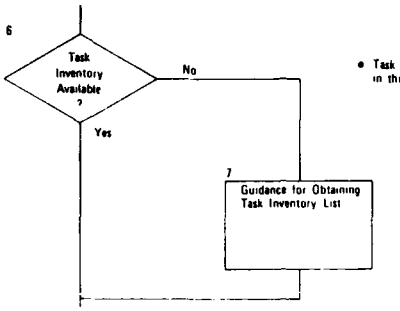
MOS 83 E Date September 21, 1976

Skill Level 2 Your Name SFC Allen Smith

Task ID Number	Task Description	% Perf.	Inst. Set.
1001	Apply the four lifesaving steps.	93	
1[illegible]	[illegible]	98	
10[illegible]	[illegible] source and apply electrical shock	98	
[illegible]	[illegible]		
1[illegible]	[illegible] chemical agent casualty.	97	
[illegible]	[illegible] for carbon monoxide	95	
[illegible]	[illegible]		
[illegible]	[illegible] procedures.	94	
[illegible]	[illegible]	93	
[illegible]	[illegible]	92	
[illegible]	[illegible]	92	
[illegible]	[illegible]	92	
[illegible]	[illegible]	90	
[illegible]	[illegible]	90	
[illegible]	[illegible] unit mission	85	
[illegible]	[illegible]	46	
[illegible]	[illegible] exploitation,	40	
[illegible]	[illegible]	45	
[illegible]	[illegible]	60	
[illegible]	[illegible]	50	
[illegible]	[illegible]	68	
[illegible]	[illegible]	70	
[illegible]	[illegible]	42	
[illegible]	[illegible]	18	
[illegible]	[illegible]	90	
[illegible]	[illegible]	75	
[illegible]	[illegible]	75	
[illegible]	[illegible]	58	
[illegible]	[illegible]	89	
[illegible]	[illegible]	88	
[illegible]	[illegible]	88	
[illegible]	[illegible]	90	
[illegible]	[illegible]	42	
20[illegible]	[illegible]	43	
[illegible]	[illegible]	76	
[illegible]	[illegible]	61	
[illegible]	Perform [illegible]	36	
1040	[illegible] with accessories.	37	

Note: The column marked Inst. Set. (Instructional Setting) will be filled in at the completion of ISD Block I.5. Select Instructional Setting.

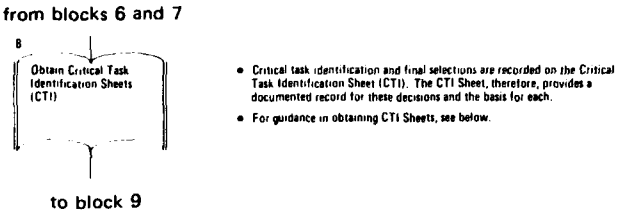
from blocks 4 and 5



- Task inventory includes all tasks performed in this skill level.

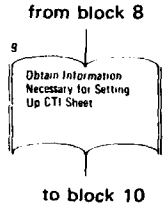
- Task inventory should be available as output from ISD I 1 Analyze Job.
- If procedures for listing tasks by skill level were not complete, see persons responsible for compiling task list.
- When list has been obtained return to Manual, ISD I 2 Select Tasks for Training, Block 6, page A 11

to block 8



Where do I get Critical Task Identification Sheets (CTI)?

- Critical Task Identification Sheets (CTI) are available for duplication in the pocket at the end of this manual.
- To see a completed CTI Sheet refer to page A-60.



- Information needed for "setting up" the CTI Sheet includes the following
  - MOS code
  - Skill level
  - Task ID numbers
  - Task inventory
- For sources of information see below.

What information do I need and where do I get it?

- The following information is needed before you can set up the CTI Sheet. Sources for locating each item of information are identified and in most cases throughout this manual the source will be rated as "excellent," "good," or "fair." Understandably not all sources of information will be readily available to you.

Information Required	Source(s)	Remarks
MOS and Skill Level designation	• Supervisor • AR 611-1 (for a new MOS) • Output of ISD I.1 Analyze Job	• Excellent source • Excellent source • Excellent source
Task I.D. Numbers	• Numbering system prescribed in TRADOC Circular 351-28, if already assigned	• Excellent source
	• Temporary numbering system of your own design, e.g. 1 through 500, if authorized numbers have not been assigned	• Excellent source
Task inventory	• Output of IPISD I.1 or job analysis • List currently in use	• Excellent source • Good source

from block 9

- Number each CTI Sheet (use as many as necessary to list all the tasks)
- Attach a copy of the task inventory to the first CTI Sheet to help you identify the tasks to which the numbers refer
- Example on next page

to block 11

What does the CT Sheet look like after it is "set-up"?

Page 1 of 5 Pages
Date Sept 21, 1978
Name SFC Allen Smith

ISD 12 Select Tasks for Training

CRITICAL TASK IDENTIFICATION SHEET

MOS 83E
Skill Level 2
Single Factor Criterion
Total Factor (Task Value) Criterion

Task ID Numbers: 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045

Selection Factors
1. [illegible]
2. Consequences of Inadequate Performance
3. Probability of Emergency Performance
4. TOTAL VALUE Total Rows 1, 2 and 3
5. Training Required
6. Information Applies to Training Required Task
7. Recommended for Training
8. Present Performance at Skill Level
9. Critical Task?

Rating Scales

TIME TO TRAIN ON JOB
4 Hrs or Less (1) | 5-8 Hrs (2) | 2.5 Days (3) | 2 Weeks (4) | 3-4 Weeks (5) | 5-6 Weeks (6) | 7 Weeks or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT
No Effect (1) | (2) | Some Effect (3) | (4) | (5) | Essential Effect (6)

PROBABILITY OF EMERGENCY PERFORMANCE
Enough Time to Practice Before Doing (1) | (2) | Enough Time to Refer to Manual or Reference Before Doing It (3) | (4) | (5) | Time Pressure or Req. w/ Memory (6)

NUMBER OF TASKS RECOMMENDED
NUMBER OF TASKS AUTHORIZED
SUPERVISORS INITIALS

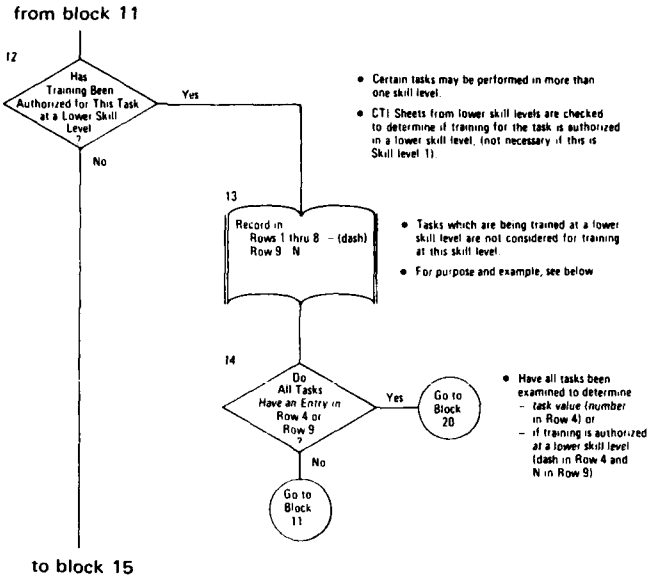
Group | Grouping of Similar Tasks

from block 10



- This block begins the process of initial selection of tasks for training

to block 12



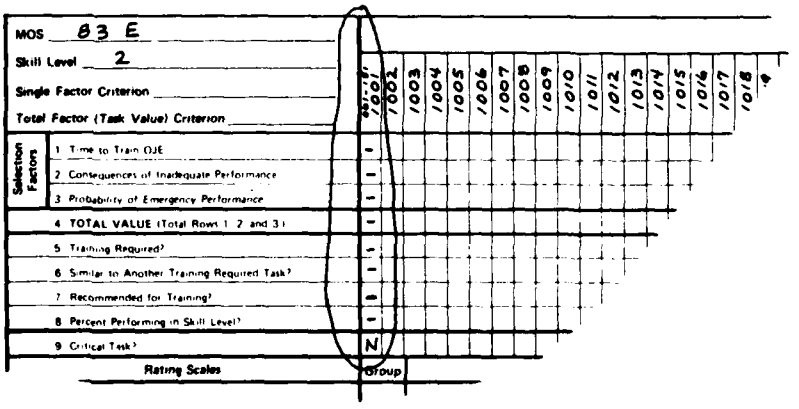
What is purpose of recording dashes in rows 1 thru 8 and an N in row 9?

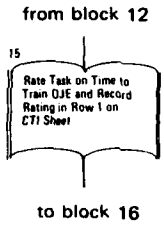
- When a task has been authorized qualification training at a lower skill level there is no need to repeat that training at this skill level. Therefore, it is not necessary to examine this task any further.

- By recording dashes in rows 1 thru 8 you are showing that those questions will not be considered. The "N" in row 9 means no training required in this skill level.

What does the CTI Sheet look like when dashes in rows 1 thru 8 and an N in row 9 have been recorded?

Example





- Time to Train OJE means: How much time is needed for the soldier to learn to perform this task *without a formal training program?*
- *Rating scale located on bottom of CTI Sheets*
- For further explanation and sources of information, see below.

How do I rate a task on Time to Train OJE?

- **Explanation of Time to Train OJE**

  Time to train on the job (on the job experience, not supervised on the job training, SOJT) is a relative measure of how difficult it is to perform the task. Some tasks on a job are so easy to perform they require no formal training. Other tasks are so complicated that the soldier can perform them adequately only after lengthy, formal training. Other tasks lie in between these two extremes. In rating each task on this criterion, consider how difficult it would be for a soldier to learn the task on his own, without supervisor, as measured by the time it would take in the OJE mode.

- **Things to Consider**

  — Amount of supervision required
  — Experience of the soldier at previous skill levels
  — Number of elements which make up the task
  — Type of task, fixed sequence, alternate path or combination (Manual, ISD I.3 Task Analysis)
  — Amount of practice required to attain proficiency

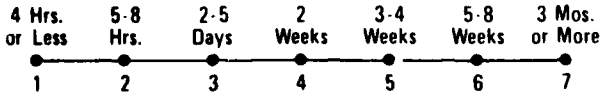
• SOURCES OF INFORMATION

Information Required	Source(s)	Remarks
Time to train a task by OJE (without formal training)	• Field survey of job supervisors and job incumbents who have learned or taught the task recently (within last 3 years).	• Excellent source. See Resource Manual
	• Panel of recent job supervisors and job incumbents who have learned or taught task recently.	• Good source. See Resource Manual
	• CODAP data when available	• Good source. See Resource Manual
	• Your own judgement, if you have learned/taught task recently.	• Fair source

• How to Estimate Time to Train OJE

— After considering the necessary factors and consulting the sources, select the appropriate number, 1 thru 7, on the rating scale. Unless you are using your own judgement, this number will be the average of the ratings given by all respondents.

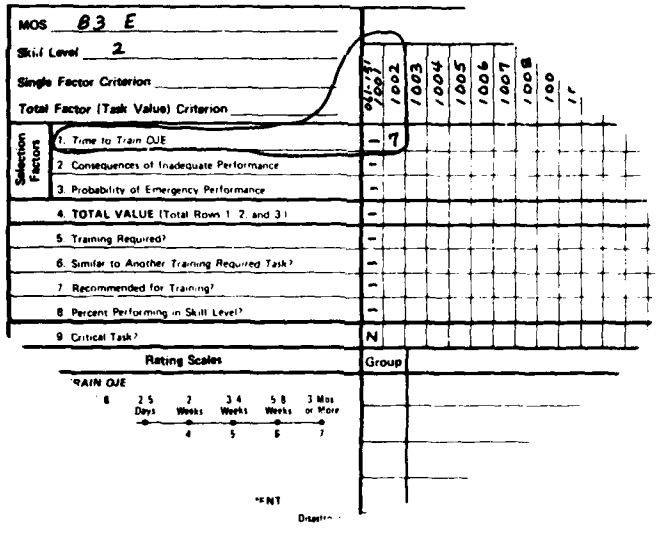
TIME TO TRAIN OJE

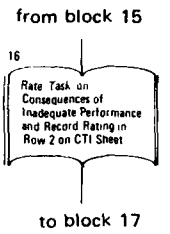


— Record this number in row 1 on the CTI Sheet, under the appropriate task.

What does the CTI Sheet look like after rating has been recorded in row 1?

Example





- Consequences of Inadequate Performance on mission accomplishment and/or battlefield survival means
  What are the results of inadequate performance in terms of
  - wasted time, inefficiency
  - destroyed materials/equipment
  - loss of lives/injury?
- Rating scale located on bottom of CTI Sheet
- For further explanation and sources of information, see below

---

How do I rate a task on Consequences of Inadequate Performance on mission accomplishment and battlefield survival?

- **Explanation of Consequences of Inadequate Performance**

  — This is a relative measure of the seriousness of incorrectly performing a task. It is a relative measure because you are comparing one task to all the other tasks in the MOS you are analyzing. You are not comparing a task to other tasks in a different MOS. Also keep in mind that the focus is on both mission accomplishment and battlefield survival. While the tasks of a clerk typist may not have a directly observable impact on battlefield survival to the extent that an Infantry rifleman's tasks do, they certainly impact on mission accomplishment. You must keep both aspects in mind.

  — Frequency of performance is not necessarily related to this factor. Tasks which are performed frequently may not have extreme negative effects if they are inadequately performed, while tasks performed only rarely may have disastrous effects if not done correctly.

  Example: Consequences of Inadequate Performance on Mission Accomplishment.

  If the driver of a truck does not react correctly to the oil light coming on, damage to the vehicle will be extensive. This is a situation which does not arise often, but must be handled correctly.

  — Thus, Factor 2 will help identify tasks for training which must be performed correctly or else serious consequences will result.

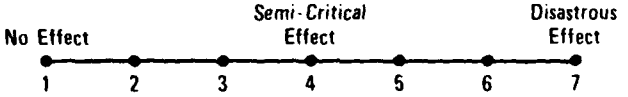
- **Things to Consider**
  - — Wasted time, inefficiency (*time is money*)
  - — Destroyed materials/equipment
  - — Loss of lives/injury

- **SOURCES OF INFORMATION**

Information Required	Source(s)	Remarks
Consequences of inadequate task performance mission accomplishment/battlefield survival	• Field survey of job supervisors*	• Excellent source. See Resource Manual.
	• Panel of recent job supervisors*	• Good source. See Resource Manual.
	• CODAP data when available*	• Good source. See Resource Manual.
	• Your own judgement*	• Fair source.
	* Need not have learned or taught task in last 3 years.	

- **How to Estimate Consequences of *Inadequate Performance***
  - — After considering the necessary factors and consulting the sources, select the appropriate number, 1 thru 7, on the rating scale. *Unless you are using your own judgement,* this number will be the <u>average</u> of the ratings given by all respondents.

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT



— Record this rating in row 2 on CTI Sheet, under the appropriate task.

What does the CTI Sheet look like after rating has been recorded in row 2?

ISD I.2 Select Tasks for Training

CRITICAL TASK IDENTIFICATION SHEET

MOS 83 E

Skill Level 2

Single Factor Criterion

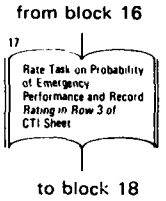
Total Factor (Task Value) Criterion

Task ID N

		1002	1003	1004	1005	1006	1007	1008	1009	1010
Selection Factors	1 Time to Train OJE	7								
	2 Consequences of Inadequate Performance	3								
	3 Probability of Emergency Performance									
	4 TOTAL VALUE (Total Rows 1, 2 and 3)									
	5 Training Required?									
	# Similar to Another Training Required Task?									
	7 Recommended for Training?									
	8 Percent Performing in Skill Level?									
	9 Critical Task?	N								
	Rating Scales	Group								

TIME TO TRAIN OJE

4 Hrs or Less (2) — 5 8 Hrs (3) — 2 5 Da. (4) — 2 Weeks (5) — 3 4 Weeks (6) — 5 8 Weeks (7) — 3 Mos or More



- Probability of Emergency Performance means
  What is the chance that task performance will occur under conditions requiring instant and effective action with no time for preparation or *practice?*
- Rating scale located on bottom of CTI Sheets
- For further explanation and sources of information, see below

---

How do I rate a task on Consequences of Inadequate Performance?

- **Explanation of Probability of Emergency Performance**

  Probability of emergency performance is estimated by figuring the amount of time the soldier has between the time the need for task performance becomes evident and the actual time performance must begin. There are some tasks for which there can be no delay (a true emergency)—instant response is required. For other tasks a delay of a few minutes might be quite acceptable, or even mandatory, while the soldier gets advice, checks technical manuals, regulations, etc. And for some tasks there might be time to assemble a group of experts and/or practice the task before proceeding.

- Things to Consider

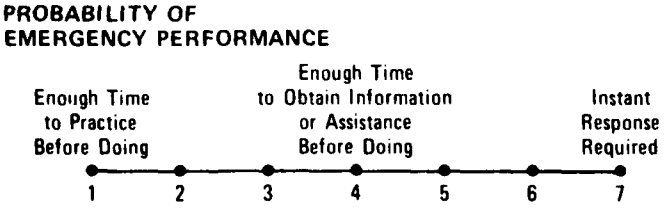
  — The effects of time delays on the intended outcome of the task.
  — The variety of situations in which task performance may be required.

• SOURCES OF INFORMATION

Information Required	Source(s)	Remarks
Probability of emergency performance of task	• Field survey of job supervisors*	• Excellent sources See Resource Manual.
	• Panel of recent job incumbents*	• Good source. See Resource Manual.
	• CODAP data when available	• Good source. See Resource Manual.
	• Your own judgement	• Fair source.
	* Need not have learned or taught task in last 3 years.	

• How to estimate Probability of Emergency Performance

After considering the necessary factors and consulting the sources, select the appropriate number, 1 thru 7, on the rating scale. Unless you are using your own judgement, this number will be the average of the ratings given by all respondents.



— Record this rating in row 3 on CTI Sheet, under the appropriate task.

What does the CTI Sheet look like after rating has been recorded in row 3?

Example

ISD I.2 Select Tasks for Training

CRITICAL TASK IDENTIFICATION SHEET

MOS 83 E

Skill Level 2

Single Factor Criterion

Total Factor (Task Value) Criterion

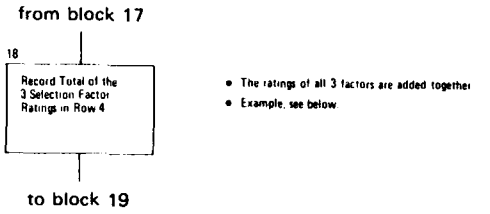
		Task ID Numbers								
		0001	1002	1003	1004	1005	1006	1007	1008	1009	1010
Selection Factors	1 Time to Train OJE	–	7								
	2 Consequences of Inadequate Performance	–	3								
	3 Probability of Emergency Performance	–	3								
	4 TOTAL VALUE (Total Rows 1, 2, and 3)	–									
	5 Training Required?	–									
	6 Similar to Another Training Required Task?	–									
	7 Recommended for Training?	–									
	8 Percent Performing on Skill Level?	–									
	9 Critical Task?	N									
Rating Scales		Group	Grouping of Similar Tasks								

TIME TO TRAIN OJE

4 Hrs or Less (1) · 5 8 Hrs (2) · 2 5 Days (3) · 2 Weeks (4) · 3 4 Weeks (5) · 5 8 Weeks (6) · 3 Mos or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT

No Effect (1) · (2) · (3) · Semi Critical Effect (4) · (5) · (6) · Disastrous Effect (7)



- The ratings of all 3 factors are added together.
- Example, see below.

What does the CTI Sheet look like after the 3 selection factor ratings have been totalled?

Example

MOS 83E

Skill Level 2

Single Factor Criterion

Total Factor (Task Value) Criterion

Task ID Numbers

Selection Factors		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
	1. Time to Train OJE	-	7									
	2. Consequences of Inadequate Performance	-	3									
	3. Probability of Emergency Performance	-	3									
	4. TOTAL VALUE (Total Rows 1, 2 and 3)	-	13									
	5. Training Required?	-										
	6. Similar to Another Training Required Task?	-										
	7. Recommended for Training?	-										
	8. Percent Performing in Skill Level?	-										
	9. Critical Task?	N										
	Rating Scales	Group	Grouping of Similar Tasks									

TIME TO TRAIN OJE

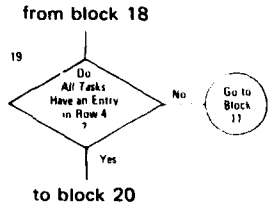
4 Hrs or Less (1) · 5.8 Hrs. (2) · 2.5 Days (3) · 2 Weeks (4) · 3.4 Weeks (5) · 5.8 Weeks (6) · 3 Mos or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT

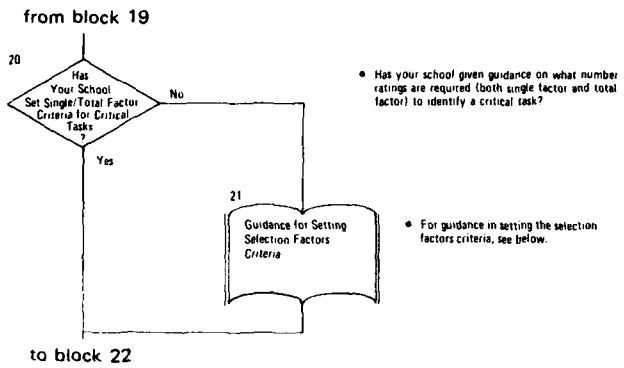
No Effect (1) · (2) · (3) · Semi Critical Effect (4) · (5) · (6) · Disastrous Effect (7)

TY OF PERFORMANCE

Enough Time to Obtain Information or Assistance Before Doing (5) · (6) · Instant Response Required (7)



* Is there either a number or a dash recorded in Row 4?



How do I determine the selection factors criteria?

— Remember that the requirement for training is determined by first considering each selection factor separately and then considering the 3 factors together.

— A task should not be identified as requiring training on the basis of a single factor rating, unless that rating is extremely high, a 6 or 7.

— When all 3 factors are considered together, the rating should be 12 or more in order to identify the task as requiring training.

— These criteria values may be adjusted to fit your particular situation. The important thing is to determine the

- single factor criterion
- total factor (task value) criterion

and apply these values throughout the MOS you are working in.

from blocks 20 and 21

22

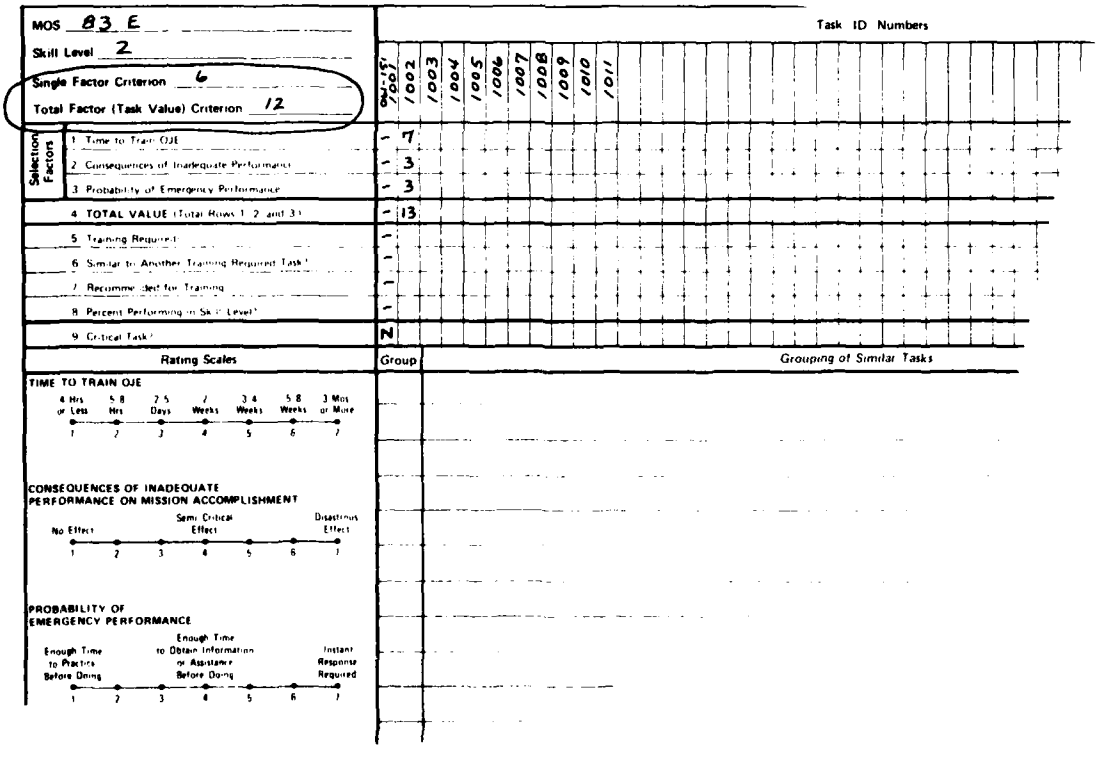
Record the Single Factor and Total Factor (Task Value) Criteria on CTI Sheet

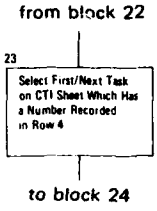
to block 23

- Space has been provided at upper left corner of CTI Sheet for this information
- For an example of how the CTI Sheet looks when this information *has been recorded, see below*

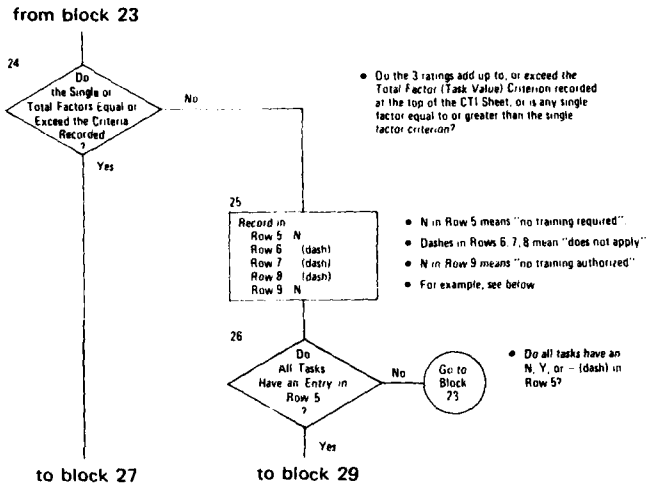
What does the CTI Sheet look like when the Single Factor and Total Factor (Task Value) Criteria have been recorded?

Example





- Now that Rows 1 thru 4 have been filled in for each task on the CTI Sheets (disregard those with a dash in Row 4) questions 5 thru 9 on the CTI Sheet are considered.



What does CTI Sheet look like after a "no" decision is reached for a task?

Example

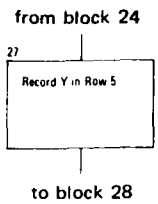
MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

		Task ID Numbers										
		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
Selection Factors	1 Time to Train OJE	–	7	2								
	2 Consequences of Inadequate Performance	–	3	4								
	3 Probability of Emergency Performance	–	3	5								
	4 TOTAL VALUE (Total Rows 1, 2, and 3)	–	13	11								
	5 Training Required?	–		N								
	6 Similar to Another Training Required Task?	–		–								
	7 Recommended for Training?	–		–								
	8 Percent Performing at Skill Level?	–		–								
	9 Critical Task?	N		N								
	Rating Scales	Group		Grouping of Similar Tasks								

TIME TO TRAIN OJE
4 Hrs or Less (1) · 5-8 Hrs (2) · 7.5 Days (3) · 2 Weeks (4) · 3-4 Weeks (5) · 5-8 Weeks (6) · 3 Mos or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT
No Effect (1) · (2) · (3) · Semi Critical Effect (4) · (5) · (6) · Disastrous Effect (7)

PROBABILITY OF EMERGENCY PERFORMANCE
[illegible] Time (1) · (2) · (3) · Enough Time to Obtain Information or Assistance Before Doing (4) · (5) · (6) · Instant Response Required (7)



- Y in Row 5 means "yes, training required"
- Example, see below

What does the CTT Sheet look like after a "yes" decision is reached for a task?

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

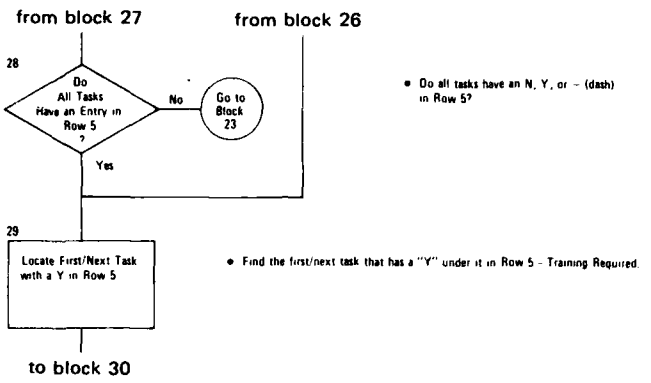
		83-E1/1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
Selection Factors	1 Time to Train OJE	-	7	2								
	2 Consequences of Inadequate Performance	-	3	4								
	3 Probability of Emergency Performance	-	3	5								
	4 TOTAL VALUE (Total Rows 1, 2, and 3)	-	13	11								
	5 Training Required?	-	Y	N								
	6 Similar to Another Training Required Task?	-		-								
	7 Recommended for Training?	-		-								
	8 Percent Performing at Skill Level?	-		-								
	9 Critical Task?	N		N								
	Rating Scales	Group		Grouping of Similar Tasks								

TIME TO TRAIN OJE

4 Hrs or Less	5 8 Hrs	2 5 Days	1 Weeks	3 4 Weeks	5 8 Weeks	3 Mos or More
1	2	3	4	5	6	7

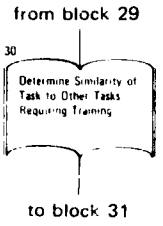
CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT

Effect		Semi-Serious Effect			Disastrous Effect
2	3	4	5	6	



- Do all tasks have an N, Y, or – (dash) in Row 5?

- Find the first/next task that has a "Y" under it in Row 5 – Training Required.



- Determine similarity of task to other tasks recorded as "Y" in Row 5 which do not have an entry in Row 6 on CTI Sheet
- For further explanation see below

How do I determine similarity?

- **Look across the CTI Sheet at all the tasks with a Y in row 5. Then consider the following:**

  — If the performance requirements are highly similar for two or more tasks which require training, it will not be necessary to train each task, but only the most representative task of that group.

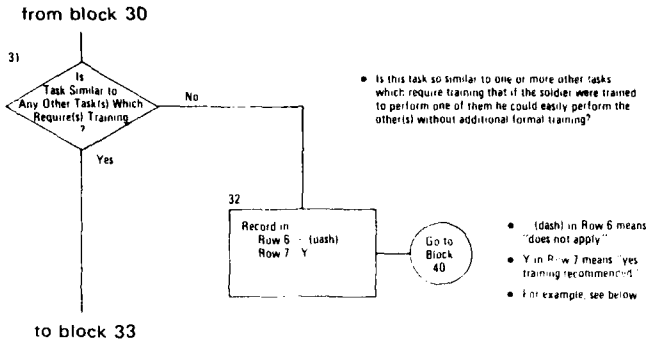
  Example: A major item of electronic equipment may contain several power supplies. Although each power supply is different, the performance requirements of each task involved may be so similar that an individual can be trained to perform the task on one or two components and then be able to perform the same task on other similar components without further formal training.

  — Therefore, you want to determine if two or more tasks are similar due to:

  - equipment/materials similarity
  - performance similarity

• SOURCES OF INFORMATION

Information Required	Source	Remarks
Similarity of one task to another task which also requires training	• Task Summary Sheet from Soldier's Manual	• Excellent
	• TMs and FMs	• Good
	• TOEs and TDAs	• Good
	• SMEs	• Good
	• Your own judgement	• Fair



What does the CTT look like when a task which is not similar to any other training required task is recommended for training?

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

Task ID Nu.

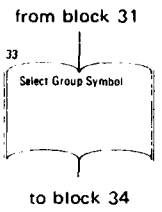
		0617/1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021
Selection Factors	1 Time to Train OJE	-	7	2	5	3	2	3	7	4	1	3	3	4	7	5	3	3				
	2 Consequences of Inadequate Performance	-	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4				
	3 Probability of Emergency Performance	-	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	3				
	4 TOTAL VALUE (Total Rows 1, 2, and 3)	-	13	11	14	11	11	9	10	18	8	10	9	18	21	13	6	10				
	5 Training Required?	-	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	N				
	6 Similar to Another Training Required Task?	-	-	-			-	-			-		-				-	-				
	7 Recommended for Training?	-	Y	-			-	-			-		-				-	-				
	8 Percent Performing in Skill Level?	-		-			-	-			-		-				-	-				
	9 Critical Task?	N		N			N	N			N		N				N	N				
	Rating Scales	Group		Grouping of Similar Tasks																		

TIME TO TRAIN OJE

4 Hrs or Less (1) · 5-8 Hrs (2) · 2-5 Days (3) · 2 Weeks (4) · 3-4 Weeks (5) · 5-8 Weeks (6) · 8 Wks or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT

Semi-Critical Effect (4) · (5) · (6) · Catastrophic Effect (7)



- The group symbol identifies all tasks within a particular group of similar tasks.
- For further explanation and guidance, see below.

What is the purpose of a Group Symbol and how do I select one?

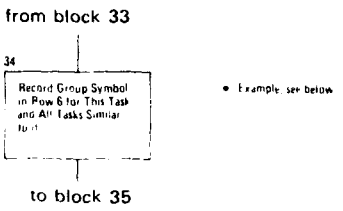
— A group symbol is an alphabetical letter used to identify a group of tasks which are similar to each other.

— Select A to identify the first group of similar tasks, B for the second, C for the third, etc., depending on how many groupings there are.

— Each task with an A in row 6 will be very similar to every other task in the A group. Each task with a B will be very similar to other group B tasks, etc.

— Once a task is included in one group it cannot later be included in another group.

— Work with one group at a time.



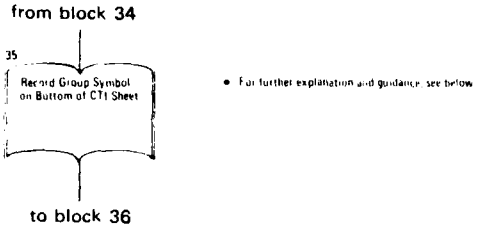
What does the CTI Sheet look like when all the tasks within one group of similar tasks have been identified by group symbol?

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

Task ID Numbers: 0001/1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015

Selection Factors	1 Time to Train Out	–	7	2	5	3	2	3	7	4	1	3	3	4	7	5
	2 Consequences of Inadequate Performance	–	3	4	5	7	4	3	2	7	3	6	3	7	7	4
	3 Probability of Emergency Performance	–	3	5	4	1	5	3	1	7	4	1	3	7	7	4
4 TOTAL VALUE Total Rows 1, 2, and 3		–	13	11	14	11	11	9	10	18	8	10	9	18	21	13
5 Training Required		–	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y
6 Similar Actions Training Required Task		–	–	–	A	–	–	–	A	A	–	–				
7 Recommended Training		–	Y	–	–	Y	–	–			–	–				
8 Person Performs at Job Level?		–	–	–			–	–			–	–				
9 Critical Task		N		N			N	N			N		N			
Rating Scales		Group	Grouping of Similar Tasks													
TIME TO TRAIN OUT																
CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT																
PROBABILITY OF EMERGENCY PERFORMANCE																



What is the purpose of recording the group symbol in the Grouping of Similar Tasks section and what does this look like?

- Notice that space has been provided for (identified by a letter symbol) you to record the I.D. numbers of tasks within each similar group. You probably have had to use several CTI Sheets in order to record all the task numbers for the skill level you are working in. However you will only need to record the similar task numbers beside their designated group symbols on the first sheet—there is ample space here for the similar tasks located on all the CTI Sheets.

- By grouping the tasks according to similarity in one space you will have a clearer idea of what each group consists of—how many tasks, which ones, etc. This will make it easier when you select the most representative task in block 37 of this job aid. It will also make it easier for your supervisor to see how you grouped the tasks.

- Record one group symbol at a time so that ample space is available for task numbers next to the symbol.

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

		Task ID Numbers									
		0515 1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011
Selection Factors	1 Time to Train OJE	–	7	2	5	3	2	3	7	4	1	3
	2 Consequences of Inadequate Performance	–	3	4	5	7	4	3	2	7	3	6
	3 Probability of Emergency Performance	–	3	5	4	1	5	3	1	7	4	1
4 TOTAL VALUE (Total Rows 1, 2, and 3)		–	13	11	14	11	11	9	10	18	8	10
5 Training Required?		–	Y	N	Y	Y	N	N	Y	Y	N	Y
6 Similar to Another Training Required Task?		–	–	–	A	–	–	–	A	A	–	
7 Recommended for Training?		–	Y	–		Y	–	–			–	
8 Percent Performing at Skill Level?		–		–			–	–			–	
9 Critical Task?		N		N			N	N			N	
Rating Scales		Group										
TIME TO TRAIN OJE		(A)										
4 Hrs or Less (1) · 5-8 Hrs (2) · 1-5 Days (3) · 2 Weeks (4) · 3-4 Weeks (5) · 5-8 Weeks (6) · 3 Mos or More (7)												

from block 35

36

Record Task I.D. Numbers for All Tasks Assigned With This Group Symbol

- On the line(s) opposite the Group Symbol, record the task I.D. numbers for each task in this group.
- For example, see below

to block 37

What does the CTI Sheet look like when the task ID numbers of similar tasks are recorded next to the designated group symbol?

Example

MOS 83E

Skill Level 2

Single Factor Criterion 6

Total Factor (Task Value) Criterion 12

Task ID Numbers

		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029
Selection Factors	1 Time to Train OJE	7	2	5	3	2	3	7	4	1	3	3	4	7	5	3	3	4	2	4	6	4	1	4	2	1	2			
	2 Consequences of Inadequate Performance	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4	4	3	1	3	7	7	1	5					
	3 Probability of Emergency Performance	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	3	4	1	1	4	7	5	1						
4 TOTAL VALUE (Total Rows 1, 2, and 3)		13	11	14	11	11	9	10	18	8	10	9	18	21	13	6	10	12	6	6	13	18	13							
5 Training Required?		Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	N	Y												
6 Similar to Another Training Required Task?				A				A	A																					
7 Recommended for Training?				Y																										
8 Percent Performing in Skill Level?																														
9 Critical Task?		N	N			N	N			N		N																		

Rating Scales

TIME TO TRAIN OJE

4 Hrs. or Less (1) — 5-8 Hrs. (2) — 2-5 Days (3) — 1 Weeks (4) — 3-4 Weeks (5) — 5-8 Weeks (6) — 3 Mos. or More (7)

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT

No Effect (1) — (2) — (3) — Some Critical Effect (4) — (5) — (6) — Disastrous Effect (7)

PROBABILITY OF EMERGENCY PERFORMANCE

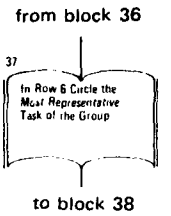
Enough Time to Practice Before Doing (1) — (2) — (3) — Enough Time to Obtain Information or Assistance Before Doing (4) — (5) — (6) — Instant Response Required (7)

Group	Grouping of Similar Tasks
A	1004, 1008, 1009

NUMBER OF TASKS RECOMMENDED ___

NUMBER OF TASKS AUTHORIZED ___

SUPERVISOR's INITIALS ___



• For further explanation and example see below

How do I identify the most representative task of the group?

- The most representative task is circled in row 6.
- Things to consider in selecting the most representative task.
  - — The various types of equipment with which the task is performed.
  - — The steps in performance required in each task.
  - — The conditions under which each task is likely to be performed.
  - — The most representative task will probably be the most comprehensive. That is, it includes the steps performed in most/all of the other similar tasks.
- Sources
  - — Same as for block 30.

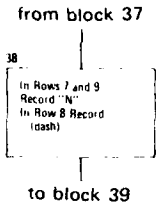
What does the CTI Sheet look like when the most representative task has been circled in row 6?

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

Task ID Numbe

	0015	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024
Selection Factors	-	7	2	5	3	2	3	7	4	1	3	3	4	7	5									
	-	3	4	5	7	4	3	2	7	3	6	3	7	7	4									
	-	3	5	4	1	5	3	1	7	4	1	3	7	7	4									
TOTAL VALUE	-	13	11	14	11	11	9	10	18	8	10	9	18	21	13									
	-	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y									
	-	-	-	A	-	-	-	(A)	A	-	-													
	-	Y	-	-	Y	-	-	-	-	-	-													
	-	-	-	-	-	-	-	-	-	-	-													
	N		N			N	N			N		N												
Rating Scales	Group																							
TIME TO TRAIN (UT)	A	1004, 1008, 1009																						



- "N" = No. Training is not recommended for this task because this is not the most representative task of the group.
- *Example, see below.*

What does the CTI Sheet look like when the remaining, less-representative tasks are not recommended for training?

Example

MOS 83 E
Skill Level 2
Single Factor Criterion 6
Total Factor (Task Value) Criterion 12

	0001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017
Selection Factors 1	–	7	2	5	3	2	3	7	4	1	3	3	4	7	5	3	3
Selection Factors 2	–	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4
Selection Factors 3	–	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	3
4. TOTAL VALUE (Total Rows 1, 2, and 3)	–	13	11	14	11	11	9	10	18	8	10	9	18	21	13	6	10
5. Training Required?	–	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	N
6. Similar to Another Training Required Task?	–	–	–	A	–	–	–	A	A	–	–	–				–	–
7. Recommended for Training?	–	Y	–	N	Y	–	–		N	–	–	–				–	–
8. Percent Performing = Skill Level?	–		–	–		–			–	–		–				–	–
9. Critical Task?	N		N	N		N	N		N	N		N				N	N
Rating Scales	Group																
	A			1004, 1008, 1009													

TIME TO TRAIN OJE
1 Hrs or Less | 5-8 Hrs | 7.5 Days | 2 Weeks | 2-4 Weeks | 5-9 Weeks | 1 Mon or More
1 2 3 4 5 6 7

CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT
No Effect | Some Critical Effect | Disastrous Effect
1 2 3 4 5 6 7

PROBABILITY OF EMERGENCY PERFORMANCE
Enough Time to Practice Before Doing | Enough Time to Obtain Information or Assistance Before Doing | Instant Response Required
1 2 3 4 5 6 7

from block 38

39

In Row 7 Record Y Under the Task you Circled

to block 40

- "Y" = Yes. Training is recommended because this is the most representative task of the group.
- For example, see below.

What does the CTT Sheet look like when the most representative task has been recommended for training?

Example

MOS 83 E

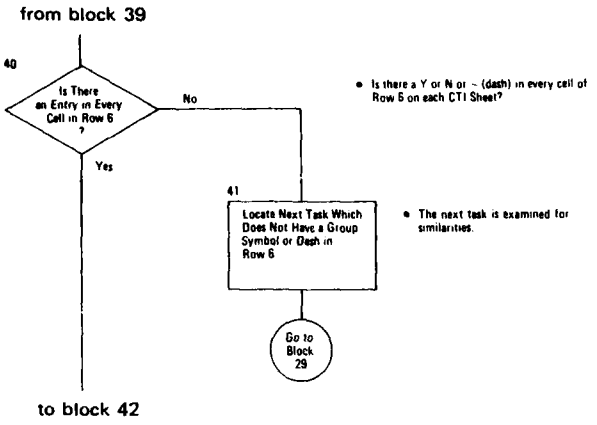
Skill Level 2

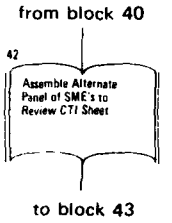
Single Factor Criterion 6

Total Factor (Task Value) Criterion 12

	Task ID Numbers	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017
Selection Factors	1. Time to Train OJE	-	7	2	5	3	2	5	7	4	1	3	3	4	7	5	3	3
	2. Consequences of Inadequate Performance	-	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4
	3. Probability of Emergency Performance	-	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	3
4. TOTAL VALUE (Total Rows 1, 2 and 3)		-	13	11	14	11	11	11	10	18	8	10	9	18	21	13	6	10
5. Training Required?		-	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	N
6. Similar to Another Training Required Task?		-	-	-	A	-	-	-	(A)	A	-	-	-	-	-	-	-	-
7. Recommended for Training?		-	Y	-	N	Y	-	-	Y	N	-	-	-	-	-	-	-	-
8. Percent Performing at Skill Level?		-		-	-		-	-		-	-		-				-	-
9. Critical Task?		N		N	N		N	N		N	N		N				N	N

Rating Scales	Group	Grouping of Similar Tasks
TIME TO TRAIN OJE: 4 Hrs or Less (1) · 5 8 Hrs (2) · 2 5 Days (3) · 2 Weeks (4) · 3 4 Weeks (5) · 5 8 Weeks (6) · 3 Mos or More (7)	A	1004, 1008, 1009
CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT: No Effect (1) · (2) · (3) · Semi Critical Effect (4) · (5) · (6) · Disastrous Effect (7)		
PROBABILITY OF EMERGENCY PERFORMANCE: Enough Time to Practice Prior to Doing (1) · (2) · Enough Time to Obtain Information or Assistance Before Doing (3) · (4) · (5) · (6) · Instant Response Required (7)		

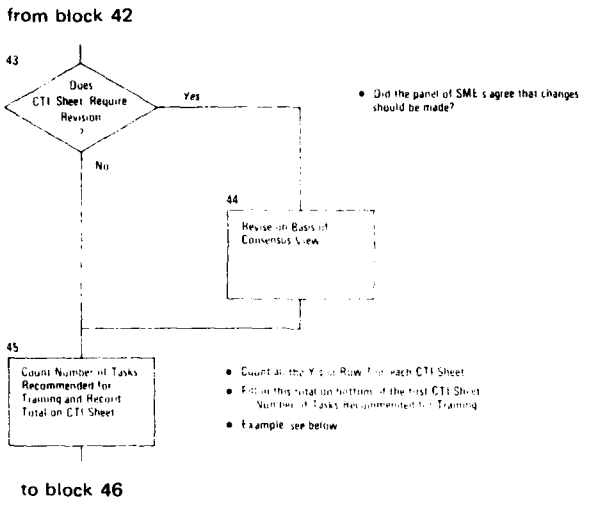

from block 39
40
Is There an Entry in Every Cell in Row 6 ?
No
Yes
• Is there a Y or N or – (dash) in every cell of Row 6 on each CTI Sheet?
41
Locate Next Task Which Does Not Have a Group Symbol or Dash in Row 6
• The next task is examined for similarities.
Go to Block 29
to block 42



- SME's verify the selection factor ratings and task similarity judgements
- For further explanation and guidance, see below

What is the purpose of having an alternate panel of SMEs review the CTI Sheet?

- The purpose of having an alternate (different) group of SME's review the CTI Sheet is to provide an objective view. A panel of three SME's is sufficient. The panel should be asked to verify the selection factor ratings and task similarity judgements.

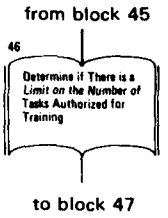


What does the CTI Sheet look like when number of tasks recommended has been filled in?

Example

9. Critical Task?

Rating Scales	Group	
TIME TO TRAIN OJE 4 Hrs or Less (1) · 8 Hrs (2) · 5 Days (3) · 2 Weeks (4) · 3 Weeks (5) · 8 Weeks (6) · 3 Mos or More (7)	A	1004, 1008, 1009
CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT No Effect (1) · Semi Critical Effect (4) · Disastrous Effect (7)		
PROBABILITY OF EMERGENCY PERFORMANCE Enough Time to Practice Before Doing (1) · Enough Time to Obtain Information or Assistance Before Doing (4) · Instant Response Required (7)		
NUMBER OF TASKS RECOMMENDED 250		
NUMBER OF TASKS AUTHORIZED _____		
SUPERVISORS INITIALS _____		



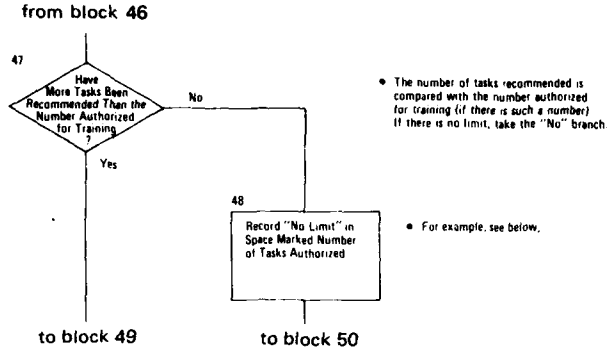
• For further information and guidance, see below.

Why would there be a limit on the number of tasks authorized for training?

— Resource constraints often make it impossible to train every task recommended for training.

- ***Source***

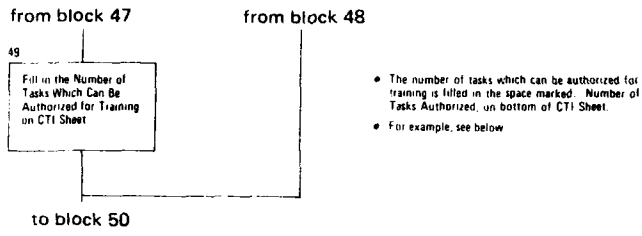
  — Your supervisor can obtain the information about the number of tasks your command has authorized for training in this MOS and skill level.



What does the CTI Sheet look like when "No Limit" is recorded in the space marked Number of Tasks Authorized?

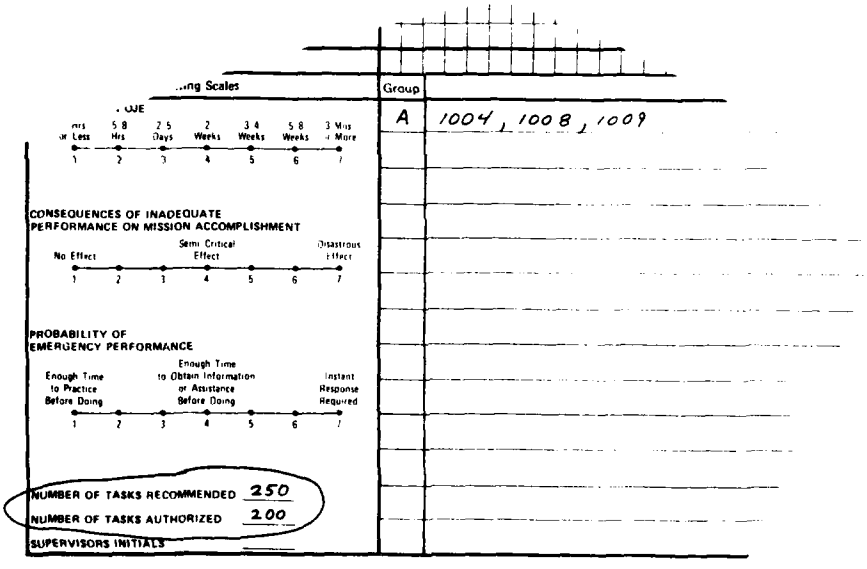
Example

Rating Scales	Group
TIME TO TRAIN OJE 4 Hrs. or Less (1) · 5-8 Hrs. (2) · 2-5 Days (3) · 2 Weeks (4) · 3-4 Weeks (5) · 5-8 Weeks (6) · 3 Mos or More (7)	A 1004, 1008, 1009
CONSEQUENCES OF INADEQUATE PERFORMANCE ON MISSION ACCOMPLISHMENT No Effect (1) · (2) · (3) · Semi Critical Effect (4) · (5) · (6) · Disastrous Effect (7)	
PROBABILITY OF EMERGENCY PERFORMANCE Enough Time to Practice Before Doing (1) · (2) · (3) · Enough Time to Obtain Information or Assistance Before Doing (4) · (5) · (6) · Instant Response Required (7)	
NUMBER OF TASKS RECOMMENDED 250 NUMBER OF TASKS AUTHORIZED No Limit SUPERVISORS INITIALS	

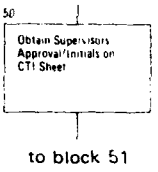


What does the CTI Sheet look like when the maximum number of tasks which can be authorized for training is filled in?

Example



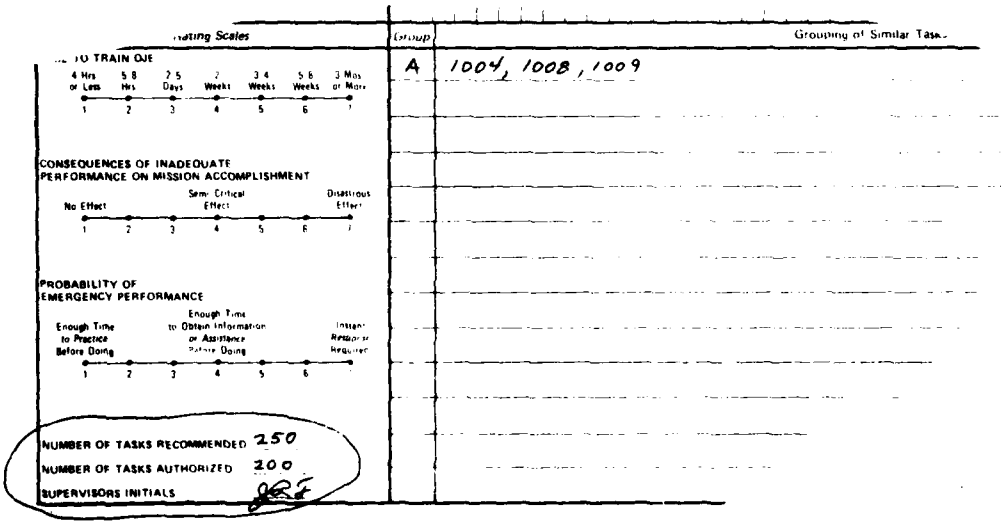
from blocks 48 and 49

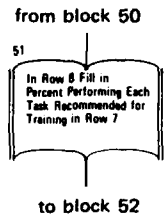


- CTI Sheets are submitted to supervisor for approval of the selections made thus far
- Supervisors initials should be placed on bottom of CTI Sheet
- For example, see below

What does the CTI Sheet look like when the supervisor's initials have been recorded?

Example





- This information will help organize the list of recommended tasks so that those performed by the larger numbers of soldiers will be given priority, if more tasks have been selected for training than can be authorized.
- Even if all the tasks recommended can be authorized for training, this information will be needed in ISD 1.5 Select Instructional Setting for the task.
- For sources and further guidance, see below.

What are the sources of information for determining the percent of soldiers who perform each task?

- **Sources of information:**

  — CODAP Group Summary Report. CODAP data, when available, are excellent for determining the percent of soldiers within the skill level who perform each task. However, it is likely that not all tasks listed on the ISR Sheet will be represented on the CODAP Report. Consequently, even when a CODAP Report is available, it will probably be necessary to supplement the data from the Report with data from other sources. See Resource Manual for guidance in using the CODAP Group Summary Report.

  — Field Survey. Field Survey data are excellent for determining the percent of soldiers who perform each task. However, a field survey should only be conducted when CODAP data are not available (or badly out of date) and when there is sufficient time to conduct the survey. See Resource Manual for guidance in conducting a field survey.

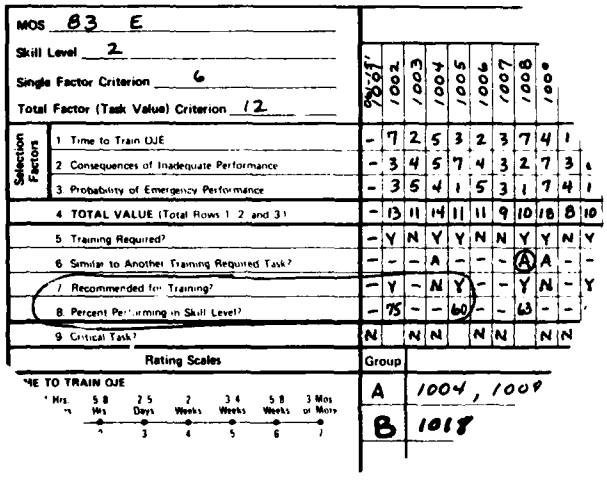
  — Panel of recent job incumbents. This represents a fair source of information. See Resource Manual for guidance in establishing and using a panel of recent job incumbents.

  — Panel of subject matter experts. Use this source only if none of the above sources are available. See Resource Manual for guidance in establishing and using this type of panel.

  — Your own judgment. Use only as a last resort.

What does the CTI Sheet look like when row 8 has been filled in with the percent performing each task recommended for training?

Example



MOS 83 E

Skill Level 2

Single Factor Criterion 6

Total Factor (Task Value) Criterion 12

		1001	1002	1003	1004	1005	1006	1007	1008	1009	
Selection Factors	1 Time to Train OJE	-	7	2	5	3	2	3	7	4	1
	2 Consequences of Inadequate Performance	-	3	4	5	7	4	3	2	7	3
	3 Probability of Emergency Performance	-	3	5	4	1	5	3	1	7	4
	4 TOTAL VALUE (Total Rows 1 2 and 3)	-	13	11	14	11	11	9	10	18	8
	5 Training Required?	-	Y	N	Y	Y	N	N	Y	Y	N
	6 Similar to Another Training Required Task?	-	-	-	A	-	-	-	(A)	A	-
	7 Recommended for Training?	-	Y	-	N	Y	-	-	Y	N	-
	8 Percent Performing in Skill Level?	-	75	-	-	60	-	-	63	-	-
	9 Critical Task?	N		N	N		N	N		N	N

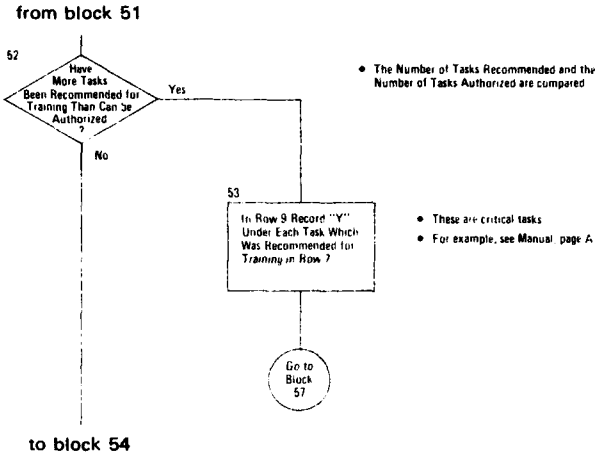
Rating Scales

TIME TO TRAIN OJE

1 Hrs. 5 8 Hrs 2 5 Days 2 Weeks 3 4 Weeks 5 8 Weeks 3 Mos or More

1 3 4 5 6 7

Group	
A	1004, 1009
B	1018



What does the CTT Sheet look like when all the tasks which were recommended for training (in row 7) are authorized for training (in row 9)?

Example

Page 1 of 5 Pages

Date Sept. 21, 1978

Name SFC Allen Smith

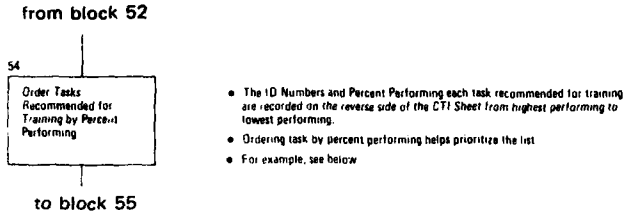
or Training

CATION SHEET

Task ID Numbers

1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045
3	4	2	4	6	4	1	4	2	1	2	6	7	5	3	2	6	7	2	3	7	5	-	-	-	2	4	5	-
4	4	3	1	3	7	7	1	5	1	4	5	4	5	7	2	3	4	7	6	7	2	-	-	-	6	4	4	-
3	4	1	1	4	7	5	1	5	1	5	7	5	5	7	2	3	5	7	6	7	2	-	-	-	6	4	4	-
10	12	6	6	13	18	13	6	12	3	11	18	16	15	17	6	12	16	16	15	21	9	-	-	-	14	12	13	-
N	Y	N	N	Y	Y	Y	N	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	N	-	-	-	Y	Y	Y	-
-	B	-	-	-	B	-	-	-	-	-	B	B	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-
-	N	-	-	Y	N	Y	-	Y	-	-	Y	N	Y	Y	-	Y	N	Y	Y	Y	-	-	-	-	Y	Y	Y	-
-	-	-	-	12	-	30	-	34	-	-	68	-	57	72	-	33	-	78	41	19	-	-	-	-	80	45	70	-
N	N	N	N	N	N	N	N	N	N	N	Y	N	Y	Y	N	N	N	Y	Y	N	N	N	N	A	Y	Y	Y	N

Grouping of Similar Tasks

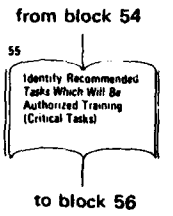


- The ID Numbers and Percent Performing each task recommended for training are recorded on the reverse side of the CTI Sheet from highest performing to lowest performing.
- Ordering task by percent performing helps prioritize the list
- For example, see below

What does the prioritized list of tasks look like?

Example

Task Number	Percent Performing	Task Number	Percent Performing	Task Number	Percent Performing
061-151 1098	95 %	1222	60%	1049	42%
1063	92 %	1178	59%	1014	42%
1074	89%	1092	59%	1036	41 %
1088	89%	1224	59%	1239	39%
1092	88%	1231	58%	1259	38%
1073	85%	1030	57%	1241	35%
1015	85%	1218	57%	1033	33%
1072	84%	1217	56%	1252	31%
1069	83%	1208	55%	1023	30%
1060	82%	1200	55%	1025	30%
1057	81%	1011	54%	1289	30%
1042	80%	1278	54%	1245	30%
1112	79%	1272	54%	1177	29%
1120	78%	1269	53%	1172	20%
1035	78%	1161	53%	1013	20%
1062	75%	1168	53%	1179	18%
1002	75%	1255	52%	1258	16%
1129	74%	1250	52%	1261	15%
1116	73%	1226	51%	1248	15%
1031	72%	1237	50%	1259	15%
1150	70%	1149	50%	1128	15%
1044	70%	1247	49%	1254	13%
1136	70%	1231	48%	1221	13%
1139	69%	1232	48%	1063	13%
1028	68%	1169	47%	1061	13%
1154	65%	1170	45%	1021	12%
1122	65%	1043	45%	1236	12%
1119	65%	1244	45%	1223	11%
1145	63%	1258	44%	1192	11%
1008	63%	1202	44%	1248	11%
1005	60%	1213	43%	1199	10%
1127	60%	1237	42%	1260	10%
1120	60%	1046	42%	1251	10%



• For further explanation and guidance, see below.

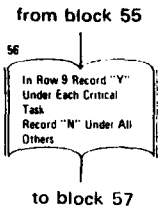
How do I determine the cut-off point?

- Starting at the top of the prioritized list, count down until you reach the number of tasks for which training is authorized.
- Draw a heavy line just below the last task you counted.

What does the prioritized list look like when cut-off has been indicated?

Example

Task Number	Percent Performing	Task Number	Percent Performing	Task Number	Percent Performing
061-151 1098	95%	1222	60%	1049	42%
1063	92%	1178	59%	1014	42%
1074	89%	1092	59%	1036	41%
1088	89%	1224	59%	1239	39%
1092	88%	1231	58%	1259	38%
1073	85%	1030	57%	1241	35%
1015	85%	1218	57%	1033	33%
1072	84%	1217	56%	1252	31%
1069	83%	1208	55%	[illegible]	[illegible]
1060	82%	1200	55%	1025	30%
1057	81%	1011	54%	1287	30%
1042	80%	1278	54%	1245	30%
1112	79%	1272	54%	1177	29%
1120	78%	1269	53%	1172	20%
1035	78%	1161	53%	1013	20%
1062	75%	1168	53%	1179	18%
1002	75%	1255	52%	1258	16%
1129	74%	1250	52%	1261	15%
1116	73%	1226	51%	1248	15%
1031	72%	1237	50%	1259	15%
1150	70%	1149	50%	1128	15%
1044	70%	1247	49%	1254	13%
1136	70%	1231	48%	1221	13%
1139	69%	1232	48%	1063	13%
1028	68%	1169	47%	1061	13%
1154	65%	1170	45%	1021	12%
1122	65%	1043	45%	1236	12%
1119	65%	1244	45%	1223	11%
1145	63%	1258	44%	1192	11%
1008	63%	1202	44%	1248	11%
1005	60%	1213	43%	1199	10%
1127	60%	1237	42%	1260	10%
1120	60%	1046	42%	1251	10%



- Row 9 is on the front side of the CTI Sheet
- For further explanation and guidance, see below

How do I decide which tasks can be considered critical (identified by a "Y" in row 9) and which tasks will not be considered critical (identified by an "N" in row 9)?

- In the last block you drew a "cut-off" line under the last task included in the number authorized for training. Note the % performing value for that last task. Usually you can consider all tasks which have that value or a higher value as critical; those which have a % performing below that value as non-critical.

- For ease of completing row 9 (on the front side of CTI Sheet), just look at the % performing in row 8 and record "Y" for tasks which have the % falling above the line, and "N" for tasks which have the % falling below the line. Note the following exception:

- However, if the line happens to be drawn in the midst of a group of tasks all having about the same % performing value, you should take the list to your supervisor. For example:

Task No.	% Performing
1541	37%
1543	37%
1566	37%
1589	35%
1595	35%
1599	15%

Cut-off lines does not really discriminate between critical and non-critical tasks.

Your supervisor will probably advise you to examine the tasks within a certain range for their task-values and select those with the higher values (total criteria) as critical. Thus, you may be picking up some tasks which were below the line and deleting some which are above.

What does the CTI Sheet look like when critical tasks are recorded as "Y" and non-critical as "N" in row 9?

Example

ISD I.2 Select Tasks for '

CRITICAL TASK IDENTIFICAT

MOS 83 E

Skill Level 2

Single Factor Criterion 6

Total Factor (Task Value) Criterion 12

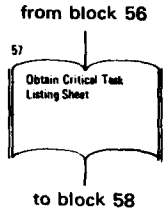
		1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017
Selection Factors	1 Time to Train OJE	–	7	2	5	3	2	3	7	4	1	3	3	4	7	5	3	3
	2 Consequences of Inadequate Performance	–	3	4	5	7	4	3	2	7	3	6	3	7	7	4	2	4
	3 Probability of Emergency Performance	–	3	5	4	1	5	3	1	7	4	1	3	7	7	4	1	
	4 TOTAL VALUE (Total Rows 1, 2, and 3)	–	13	11	14	11	11	9	10	18	8	10	9	18	21	13	6	
	5 Training Required?	–	Y	N	Y	Y	N	N	Y	Y	N	Y	N	Y	Y	Y	N	
	6 Similar to Another Training Required Task?	–	–	–	A	–	–	–	(A)	A	–	–	–	–	–	–	–	
	7 Recommended for Training?	–	Y	–	N	Y	–	–	Y	N	–	Y	–	Y	Y	Y	–	
	8 Percent Performing in Skill Level?	–	75	–	–	60	–	–	63	–	–	54	–	20	42	85	–	
	9 Critical Task?	N	Y	N	N	Y	N	N	Y	N	N	Y	N	N	Y	Y		

Rating Scales

TIME TO TRAIN OJE

4 Hrs. or Less (1) — 5 8 Hrs (2) — 2 5 Days (3) — 2 Weeks (4) — 3 4 Weeks (5) — 5 8 Weeks (6) — 3 Mos or More (7)

Group	
A	1004, 1008, 1009
B	1018, 1022, 107
C	1034, 1035



- The Critical Task Listing Sheet is the document on which all the tasks selected for training are recorded. This Critical Task Listing will be passed on to those working in subsequent ISD Blocks.
- For an example of a completed task listing sheet, and guidance in obtaining the form see below.

Where do I get the Critical Task Listing Sheet?

- Critical Task Listing Sheets are available for duplication in the pocket at the end of this manual.
- To see a completed Critical Task Listing Sheet, see next page. Follow this example for filling in:

  MOS code
  Skill level
  Date
  Your name

Example

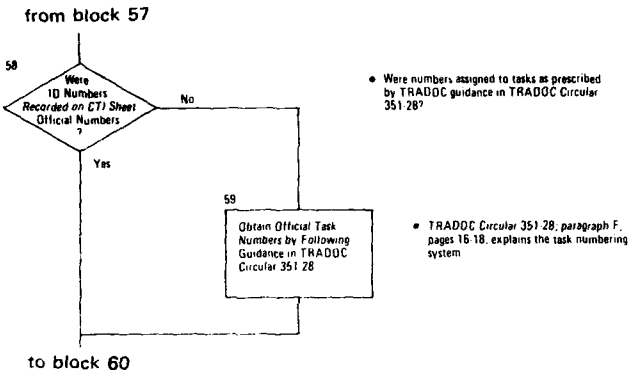
ISD I.2 Select Tasks for Training

CRITICAL TASK LIST

MOS 83 F Date September 21, 1978

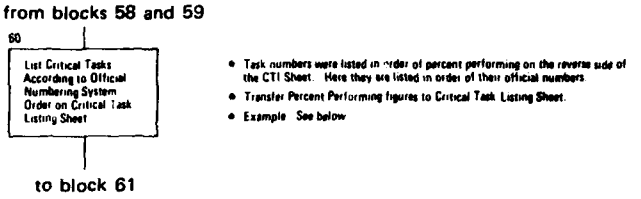
Skill Level 3 Your Name SFC Allen Smith

Task ID Number	Task Description	% Perf	Inst. Set.
1001	Apply the four lifesaving steps.	98	
1002	Apply first-aid measures for burns.	98	
1003	Remove victim from electrical source and apply electrical shock first aid.	98	
1004	Apply artificial resuscitation by a chemical agent casualty.	97	
1005	Apply preventive and first-aid measures for carbon monoxide poisoning.	95	
1006	Practice [illegible] personal hygiene to reduce [illegible].	95	
1007	Apply preventive measures to reduce climatic injuries.	95	
1008	Perform [illegible] and [illegible] procedures.	95	
1009	Maintain protective mask and accessories.	95	
1010	[illegible] awards and numbers to [illegible] troops.	95	
1011	[illegible] [illegible] [illegible] area.	90	
1012	Receive [illegible] and individual equipment.	90	
1013	Maintain individual physical fitness appropriate to unit mission.	90	
1014	[illegible] in the event of a penalty.	90	
1015	Report [illegible] incorporation, indoctrination, exploitation, [illegible] captured.	90	
1016	Report information of possible intelligence value.	90	
1017	Apply Geneva Convention Rules for handling POW.	90	
1018	Safeguard classified information.	90	
1036	Engage hostile aircraft with individual weapon.	98	
1037	Practice noise, light and litter discipline.	90	
1038	Install, operate, and maintain field telephone [illegible] & TA312.	85	
1040	Communicate using proper radio telephone [illegible] procedures.	95	
1041	Camouflage [illegible] self.	80	
1050	Select hasty individual battlefield positions providing [illegible] concealment.	90	
1051	Construct and camouflage individual defensive position.	70	
1052	Control movement by [illegible] weather and light conditions.	98	
1056	Perform preventive maintenance on M16A1 rifle, magazine.	80	
1058	Load, reduce [illegible], unload, and clear M16A1 rifle.	98	
1060	Zero an M16A1 rifle.	98	
1061	Qualify with M16A1 rifle.	80	
1062	Prepare M72A2 LAW for firing; restore M72A2 for carrying.	85	
1068	Engage targets on a firing range M72A2 LAW.	77	
1070	Engage targets with hand grenades.	70	
1072	Install prepare electrical [illegible] armed firing [illegible].	65	
1073	Perform [illegible] maintenance on assigned [illegible].	80	
1303	Operate radio set AN/PRC-106 with accessories.	97	



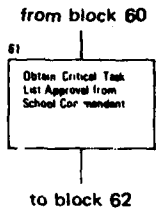
- Were numbers assigned to tasks as prescribed by TRADOC guidance in TRADOC Circular 351-28?

- *TRADOC Circular 351 28, paragraph F,* pages 16-18, explains the task numbering system



What does the Critical Task Listing Sheet look like when completed?

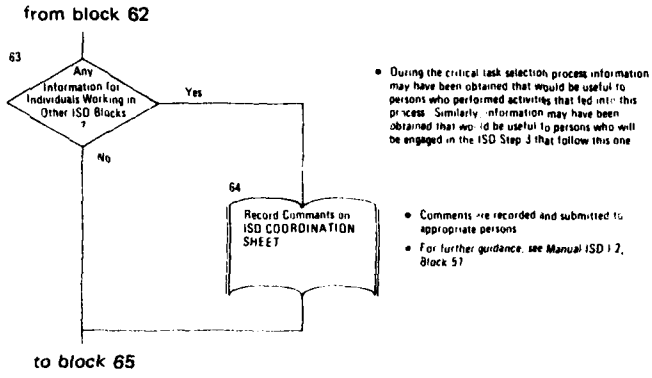
• See page A-10 in this manual.



- Obtain School Commandant's Review, Comments and Approval as directed in TRADOC Circular 351-4, *paragraph 3-1b(3)2d, page 17.*



- Collect CTI Sheets
  Critical Task Listing Sheets
- Submit to Supervisor who will pass it along to individuals working in ISD I 3 Task Analysis

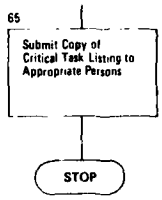


What is the importance of preparing comments for people working in other steps of the instructional systems development process? How do I record them?

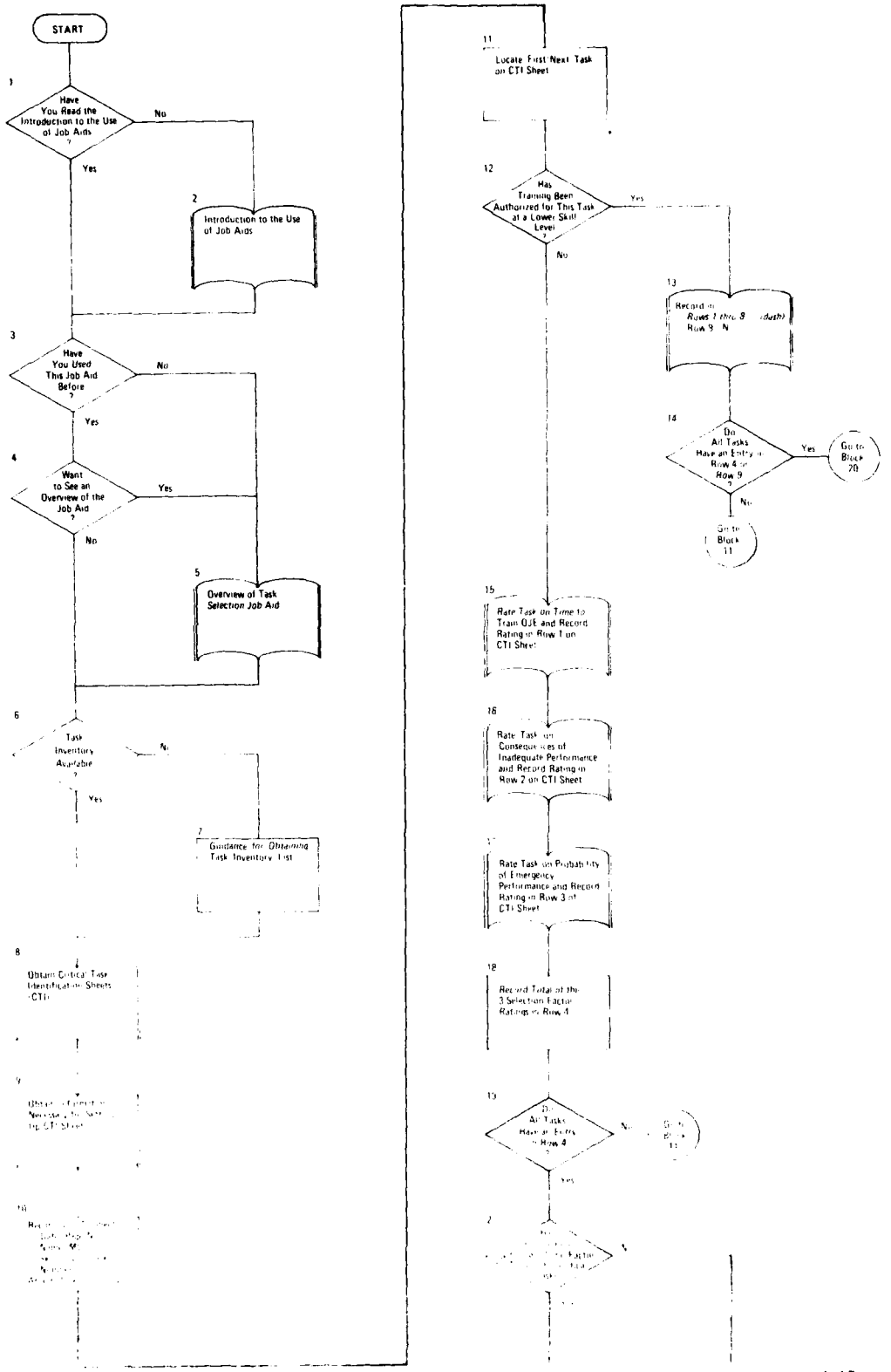
- In order for the Instructional Systems Development process to work effectively it is imperative that there be forward and backward communication between the people involved in the process. At some time or other you have probably complained about the input that has been provided to you. For example, you may have thought that other tasks should have been included in the critical task listing, or that the job performance measures were incomplete or inaccurate. Sometimes, you may have had to do work that should have been performed in previous steps.

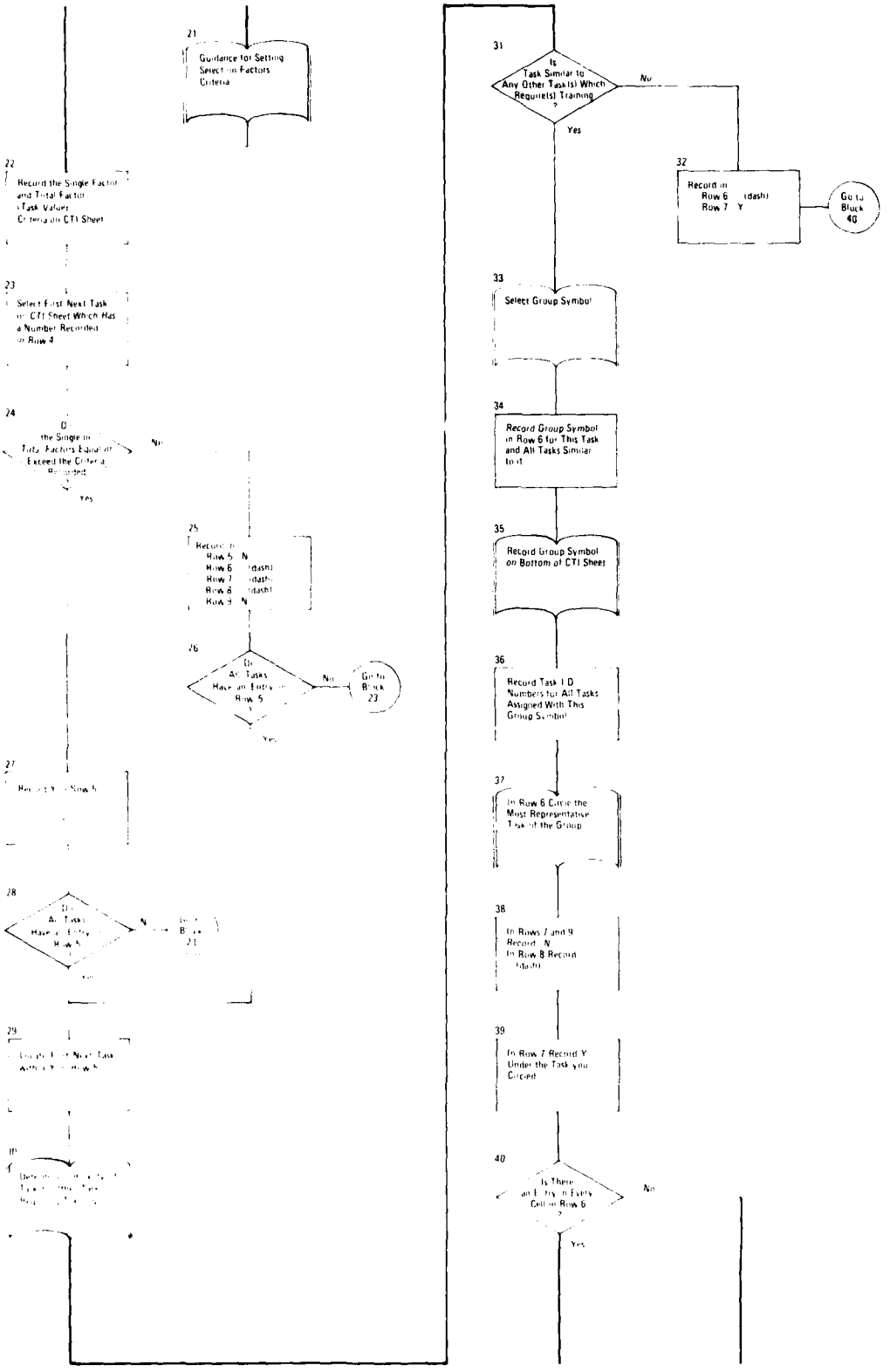
> IT IS IMPORTANT THAT YOU FEED THIS INFORMATION BACK TO THE APPROPRIATE PEOPLE SO THAT REVISIONS CAN BE MADE TO EFFECT IMPROVEMENT IN THE END PRODUCT'

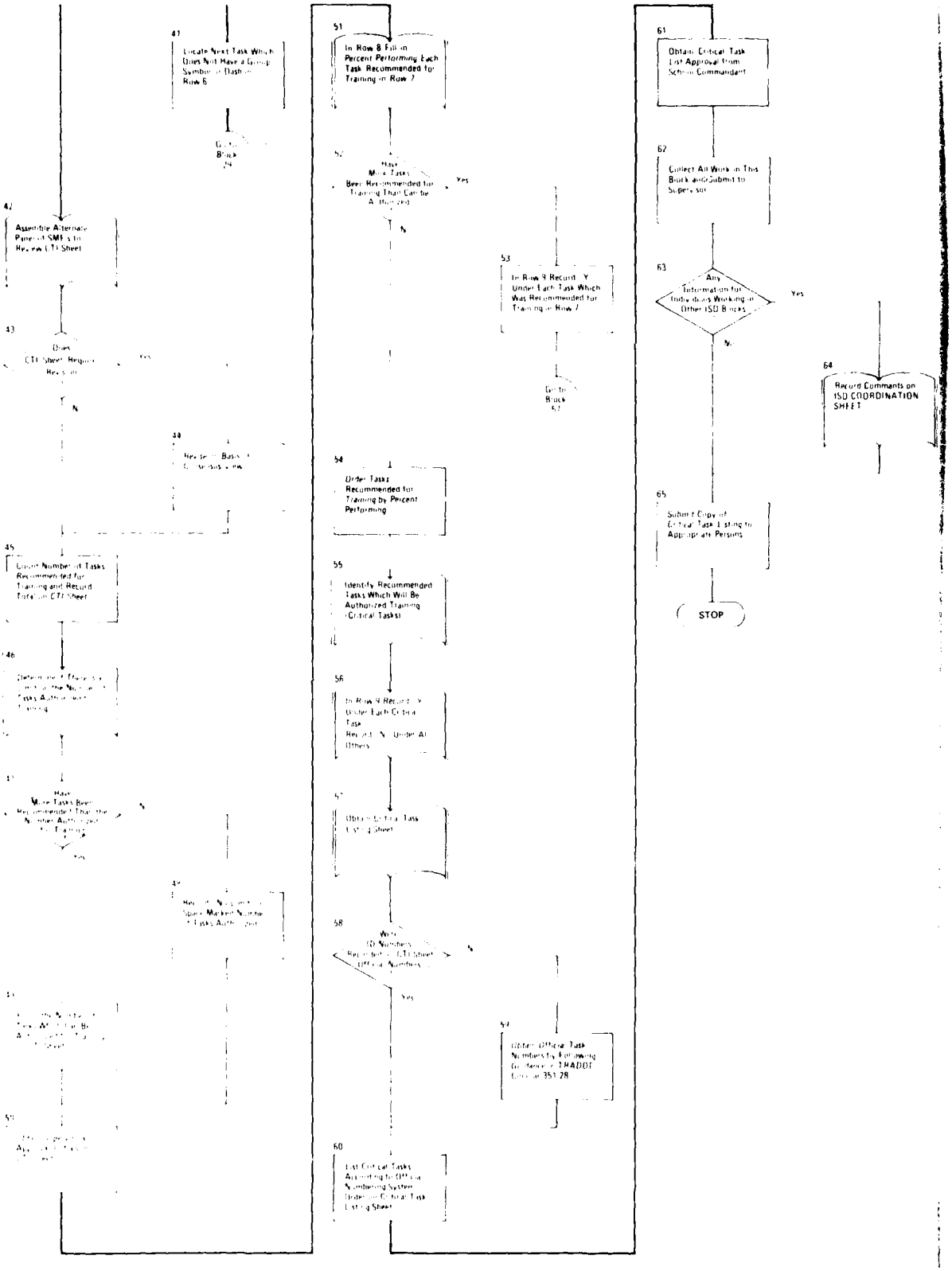
from block 63 and 64



- Individuals who can provide useful input at this stage of the ISD process, e.g. DOT, COD, etc. should receive a copy of the Critical Task Listing.


START
1
Have You Read the Introduction to the Use of Job Aids ?
No
Yes
2
Introduction to the Use of Job Aids
3
Have You Used This Job Aid Before ?
No
Yes
4
Want to See an Overview of the Job Aid ?
Yes
No
5
Overview of Task Selection Job Aid
6
Task Inventory Available ?
No
Yes
7
Guidance for Obtaining Task Inventory List
8
Obtain Critical Task Identification Sheets (CTI)
11
Locate First/Next Task on CTI Sheet
12
Has Training Been Authorized for This Task at a Lower Skill Level ?
Yes
No
13
Record in Rows 1 thru 9 (dash) Row 9 N
14
Do All Tasks Have an Entry in Row 4 or Row 9 ?
Yes
Go to Block 20
No
Go to Block 11
15
Rate Task on Time to Train O/E and Record Rating in Row 1 on CTI Sheet
16
Rate Task on Consequences of Inadequate Performance and Record Rating in Row 2 on CTI Sheet
17
Rate Task on Probability of Emergency Performance and Record Rating in Row 3 on CTI Sheet
18
Record Total of the 3 Selection Factor Ratings in Row 4
19
Do All Tasks Have an Entry in Row 4 ?
No
Yes


21
Guidance for Setting Selection Factors Criteria
22
Record the Single Factor and Total Factor Task Values Criteria on CTI Sheet
23
Select First Next Task on CTI Sheet Which Has a Number Recorded in Row 4
24
Do the Single or Total Factors Equal or Exceed the Criteria Recorded
No
Yes
25
Record in
Row 5 N
Row 6 (dash)
Row 7 (dash)
Row 8 (dash)
Row 9 N
26
Do All Tasks Have an Entry in Row 5
No
Go to Block 23
Yes
27
Record Y in Row 5
28
Do All Tasks Have an Entry in Row 5
No
Go to Block 23
Yes
29
Circle First Next Task Which Is Row 5
30
31
Is Task Similar to Any Other Task(s) Which Require(s) Training
No
Yes
32
Record in
Row 6 (dash)
Row 7 Y
Go to Block 40
33
Select Group Symbol
34
Record Group Symbol in Row 6 for This Task and All Tasks Similar to It
35
Record Group Symbol on Bottom of CTI Sheet
36
Record Task I D Numbers for All Tasks Assigned With This Group Symbol
37
In Row 6 Circle the Most Representative Task of the Group
38
In Rows 7 and 9 Record N In Row 8 Record (dash)
39
In Row 7 Record Y Under the Task You Circled
40
Is There an Entry in Every Cell in Row 6
No
Yes


42
Assemble Alternate Panel of SME's to Review CTI Sheet
43
Does CTI Sheet Require Revision
Y
N
43
Locate Next Task Which Does Not Have a Group Symbol or Dash in Row 6
Go to Block 42
44
Revise CTI Sheet Based on Discussions
45
Count Number of Tasks Recommended for Training and Record Total on CTI Sheet
46
Determine if Changes are Needed in the Number of Tasks Authorized for Training
47
Have More Tasks Been Recommended Than the Number Authorized for Training
Yes
48
Have All Tasks Been Assigned Marked Number of Tasks Authorized
49
Select Next Task Which Was Marked to be Authorized
50
Assign Critical Task Number
51
In Row 8 Enter Percent Performing Each Task Recommended for Training in Row 7
52
Have More Tasks Been Recommended for Training Than Can be Authorized
Yes
N
53
In Row 9 Record Y Under Each Task Which Was Recommended for Training in Row 7
Go to Block 42
54
Order Tasks Recommended for Training by Percent Performing
55
Identify Recommended Tasks Which Will Be Authorized Training (Critical Tasks)
56
In Row 9 Record Y Under Each Critical Task Record N Under All Others
57
Obtain Critical Task Listing Sheet
58
Were CD Numbers Recorded on CTI Sheet Different Numbers
Yes
59
Obtain Official Task Numbers by Following Guidance in TRADOC Circular 351-28
60
List Critical Tasks According to Official Numbering System Under on Critical Task Listing Sheet
61
Obtain Critical Task List Approval from School Commandant
62
Collect All Work in This Block and Submit to Supervisor
63
Any Information for Individuals Working in Other ISD Blocks
Yes
N
64
Record Comments on ISD COORDINATION SHEET
65
Submit Copy of Critical Task Listing to Appropriate Persons
STOP

JOB AID FOR

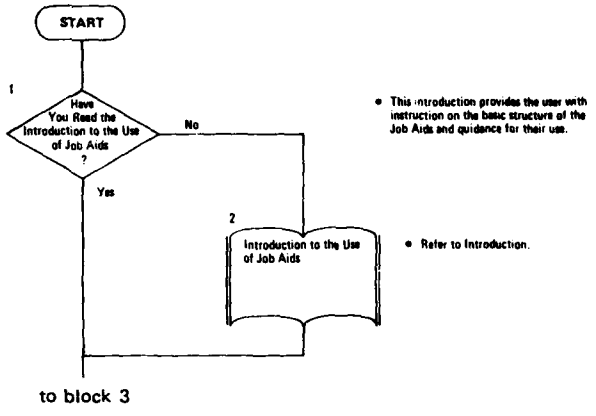
CONDUCTING TASK ANALYSIS

ISD I.3

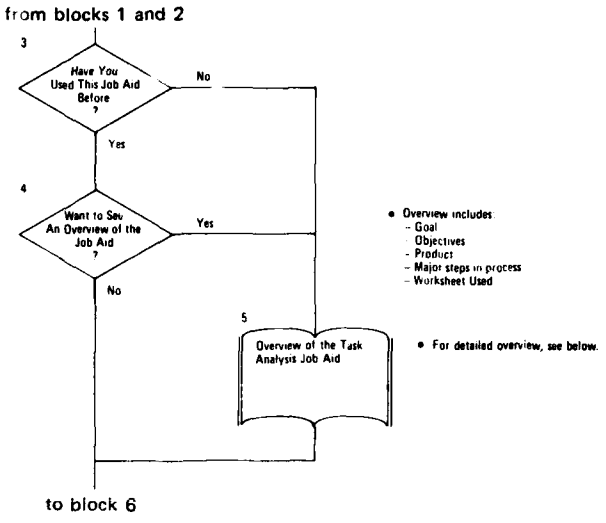
Manual

This is the 2nd in a series of ISD Job Aids for use in instructional design and development. This volume is to be used as a supplement to the primary document, "Job Aids: Descriptive Authoring Flowcharts ISD I.3 Conduct Task Analysis." The flowchart document will direct you to specific guidance, examples, and references provided in this volume. If you do not have the primary flowchart document, request it from your supervisor.

The wording in this manual should not be construed to discriminate between the sexes. In order to avoid a repetitious use of the terminology, "he/she," the terms, "he," "him," and "his," as well as "men," are intended to include both the masculine and feminine gender. Any exceptions to this usage will be so noted.



- This introduction provides the user with instruction on the basic structure of the Job Aids and guidance for their use.
- Refer to Introduction.



What is the Task Analysis Job Aid all about?

- **GOAL**

  Your goal in using this job aid is to obtain, document, and summarize all the information about each critical task that is needed to prepare the Soldier's Manual, courses of instruction, and SQT.

- **OBJECTIVES**

  1. Given a task statement, detail the following information for the task:
     - CONDITIONS (in what environmental situation it is performed)
     - CUES (when it is performed)
     - STANDARDS (how well it is performed)
     - References and training tips
     - ELEMENTS or STEPS (how it is performed)
  2. Given the above information about a task, summarize it in a format which can be:
     - placed in the Soldier's Manual
     - understood by the Soldier learning the task
     - used as an evaluation tool by someone supervising the task

• PRODUCTS

This job aid will result in

— a completed Task Analysis Worksheet, and

— a Task Summary Sheet

for each task selected for training.

• MAJOR STEPS IN PROCESSS

Step 1. Determine acceptability of task statement

Step 2. Select method of obtaining task information

*Step 3. Record cues, conditions, standards, references and training tips for whole task.

Step 4. Record task elements (steps in performance).

Step 5. Record cues, conditions, standards, references and training tips which are specific to each element.

Step 6. Convene panel of subject matter experts to:
a. review Task Analysis Worksheets
b. identify critical elements

Step 7. Summarize information from Task Analysis Worksheet on Task Summary Sheet (write a clear, concise narrative description of task)

Step 8. Determine need/obtain illustrations.

*Task elements, conditions, cues and standards cannot be written for soft skill (managerial/supervisory) tasks with the same degree of accuracy or specificity possible with hard skill (operator/performer) tasks. This is because soft skill tasks often include information processing and communication skills not observable by the analyst. However, by using the Task Analysis Worksheet to document task information, you are more likely to do the most thorough task analysis possible.

- **WORKSHEETS USED**

  — On pages B-7, B-8, and B-9 there are examples of a completed Task Analysis Worksheet (front and back). For ease of reading all entries on Task Analysis Worksheets have been typed. Your T.A. Worksheets will most likely be handwritten since they are working documents.

  — On pages B-10 and B-11 are examples of a Task Summary Sheet.

- **DESCRIPTIVE FLOWCHART**

  The flow chart on pages B-90 thru B-92 shows the steps in using the Task Analysis Job Aid. The flowchart will be useful in getting a clear picture of the overall process used in this job aid. A more completely described flowchart is provided in Job Aids: Descriptive Authoring Flowcharts, pages B-3 thru B-15.

TASK ANALYSIS WORKSHEET (Front)

ISD I.3 TASK ANALYSIS WORKSHEET		1. MOS 88E	2. Skill Level 1	3. Date Analyzed September 1, 1978	4. Page 1 of 4 Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/ITAD		6. Method of Obtaining Information (Circle as many as appropriate) (Review of Information) (On Site Interview/Observation) Other (Specify) Consensus Group Self Performance			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11. Standards	12. References/Tips
441-18H-1004	Administer artificial respiration by mouth-to-mouth method	Discovery of an unconscious casualty with weak pulse, no breathing, no severe facial wounds	Performed in all climatic conditions, generally outdoors, non-toxic atmosphere	Within 24 seconds the casualty will be examined, his airpassage will be cleared, and mouth-to-mouth resuscitation will be started	FM 21-11 First Aid for Soldiers, Chapter 3 TEC 9111-441-0026 Basic First Aid Measures: Restoring the Breathing When a casualty begins to breathe for himself, he will automatically resist resuscitation efforts Requires high degree of endurance

TASK ANALYSIS WORKSHEET (Back)

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.				
2		Position casualty on his back.				
3	* C.S.F. S.C.	Clear airway of obstructions.				
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4	* M.O.I.	Enlarge airway--head tilt.				
4.1		Tilt head back so chin is in jutting-out position.				
		Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				
5		Enlarge airway, thumb-jaw lift.	Step 4 not successful	Same as task		Para. 5
5.1		Lift jaw with thumb. Place thumb in casualty's mouth, grasp lower jaw firmly.				Preferred over Step 6 when possible.
5.2		Lift jaw forward. If successful, go to Step 7.				Do not hold or depress tongue.
6		Enlarge airway; 2 hand-jaw lift.		Same as task	Same as task	Para. 6
6.1		Lift jaw with both hands. Grasp angles of lower jaw just below ear-lobes.	Jaws so tightly closed, thumb can't be inserted.			
6.2		Lift jaw forcibly forward.				
6.3		Open lips by pushing lower lip toward chin with thumbs.				
7		Pinch nose shut.	Same as task	Same as task	Same as task	Para. 7
7.1		Pinch nose with thumb and index finger.				Pinching nose shut prevents air leakage.
7.2		Use hand to exert pressure on fore-head to maintain backward head tilt.				
8		Seal mouth and blow forcefully.	Same as task	Same as task	Artight seal, casualty's chest must rise.	Observe casualty's chest for rise.
8.1		Take a deep breath and place your mouth around casualty's.				
8.2		Blow into his mouth forcefully.				

TASK ANALYSIS WORKSHEET (Back, Continued)

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
9		Exhale	Same as task	Same as task	Casualty's chest must rise and fall. Can hear air escape during exhalation.	Observe casualty's chest for rise and fall.
9.1		Stop blowing and remove mouth.				
9.2		Take another breath while listening for casualty's exhalation.				
10		Dislodge foreign object.	Airway still not clear.	Same as task	Same as task	Para. 10
10.1		Roll casualty on his side				
10.2		Use heel of hand to dislodge foreign body by administering sharp blows between casualty's shoulder blades. Return to Step 2.				
11		Breathe until relieved by medic, or until casualty regains consciousness, or for 45 minutes in absence of all life signs.	Blow next breath after each exhalation.	Same as task	First several breaths rapid and strong. Then normal even cadence (12 to 20 times per minute).	If standard not followed, you may become faint, tingle, or lose consciousness.

TASK SUMMARY SHEET

TASK SUMMARY SHEET

Task Number 441-184-1004

Task: Administer artificial respiration by mouth-to-mouth method.

Conditions: Performed in all climatic conditions, generally out doors, non-toxic atmosphere.

Standards Within 20 seconds the casualty will be examined, his air passage will be cleared, and mouth-to-mouth resuscitation will be started.

References: FM 21-11 First Aid for Soldiers, Chapter 3

TDC 911-441-0026F Basic First Aid Measures: Restoring the Breathing

Performance Description

1. DETERMINE IF HEART IS BEATING

   - Locate an unclothed area to take pulse if casualty has injuries.

2. POSITION CASUALTY FOR CPR

   - Use quick careful movements to avoid further injury. If casualty has other serious wounds, they should be treated concurrently, if you have an assistant. However, restoring the breathing must be your first task if working alone.

* 3. CLEAR AIRWAY OF OBSTRUCTIONS

   - Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat. Move fingers across the back of the throat with a sweeping motion to remove any vomit, mucus, or foreign bodies from the mouth of the casualty.

* 4. ENLARGE AIRWAY

   There are three methods:

   1) Place a rolled blanket, poncho or similar object under casualty's head to help maintain this position. If this is successful, go to Step 5.

   2) Thumb jaw-lift method

      - If the head tilt method is unsuccessful, adjust the jaw to a jutting-out position by placing your thumb in the casualty's mouth. Grasp the lower jaw firmly and lift it forward. Do not attempt to hold or depress tongue. If successful, go to Step 5.

   3) Two-hand jaw-lift method

      - If the casualty's jaws are so tightly closed that the thumb cannot be inserted into the mouth, then use both hands. Grasp the angles of the lower jaw just below the earlobes. Lift the jaw forcibly forward; then open the lips by pushing the lower lip toward the chin with the thumbs.

   5. PINCH NOSE SHUT

      - Pinch the nose with the thumb and index finger in order to prevent air leakage. Let this same hand exert pressure on the forehead to maintain the backward head tilt.

   6. SEAL MOUTH AND BLOW FORCEFULLY

      - Take a deep breath and place your mouth around the casualty's mouth. Blow forcefully into casualty's mouth until you see his chest rise.

TASK SUMMARY SHEET (Continued)

7. EXHALE

- Stop blowing and remove your mouth when casualty's chest rises. Take another breath while listening for casualty's exhalation. If you hear air escape, go to Step 9. Otherwise, continue with Step 8.

8. DISLODGE FOREIGN OBJECT

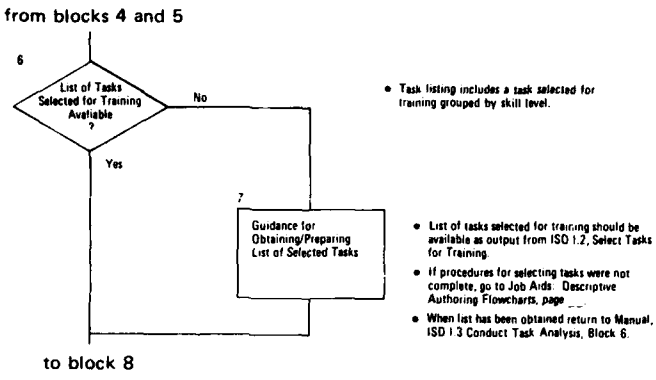
- If airway is still not clear, then roll casualty on his side. Use the heel of your hand to deliver sharp blows between the casualty's shoulder blades. This should dislodge the foreign object. Then go back to Step 2.

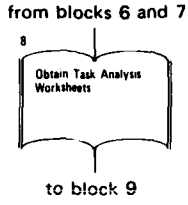
9. BREATHE UNTIL REVIVED

- When exhalation is finished, blow in the next breath. On the first several breaths, blow rapidly and strong. Then blow in a normal, even cadence (12-20 times per minute).

NOTE 1: If your breathing has been very deep and rapid for too long a period, you may become faint, tingle, or even lose consciousness if you persist. However, if you administer only four full quick breaths, then adjust your breathing to the rate of approximately once every 5 seconds with only moderate increase in normal volume, you will be able to continue to give artificial respiration for a long period without experiencing temporary ill effects.

NOTE 2: When a casualty begins to breathe for himself, he will automatically resist resuscitation efforts. This is a sign that you can cease your efforts.


from blocks 4 and 5
6
List of Tasks Selected for Training Available ?
No
Yes
7
Guidance for Obtaining/Preparing List of Selected Tasks
to block 8
• Task listing includes a task selected for training grouped by skill level.
• List of tasks selected for training should be available as output from ISD 1.2, Select Tasks for Training.
• If procedures for selecting tasks were not complete, go to Job Aids - Descriptive Authoring Flowcharts, page ___
• When list has been obtained return to Manual, ISD 1.3 Conduct Task Analysis, Block 6.



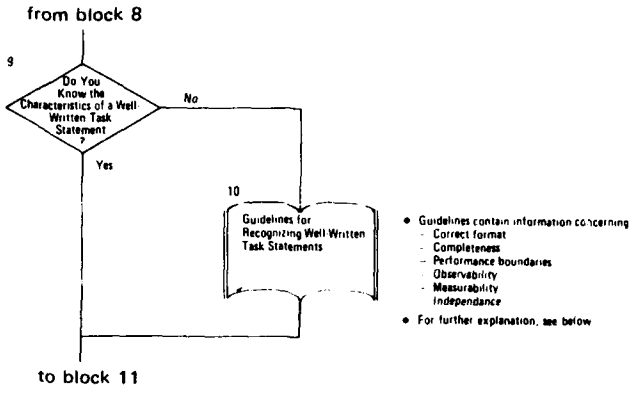
- The task statement, elements, conditions cues, standard, references and training tips are recorded on the Task Analysis (T.A.) Worksheet
- For guidance in obtaining the T.A. Worksheet, see below

What is the purpose of the Task Analysis Worksheet?

The Task Analysis Worksheet provides an easy to use format for recording all relevant information about the performance of a task. The headings of each section will remind you not to omit any necessary information as you are recording, and the completed Task Analysis Worksheet can be checked at a glance for any such omissions. Think of it as a rough draft which will help you prepare a more complete and accurate Task Summary.

Where do I obtain Task Analysis Worksheets?

- Task Analysis Worksheets are available for duplication in the pocket at the end of this manual.
- To see an example of a completed Task Analysis Worksheet, refer to pages B-7, B-8 and B-9.



What are the characteristics of a well written task statement?

1. CORRECT FORMAT

- Each statement of a task is composed of three basic elements:
  - *1. A specific action word: describes what action is being done.
  - *2. The object of the action word: identifies what is being acted upon.
  - 3. Whatever qualifying phrases are needed to communicate clearly what the task is.
- Thus task statements are simple sentences which start with an action word. (The pronoun I is never written into the statement, however, because when read before the task statement it makes the statement sound like the answer to the question, "What do you do?" For instance, " (I) Load and unload an M16A1 rifle magazine.")

Action +	Object or Element Being Acted Upon +	Necessary Qualifier
COMPUTE	average test score	on a desk calculator.
COUNSEL	staff personnel	on employee development.
REPLACE	brake shoes.	
SUBMIT	receiving reports	for new engine parts.
TYPE	legal affidavits.	

Note: *More than one action word may be used when actions are very closely related, such as: mount/dismount AN/PVS-2 on M16A1 rifle.

*More than one object may be included when objects are closely related, such as: decontaminate self and individual equipment.

- In order to improve the quality of the CODAP (Comprehensive Occupational Data Analysis Program) survey questionnaires, which are used as a job analysis tool, it is helpful to have task analysis throughout the Army use standardized terminology. The following two action verb lists, one for supervisors and one for doers, are suggested.

Preferred Verb List for "SUPERVISOR" Task Statements.

ADMINISTER	DETERMINE	INSPECT	PRESENT	TEACH
ADVISE	DEVELOP	INSTRUCT	PROMOTE	TEST
ANALYZE	DIAGNOSE	INTERPRET	PROVIDE	VERIFY
APPRISE	DIRECT	INTERVIEW	RECOMMEND	WELCOME
ASSIGN	DISTRIBUTE	MAKE	RECORD	
BRIEF	ESTABLISH	MAINTAIN	REFER	
CHECK	EVALUATE	MONITOR	REQUEST	
COMPARE	EXPLAIN	NOTIFY	REVIEW	
CONTROL	FAMILIARIZE	ORGANIZE	SCHEDULE	
COORDINATE	IDENTIFY	PARTICIPATE	SELECT	
COUNSEL	IMPLEMENT	PERFORM	SPOT CHECK	
CRITIQUE	INFORM	PLAN	SUPERVISE (PERSONNEL)	
DEMONSTRATE	INITIATE	PREPARE	SURVEY	

Preferred VERB list for "DOER" task statements:

ACTIVATE
ADAPT
ADJUST
ADMINISTER
ALIGN/ALINE
APPLY
ARRANGE
ASSEMBLE
ASSIGN
ATTACH
BRIEF
CALCULATE
CALIBRATE
CHANGE
CHECK
CLASSIFY
CLEAN
CLEAR
COLLECT
COMPARE
COMPILE
COMPUTE
CONDUCT
CONNECT
CONSOLIDATE
CONSTRUCT
CONVERT
COORDINATE
CORRECT
CULTURE
DECODE
DELIVER
DEMONSTRATE
DETERMINE
DEVELOP
DIAGNOSE
DIG
DISASSEMBLE
DISCARD
DISPOSE
DISSEMINATE
DISTRIBUTE
DRAFT
DRAIN
DRAW
DRESS
DRILL
DRIVE
EDIT
ELEVATE
EMPLACE
EMPLOY
ENERGIZE
ENCODE
ERECT
ESCORT
ESTABLISH
EVACUATE
EVALUATE
EXAMINE
FABRICATE
FILE
FILL
FILL OUT
GROUND
IDENTIFY
IMPLEMENT
INFORM
INSERT
INSPECT
INSTALL
INSTILL
INSTRUCT
INSURE
INTERVIEW

INVENTORY
IRREGATE
ISSUE
LABEL
LAY
LOAD
LOG
LUBRICATE
MAINTAIN
MEASURE
ORIENT
OVERHAUL
PAINT
PACK
PARTICIPATE
PASS
PATCH
PERFORM
PLACE
PLOT
PLUMB
POSITION
POST
PREPARE
PRESENT
PRESSURIZE
PROCESS
PURGE
RAISE
READY
REBUILD
RECEIVE
RECOMMEND
RECONCILE
RECORD
REGULATE
REMOVE
REPAIR
REPLACE
REPORT
REPRODUCE
REQUEST
REQUISITION
RESTORE
ROTATE
ROUTE
RUN
SAFEGUARD
SAMPLE
SCHEDULE
SCREEN
SEAL
SECURE
SEND
SEPARATE
SERVICE
SET-UP
SINK
SPLICE
SORT
STERILIZE
SURVEY
TAKE
TENSION
TERMINATE
TEST
TEST-OPERATE
TIGHTEN
TRANSCRIBE
TRANSMIT
TRANSPORT
TRIM
TROUBLESHOOT
TYPE
UPDATE
VERIFY
WEIGH
WRITE

Verbs on the Preferred Verb Lists for Supervisor and Doer Task Statements are considered generally acceptable and appropriate for questionnaire statements. However, if the meaning of a task statement is unclear because a specific verb is not on the lists, use the appropriate verb.

2. COMPLETENESS

- The task statement describes a specific, complete action performed by one individual.

NOTE THAT . . .

a. "Repair wheeled vehicles" is not sufficiently specific to be a good task statement. To one person, such a statement might mean performing such actions as "replace wiper blades" and "replace burned-out head lamp." Another person might think it means "overhaul transmission and engine."

b. Also, "inspect and repair exhaust system" is not sufficiently specific. However, one task might be "inspect exhaust system," and another task be "repair exhaust system."

c. Likewise, "perform general administration" is not a specific task, but "prepare correspondence" is.

3. PERFORMANCE BOUNDARIES

- The statement should present or imply definite beginning and ending points.
- Tasks are performed in relatively short periods of time, i.e., seconds, minutes, or hours, but rarely, if ever, days, weeks, months, or years.

EXAMPLE:

Such phrases as "have knowledge of" or "take responsibility for" are not time-relatable and therefore should not be included in a task statement. While "assure a well-trained Army" has no performance boundaries, "clean an M-16 rifle" does.

Likewise "tune radio," has unclear performance boundaries. A better task statement is "select frequencies for command net."

4. OBSERVABILITY

- Some one should be able to observe
  - — the soldier performing the task(process) and/or
  - — the results of the soldier's actions(product), and determine definitely that the task has been performed.

EXAMPLE:

"Understand electronic principles" is not observable. Neither the process nor the results can be observed. In a task such as "read equipment work order and determine what action to take," you cannot really be sure the soldier is performing the task by observing his action (reading) but you can observe the result of his performance—the action he takes.

5. MEASURABILITY

- A technically proficient person (SME) should be able to observe the task or the end product and decide whether or not the task has been properly performed.

EXAMPLE:

"Know how to" or "be able to" are not measurable. Neither are they observable. However, "fill tires to 32 lbs. air pressure" is measurable, as is "advise suspect of his rights." (The observer could check to see if the performer of this task presented a complete and accurate statement.)

NOTE: Observability and measurability are easier to define with operator tasks (hard skills) than they are with supervisor or manager tasks (soft skills). Generally, the observability and measurability relate more to the result or outcome of task performance for soft skills.

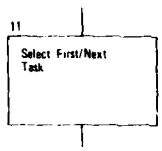
6. INDEPENDENCE

- Each task statement describes a specific part of the job, which is independent from other tasks. In determining whether an action is an independent activity it is necessary to keep in mind who the performer is and what his function is. A whole task for skill level 1 may only be a single element in a more complex skill level 2 task.

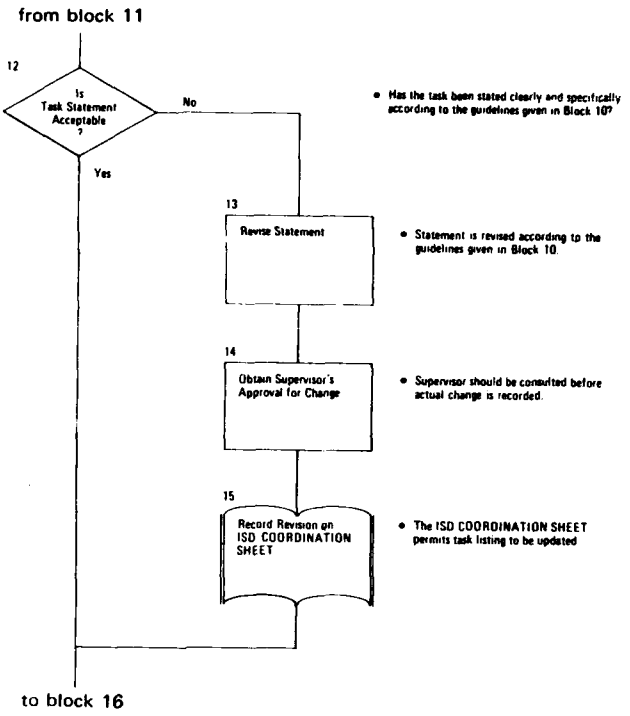
EXAMPLE:

If one of the skill level 2 tasks is "repair exhaust system," then "remove muffler" might be one element of the task. However, a skill level 1 soldier might be assigned the task of "remove muffler." For the skill level 2 soldier "remove muffler" is only part of his task. His responsibility is not fulfilled until he performs the other appropriate elements that are part of "repair exhaust system." However, the skill level 1 soldier's responsibility for this activity is fulfilled as soon as he properly "removes the muffler."

from blocks 9 and 10



to block 12



What is the purpose of recording revisions to task statements?

- In order for the Instructional Systems Development process to work effectively it is important to communicate with other people who have worked before you and will work after you in the ISD process. This communication should be documented on an ISD Coordination Sheet.
- Since the task statement is used to identify the task throughout the training system, there can be only one official version.
- A brief explanation of any changes you make should be included.

Where do I obtain an ISD Coordination Sheet and what does it look like when explanation has been recorded?

- **An ISD Coordination Sheet can be found in the pocket at the end of this manual.**

Page 1 of 1 Pages

Date September 21, 1978

ISD COORDINATION SHEET

FROM:

Name SFC ALLEN SMITH

Div/Branch ITAD

Telephone No 4715

TO

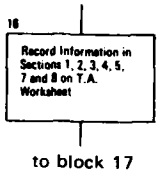
Name SFC A. GARCIA

Div/Branch ITAD

SUBJECT: REVISION OF TASK STATEMENTS

Task Number	Original Task Statement	Reason for Change	Revised Task Statement
081-191-1111	Administer artificial respiration.	Not complete, no qualifier given.	Administer artificial respiration by mouth-to-mouth method.
081-192-1234	Disarm explosive devices.	Not complete, no qualifier given.	Disarm the M14 blast anti-personnel mine.
31-191-1057	Understand techniques of radio communication.	Action not observable or measurable; no qualifier given.	Prepare/operate tactical FM radios (AN/PRC-77, AN/VRC-64 and AN/GRC-160).

from block 12 and 15

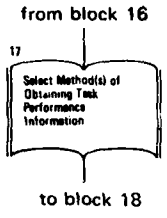


- Information required on Task Analysis Worksheet
  - MOS
  - Skill level
  - Todays date
  - Page number
  - Analyst's name and office symbol
  - Task number
  - Task statement
- For example, see below.

What does the Task Analysis Worksheet look like when identifying information has been recorded?

Example

ISD I.3 TASK ANALYSIS WORKSHEET	1. MOS 83E	2. Skill Level 1	3. Date Analyzed [illegible], 1978	4. Page 1 of 4 Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/ITAD	6. Method of Obtaining Information (Circle as many as appropriate) Review of Information — On Site Interview/Observation — Other (Specify) Consensus Group — Self Performance			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11. Standards	12. References/Tips
441-18H 1004	Administer artificial respiration by mouth-to-mouth method.				

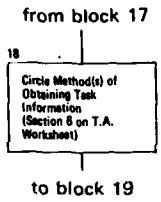


- Methods of obtaining task performance information include
  - Review of Task Information
  - Consensus Group
  - On-Site Interview/Observation
  - Self-Performance
  - Other
- For further explanation, see below

Which method should I use to obtain task performance information?

- There are several different methods of obtaining information for task analysis. The method(s) you choose depends on:
  - — your knowledge of the task
  - — type of task
  - — budgetary and time constraints
- In most cases you will use a combination of the following methods.

METHOD	WHEN IT IS USED	HOW IT IS USED
(1) Review of Task Information	When starting your analysis. This is a good starting point for analysis of any task, especially if you are not an expert in performance yourself. It should never be used as the only method of analysis. When preparing a rough draft. You may wish to use this information to fill out a rough draft of the Task Analysis Worksheet; then you can verify and refine the information when you conduct another method of task analysis.	Review. Locate and read as many sources of task information as possible, i.e., field and technical manuals, training films, course outlines from both institutional and extension training documents of equipment manufacturers, etc. Evaluate. From all the sources, decide which is the prefered method of task performance. Describe. Record task conditions, cues, standards, elements, tips and references on Task Analysis Worksheet.
(2) Consensus Group (SME's)	When analyzing soft-skills tasks. This method is particularly useful for analyzing supervisory and managerial tasks (soft-skills) in which many of the critical elements are not directly observable, or for which there are optional methods of performance and alternative paths. When analyzing new tasks. When you are analyzing a new task, that is, one which has not yet been introduced to the field, this is the only method available. The "experts" in this case are personnel who have expertise in similar tasks, or who have been contractor trained on the new equipment.	Selecting a group. Assemble a group of personnel (three or more) who have knowledge and experience in the task. Pool information. SME's share information. Evaluate. SME'S evaluate all information in order to make decisions as to the most acceptable method of task performance. In order to do this for alternate path tasks, key elements must be identified. Describe. Same as method 1.
(3) On-Site Observation Interview	When analyzing hard-skills. This is the best method for analyzing operator/performer tasks (hard-skills) which generally have a fixed sequence of performance. When analyzing all tasks. Whenever budgetary and time constraints allow, this method should be used, either alone or in combination with another method.	Observe performance. Watch a soldier who is proficient perform the task. Observe the cues which initiate performance of each step and the steps (elements) which follow each cue. Interview soldier. Tactfully question the soldier about various aspects of his performance. For example you may say, "Is that step always done that way?" or "Can you do anything else at this point?" Describe. Same as Method 1. Note: More than one soldier should be observed/interviewed ideally in more than one location.
(4) Self-Performance	When on-site interview/observation is not possible. This method is not recommended because it is very difficult to be objective and to note every step. When a final check is desired. This method can be used as a final check on another method.	Reconstruct task performance. Here you mentally reherse or actually perform the task yourself. Describe. Same as Method 1.

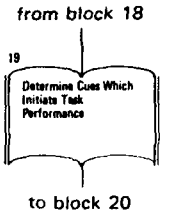


• For example, see below.

What does the Task Analysis Worksheet look like when method of obtaining information has been recorded?

Example:

ISD I.3 TASK ANALYSIS WORKSHEET		1. MOS	2. Skill Level	3. Date Analyzed	4 Page ____ of ____ Pages
5. Analyst's Name/Office Symbol		6. Method of Obtaining Information (Circle as many as appropriate) (Review of Information) (On-Site Interview/Observation) Other (Specify) Consensus Group Self-Performance			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11 Standards	12 References/Tips



- These cues signal the beginning of a task
- For further explanation and guidance in identifying cues, see below

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How do I determine the cues which initiate task performance?

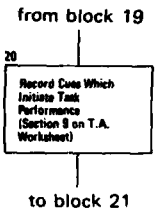
- Ask the soldier, "How do you know when to begin task performance?"

- Identify the state of affairs or occurrences that determine when the soldier begins to perform the task in his job situation. Cues are often dependent upon conditions (see block 21) so you actually want to consider them together. For example:

  For a wheeled vehicle mechanic, a flat tire on a vehicle that he was supposed to repair would be a cue that should result in his changing the tire or repairing the tire. Other cues and conditions, such as length of time before the vehicle must be driven, location of the vehicle, and availability of a spare tire, would determine which of several actions he should take; that is, whether he should change the tire and possibly repair it later, or whether he should immediately repair the tire.

- Obviously, many different cues could initiate performance of the same task. What is important in your task analysis is to identify those cues which a soldier can recognize on the job and respond to appropriately. For example:

  If the engine of a 1/4-ton truck does not "crank," this is a cue for the wheeled vehicle mechanic to check the battery and battery cables. However, if the vehicle engine will not start and, as a result, the mechanic changes the tire, he has not done his job satisfactorily even if he did a perfect job of changing the tire. He has responded inappropriately to certain cues.

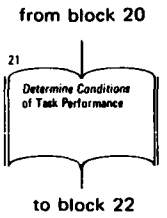


• For example, see below.

What does the Task Analysis Worksheet look like when initiating cues have been recorded?

Example:

ISD 1.3 TASK ANALYSIS WORKSHEET		1. MOS 83E	2. Skill Level 1	3. Date Analyzed	4. Page ____ of ____ Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/TTRD		6. Method of Obtaining Information (Circle as many as appropriate) (Review of Information) Consensus Group (On-Site Interview/Observation) Self-Performance Other (Specify)			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11. Standards	12. References/Tips
441-18H 1004	Administer artificial respiration by mouth-to-mouth method.	Discovery of an unconscious casualty with weak pulse, no breathing, no severe facial wounds.			



- *This conditions statement establishes the physical setting in which the task is performed, and the necessary equipment and supplies.*
- For further explanation and guidance in identifying conditions, see below.

How do I determine the conditions of task performance?

- Ask the soldier, "What tools/equipment, etc. do you normally have to do this task?"
- Identify everything in the on-the-job environment which significantly affects task performance. These conditions must be so specific that you can observe their effect on task performance. Many conditions can be derived from the job description itself. Chart below shows items to be considered in stating task conditions.

Items to be Considered in Statement of Task Conditions	Examples
1. Tools and equipment ammunition used to perform the task. Use identification numbers where appropriate	1. Cleanroom overalls 2. Lead-lined gloves 3. A-70 aircraft 4. Soldering iron
2. Special job aids and manuals.	1. Procedural checklists 2. Technical manuals
3. Kind and amount of supervision and assistance normally available during task performance.	1. Job holder performs task completely independent of assistance from others. 2. Task performed under close supervision. 3. Task performed as a member of a team.
4. Special physical demands of the task.	1. Crowded working conditions. 2. Unusual or prolonged physical exertion. 3. Kneeling or squatting. 4. Unusually cramped position.
5. Environmental conditions that influence task completion.	1. Weather (tropical, arctic, desert) 2. Light intensity (night time) 3. Noise background.
6. Location of performance.	1. Air conditioned building. 2. Outdoors 3. Direct support maintenance van. 4. Field or garrison environment.

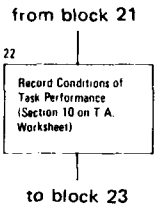
NOTE: CUES AND CONDITIONS ARE INTERRELATED

It is possible to have different sets of cues and conditions for the same task when it is performed in different situations.

In order to simplify the task analysis you should record only the most typical cues and conditions. If there is more than one set of equally typical cues and conditions and each set causes task performance to change significantly, then you should consider doing task analysis for each situation and renaming each new task.

For example, if you are given the task statement: Administer artificial respiration, you will quickly realize that there are two distinct methods to choose from (each with minor variations), depending on the situation. If the casualty has no severe facial injury you will perform the mouth-to-mouth method. However, if he does have severe facial injury, you will recognize that as a cue to perform the chest pressure arm-lift method. Because the performance steps for each major method are completely different you really have two different tasks. (The minor variations within each method of course are treated within a single task because the overall performance is basically the same.)

Determining which situation to select for task analysis and knowing when to break a task into two tasks, (or combine two tasks into one), is a matter of judgment based on guidance from your command and your own experience.

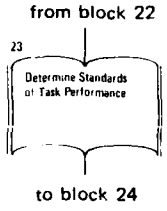


• For example, see below.

What does the Task Analysis Worksheet look like when task conditions have been recorded.

Example:

ISD I.3 TASK ANALYSIS WORK SHEET		1. MOS 83E	2. Skill Level 1	3. Date Analyzed September 21, 1978	4. Page 1 of 4 Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/ITAD		6. Method of Obtaining Information (Circle as many as appropriate) (Review of Information) (On Site Interview/Observation) Consensus Group Self Performance Other (Specify)			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11. Standards	12. References/Tips
441-18i 1004	Administer artificial respiration by mouth-to-mouth method.	Discovery of an unconscious casualty with weak pulse, no breathing, no severe facial wounds	Performed in all climatic conditions, generally outdoors, non-toxic atmosphere		



- This task standard is a statement of how well the task must be performed
- For further explanation and guidance see below

How do I determine the task standards?

- Ask the soldier, "How do you know you have done the task correctly?"
- Identify the aspects of the task which give proof of proficient performance on-the-job. These task standards must be clear enough to
  - — let the soldier know what is expected of him on the job
  - *— provide a basis for evaluation of his performance on the job.

*The task standard which appears in the Soldiers Manual is a statement of how well a task must be performed on the job regardless of the cost, time, or safety hazards involved in performing the task. Sometimes, especially with combat tasks, the task standard is not used to actually measure task performance testing situation. However for purposes of task analysis you want to record the on-the-job standards—not training standards and not testing standards

- Decide whether task is a process, product or combination process/product so that you know which type of standards to look for.

PROCESS TASK	PRODUCT TASK	COMBINATION TASK
1. Performance of task does not leave a readily observable product. Example: Perform a drill ceremony in proper sequence. 2. Failure to use the correct process could result in damage to equipment or danger to the soldier or others. Example: Defuse a defective bomb within 30 seconds.	1. The product is observable and can be inspected. Example: Dig a trench 5 ft. deep and 25 ft. long. 2. The process by which the product was produced cannot be easily observed. Example: Prepare trip report. 3. The procedure leading to the product can vary without affecting the product. Example: Complete parts order from # 17756.	1. Although the product is more important than the processes that led to its completion, there are critical points in the processes which, if misperformed, may cause damage to personnel or equipment. 2. The process and product are of equal importance. Example: Drive a motor vehicle cross country without accident in 10 days. (If a task requires that a motor vehicle be driven from Point A to Point B, the existance of the vehicle at Point B could provide a product standard. However, since the driver might have run 10 other vehicles off the highway in the process, the product standard alone would not be sufficient).
Standard described in terms of: Sequence Completeness Accuracy Speed of performance	Standard described in terms of: Accuracy Tolerances (range) Completeness Format Clarity Number of errors Quantity (number of work units produced per time unit)	Standard described in terms of both process and product.

NOTE: To simplify writing the standards statements, often a number of implied standards are not included in the documentation. Some of these implied standards are "complete and accurate," "submitted on time," and "correct solution." Thus, for some tasks the standard is implied in the task statement but need not be listed as a separate item.

NOTE: Task standards are the same for all situations, with the exception of speed of performance, e.g., more time may be allowed for task performance in a black-out situation. If speed of performance is not a relevant standard do not record it. If speed is a relevant standard and it is affected by the situation, record the standard for both situations.

from block 23

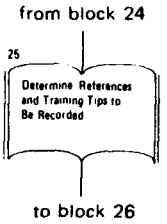
24

to block 25

What does the Task Analysis Worksheet look like when task standards have been recorded?

Example:

ISD I.3 TASK ANALYSIS WORKSHEET		1 MOS 83E	2 Skill Level	3 Date Analyzed September 21, 1978	4 Page 1 of 4 Pages
5 Analyst's Name/Office Symbol SPC ALLEN SMITH/TTAD		6 Method of Obtaining Information (Circle as many as appropriate) (Review of Information) (On Site Interview/Observation) Consensus Group Self Performance Other (Specify)			
7 Task Number	8 Task Statement	9 Initiating Cues	10 Conditions	11 Standards	12 References/Tips
441-18H 1004	Administer artificial respiration by mouth-to-mouth method.	Discovery of an unconscious casualty with weak pulse, no breathing, no severe facial wounds	Performed in all climatic conditions, generally outdoors, non-toxic atmosphere	Within 20 seconds the casualty will be examined, his air passage will be cleared, and mouth-to-mouth resuscitation will be started	



- References include TMs, FMs, other sources of task performance information
- Training tips include Rules of thumb, safety precautions, etc
- For further explanation, see below

What references and training tips should be recorded for this task?

- **REFERENCES**

  — The purpose of recording references on the Task Analysis Worksheet is to provide the soldier with additional study materials. Therefore you should list all the primary study materials which you have reviewed. Be sure they are up to date, relevant, and available to the soldier in most locations.

  — Include: reference number, title, paragraphs, page numbers, publication date.

  — Record the references in rank order of usefulness. That is, if you found four sources which meet the criteria of being up to date, relevant and available, but some were clearly better than others, record them in the order you would want the soldier to seek them out. This is a matter of judgment; however, since the soldier is likely to check only one reference beyond his Soldiers Manual, you will be guiding him to the best first. If it isn't available he can go down through the list until he finds the next best reference available.

  — Include the following types of references:

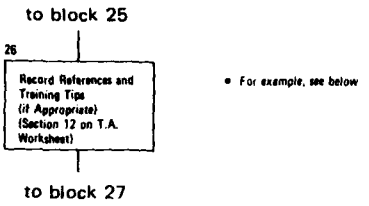
TEC Lessons	Technical Bulletins	Technical Manuals
Slide Kits	DA Circulars	Training Circulars
Slides	DA Pamphlets	Army Training and Evaluation Programs
Recordings	DA Posters	
TV Tapes	Field Manuals	Firing Tables and Trajectory Charts
DA Regulations	ROTC Manuals	Tables of Organization and Equipment
Supply Bulletins	Supply Manuals	
Tables of Allowancies	Lubrication Orders	Correspondence Courses

- **TRAINING TIPS**

  — The purpose of recording training tips in the same column as the references is to document any information needs that are not covered by the task conditions, cues, standards, and elements (to be recorded next), or by the references. Training tips include such things as "tricks of the trade," "rules of thumb" and precautions to prevent injury, damage, or performance error.

  — If the references you have listed contain all the necessary information and you are sure they are available to the soldier, there is no need to record training tips; the references will be sufficient.

  — Caution: Do not confuse training tips with steps in performance, or standards, e.g., "be sure to tighten all screws," this is a step. The tips would be, "Severe damage will result if screws are not tightened."

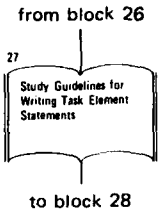


• For example, see below

What does the Task Analysis Worksheet look like when task references and training tips have been recorded?

Example:

ISD I.3 TASK ANALYSIS WORKSHEET		1. MOS 83E	2. Skill Level 1	3. Date Analyzed September 21, 1978	4. Page 1 of 4 Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/ITAD		6. Method of Obtaining Information (Circle as many as appropriate) (Review of Information) (On Site Interview/Observation) Other (Specify) Consensus Group Self Performance			
7. Task Number	8. Task Statement	9. Initiating Cues	10. Conditions	11. Standards	12. References/Tips
441-18R 1004	Administer artificial respiration by mouth-to-mouth method.	Discovery of an unconscious casualty with weak pulse, no breathing, no severe facial wounds	Performed in all climatic conditions, generally outdoors, non-toxic atmosphere	Within 20 seconds casualty will be examined, his air passage will be cleared, and mouth-to-mouth resuscitation will be started	FM 21-11 First Aid for Soldiers, Chapter 3 TEC 9111-441-00261 Basic First Aid Measures: Restoring the Breathing When a casualty begins to breathe for himself, he will automatically resist resuscitation efforts Requires high degree of endurance



- This section begins the process of describing how the task is actually performed.
- For guidance in writing task element statements, see below.

How do I write task element statements?

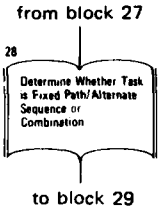
— Think of the task elements as step-by-step directions and guidance to the soldier. They give a physical description of exactly what the soldier must do to successfully perform the task.

— In block 10, p. B-14, a list of characteristics of well-written task statements was given. All but one of these characteristics of tasks are also characteristics of elements. The last characteristic listed for tasks (number 6) points out the major differences between a task and an element. These differences are:

1. Tasks are not components of a procedure. Elements are always components of a procedure.
2. In the eyes of the soldier, a task is performed for its own sake in the job situation. An element is one step in the performance of a task.

— Review the guidelines 1 thru 5 on p. B-14 thru B-21 and apply them to each task element statement.

— Determine the appropriate level of detail in breaking out the steps; that is, break the task down into specific elements to the point where the soldier can accomplish the task by following the written procedure. When in doubt it is better to record too much detail than not enough.



- Fixed path tasks are always performed in the same procedural sequence
- Alternate sequence tasks are performed in a non-procedural sequence.
- Combination tasks have elements which are performed in both procedural and non-procedural sequence
- For further explanation, see below.

How do I determine whether task is performed in a fixed sequence, in an alternate sequence, or a combination of both?

- Just as important as knowing what the elements are is understanding the relationships between elements. The elements within a task will be:

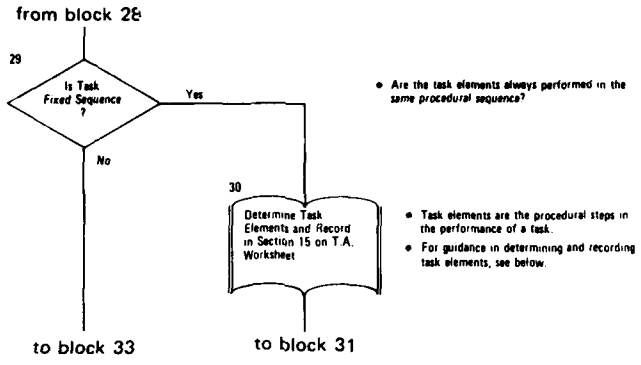
  1. fixed sequence—the steps are always done in the same order, such as "mount/dismount AN/PVS-2 on M16A1 rifle."
  2. alternate sequence—the specific situation encountered determines the appropriate sequence, such as "Formally counsel subordinates on substandard performance."
  3. a combination of both—most of the steps follow a predetermined sequence, however decisions made during task performance result in the addition or deletion of certain steps, such as "Troubleshoot disabled field radio."

- As you obtain information about task performance, ask this question: "Is the task always performed in this sequence?"

  — For many hard skills (operator tasks) the answer will be yes. Then you have a fixed sequence task.

  — For many soft skills (manager/supervisor tasks) the answer will be no. Then you have an alternate sequence or possibly a combination task.

  — For many maintenance tasks the answer will also be no. Many of these tasks are combination.



How do I determine and record the task elements?

- This part of the task analysis is best accomplished by observing another person perform the task. If you have already reviewed task information and made a rough draft of the elements, you can simply check them off as you see them performed, making additions and deletions as necessary. If you have not made the rough draft, simply record the steps in procedural order as you observe them being performed.

- *If you are observing the task as it is performed you will not have time to be con*cerned with the correct format and phrasing of the element statements. However, at some point, when you have time, be sure to check them over according to the guidelines given for writing task elements in block 27, p. B-42.

- Expanded explanation is permissible to make each element clearly understood. element clearly understood.

- If the task is performed by a variety of procedures, select and record the steps by which the most inexperienced soldier in that skill level could achieve task proficiency. Be sure this procedure matches the task conditions and cues which you have already recorded.

- Expect to do some erasing and crossing out before you are finished. Remember that the Task Analysis Worksheet is exactly that—a worksheet on which to collect and verify information.

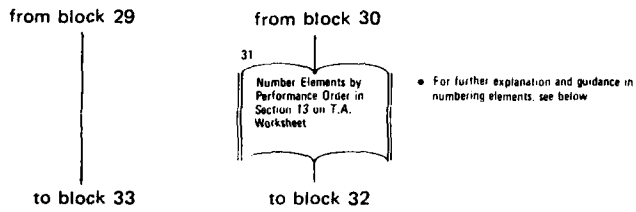
What does the Task Analysis Worksheet look like when all task elements have been recorded for a fixed sequence task?

Example:

ISD 1.3 TASK ANALYSIS WORKSHEET	1 MOS	2 Skill Level	3 Date Analyzed	4 Page ____ of ____ Pages
5. Analyst's Name/Office Symbol SFC ALLEN SMITH/ITAD	6 Method of Obtaining Information (Circle as many as appropriate) Review of Information — On Site Interview/Observation — Other (Specify) Consensus Group — Self Performance			

7 Task Number	8 Task Statement	9 Initiating Cues	10 Conditions	11 Standards	12 References/Tips
051-191 1212	Load, unload, and clear the M203 grenade launcher.				

13 Element Number	14 C.E.	15 Elements (Steps)	16 Initiating Cues	17 Conditions	18 Standards	19 References/Tips
		Load the weapon.				
		Depress the barrel latch and slide barrel forward.				
		Fully insert round into barrel.				
		Slide barrel rearward, locking it to the breach.				
		Place safety in safe position.				
		Unload the weapon.				
		Same as 1.1				
		Round automatically ejects.				
		Same as 1.3				
		Clear the weapon.				
		Same as 1.1				
		Keeping weapon pointed down range, look into the barrel to insure there is no round or cartridge case in the barrel.				
		Same as 1.3				



How do I number the task elements by performance order on the Task Analysis Worksheet?

1. Once the task elements have been identified, the next step is to sequence each element in the order that it will be performed, that is, what must be done first, second, third, etc. Frequently, many steps seem to be done simultaneously or appear to have no particular order of performance. You must use your own judgment in listing the elements.

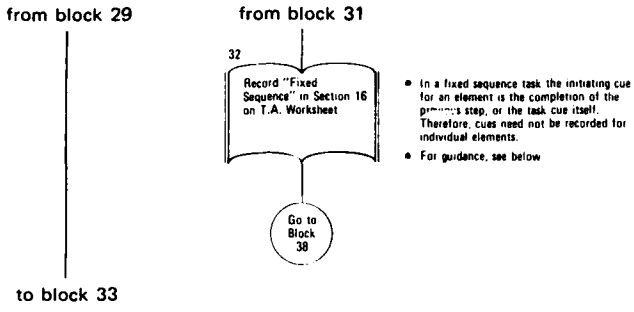
2. Check over the elements again to be sure you have them listed in their most usually performed order.

3. Number each element sequentially, i.e., 1, 2, 3, 4, 5, 6, 7, 8, 9, etc., unless you can easily determine that some steps are substeps of other steps, as with the example given on p. B-47. Steps and substeps can be numbered using the decimal number system as in the example on the next page.

What does the Task Analysis Worksheet look like when each element is numbered?

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Load the weapon.				
1.1		Depress the barrel latch and slide barrel forward.				
1.2		Fully insert round into barrel.				
1.3		Slide barrel rearward, locking it to the breach.				
1.4		Place safety in safe position.				
2		Unload the weapon.				
2.1		Same as 1.1				
2.2		Round automatically ejects.				
2.3		Same as 1.3				
3		Clear the weapon.				
3.1		Same as 1.1				
3.2		Keeping weapon pointed down range, look into the barrel to insure there is no round or cartridge case in the barrel.				
3.3		Same as 1.3				

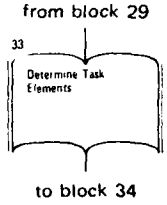


What is the purpose of recording "fixed sequence" under cues and what does this look like on the Task Analysis Worksheet?

- Because this task is always performed the same way there is no need to record a separate cue for each element. The whole task cue initiates performance of the first step, and the cue for each subsequent step is the completion of the previous step. (This is the easiest type task to analyze.) The words "fixed sequence" will identify this type of task at a glance to anyone reviewing the completed Task Analysis Worksheet.

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Load the weapon.	Fixed Sequence			
1.1		Depress the barrel latch and slide barrel forward.				
1.2		Fully insert round into barrel.				
1.3		Slide barrel rearward, locking it to the breach.				
1.4		Place safety in safe position.				
2		Unload the weapon.				
2.1		Same as 1.1				
2.2		Round automatically ejects.				
2.3		Same as 1.3				
3		Clear the weapon.				
3.1		Same as 1.1				
3.2		Keeping weapon pointed down range, look into the barrel to insure there is no round or cartridge case in the barrel.				
3.3		Same as 1.3				



- The task is alternate path or combination
- All task elements must be identified even though they may not be included in each task performance
- For further explanation, see below

How do I determine the elements of an alternate sequence or combination task?

- As you observe task (again observation is the best way of obtaining information about elements) write down every step the soldier performs. (You could also do this as you read about, discuss or self-perform task).

- Next, ask the soldier how different conditions and cues would affect his performance ("Is the task always performed this way?") Write down alternative methods of task performance.

Later, when you have completed your observation/interview:

- Diagram (flowchart) the task elements on a clean sheet of paper. At first you may find this difficult, but it is the best way to be sure no steps are left out.

  1. Draw a rectangle for each element, record a brief description of action in the rectangle and connect rectangles with lines to show sequence.

  2. Draw a diamond for each decision (new cues), and record a question in diamond. (This occurs whenever alternative steps occur)

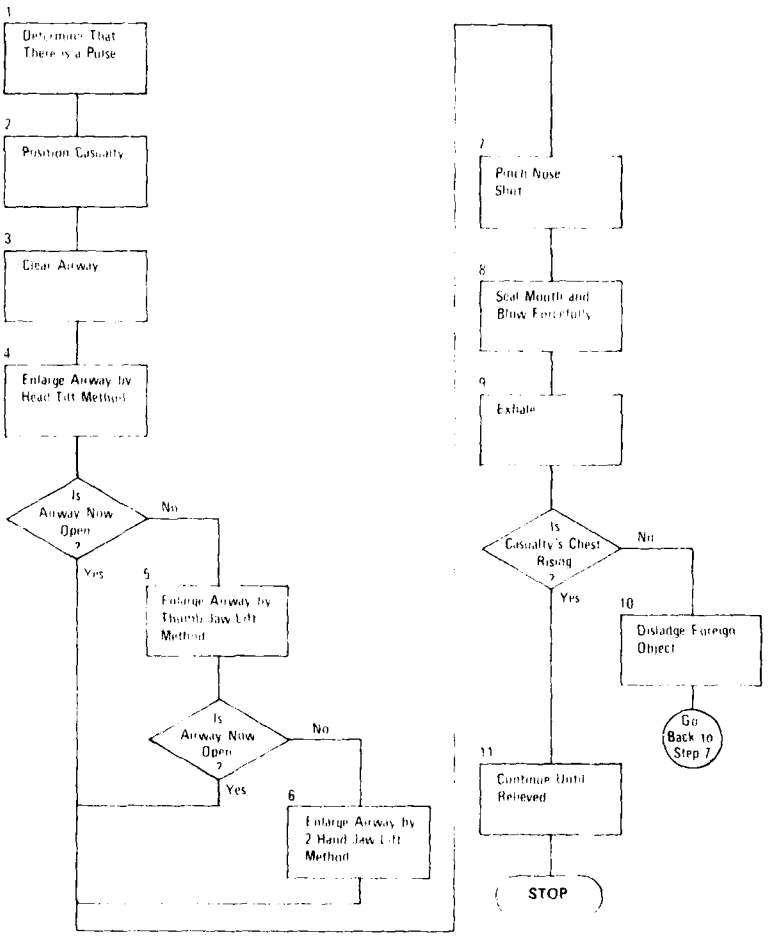
- Compare this diagram with the elements you recorded on the Task Analysis Worksheet.

- Revise your list of elements, your flowchart, or both, until you have a perfect match.

- Number each rectangle on the diagram. Follow the normal job order in so far as possible. The numerical order you assign will structure the order of your list of elements and will make your list more understandable to others.

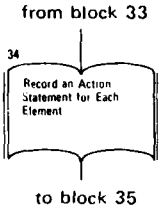
What does an alternate sequence or combination task look like when the steps have been flowcharted?

Administer artificial respiration by mouth to mouth method



NOTE 1 Substeps need not be included in the flowchart, but should be included in the list of elements if you think they are necessary to clarify the step performance. Number them according to the decimal numbering system.

NOTE 2 The decision diamonds are cues to the next step to follow, therefore they are not numbered. To see how decisions are incorporated into the elements, look at element 4 in the next example, page B.



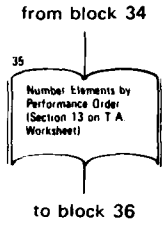
- Action statements are recorded in the order in which they are most frequently performed
- For further explanation and guidance, see below

How do I record the elements of an alternative sequence or combination task?

- Record all elements in the same order by which you numbered them on the flowchart diagram.
- Whenever an alternative step may be taken, indicate which numbers to follow by rephrasing the question in the decision diamond and directing the soldier to the step he should take. (Note the last step on page).

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
		Determine if there is a pulse. Position casualty on his back. Clear airway of obstructions. Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat. Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies. Enlarge airway--head tilt. Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



* For explanation and guidance in numbering elements, see below

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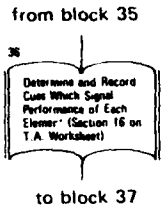
How do I record the number of elements for alternate sequence and combination tasks?

1) Check one more time to be sure the elements are in as normal order as possible for this type of task.

2) Record numbers as explained in block 31, p. B-46.

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.				
2		Position casualty on his back.				
3		Clear airway of obstructions.				
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4		Enlarge airway--head tilt.				
4.		Tilt head back so chin is in jutting-out position				
		Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



• For further explanation and guidance in determining and recording cues see below

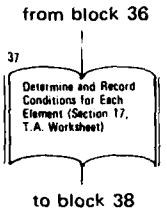
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How do I determine and record the cues for each element?

- Refer to Block 21 of this job aid for more information about initiating cues.
- Adequate task performance clearly consists of more than performing the task elements. The correct order and appropriateness of performance of each element depends upon recognition of cues and upon knowledge of the correct response to each cue. In an alternate sequence or combination task, the situation may change, which may cause the cues to change. In other words, the cue for each step will not always be the completion of the previous step as in a fixed sequence task. Decision points in the task will usually present new cues.
- Therefore, you will have two ways of recording cues:
  1) Statement of the new cue after each decision point.
  2) The words "same as task", when cue is the one which initiates the first step of task performance, or is the completion of the previous step.

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.	Same as task			
2		Position casualty on his back.	Weak pulse verified			
3		Clear airway of obstructions.	Same as task			
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4		Enlarge airway--head tilt.	Same as task			
4.1		Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



- For further explanation and guidance in determining and recording element conditions, see below.

How do I determine and record the conditions for each element?

- Block 21 explains how to determine the whole task conditions. The same guidance applies to element conditions, except now you want to be more specific.

- List only those conditions which apply to the particular element you are considering. In other words, if the task is performed in a field hospital there is no need to repeat the location with each step; however, if various surgical instruments are used they should be listed specifically with the element in which they are used.

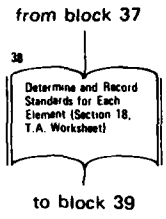
- Therefore you will have two ways of recording conditions.

  1) Statement of conditions which apply only to specific steps.

  2) The words "same as task" when conditions are same as task; or "same as (element number)" i.e., "same as step 3" when conditions have been listed sepcifically for a previous element.

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.	Same as task	Same as task		
2		Position casualty on his back.	Weak pulse verified	Other serious injuries		
3		Clear airway of obstructions.	Same as task	Same as task		
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4		Enlarge airway--head tilt.	Same as task	Same as task		
4.1		Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



• For guidance in determining and recording standards, see below

---

How do I determine and record the element standard?

- The guidance given in block 23 for whole task standards applies when you are describing standards for the separate elements.

- For some task elements there may be no observable indications that the step has been performed correctly. (This is particularly true with soft skill tasks). In these cases you may list as a standard a statement of the purpose of the step. Take this element from a supervisory task as an example:

  Element: Informs the individual concerned of the occurrence and/or purpose of the observation.

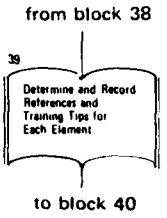
  Standard: Prevent misunderstanding on the part of the individual.

- If the element standard is clearly implied by the task standard, such as, "perform *without error*," it need not be recorded.

- Therefore, you will have two ways of recording standards:
  1) Statement of standard or purpose of step.
  2) The words "same as task" when element standard is implied by the task standard, or "same as (*step number*)" when standard is the same as a previous element.

Example

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.	Same as task	Same as task	Must locate uninjured area to take pulse	
2		Position casualty on his back.	Weak pulse verified.	Other serious injuries	Quick careful movements--avoid further injury	
3		Clear airway of obstructions.	Same as task	Same as task	Removal takes 1-5 seconds	
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4		Enlarge airway--head tilt.	Same as task	Same as task	Same as task	
4.1		Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



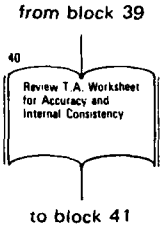
- For further explanation and guidance in determining and recording references and training tips, see below.

How do I determine and record the references and training tips for each element?

The guidance given in Block 25 of this aid applies to determining training tips and references for each element. There is only one further step: record the references by specific paragraph number, as required by TRADOC Circular 351-28.

Example:

13. Element Number	14. C E	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.	Same as task	Same as task	Must locate uninjured area to take pulse	FM 21-11, Chapter 3, Para. 1.
2		Position casualty on his back.	Weak pulse verified	Other serious injuries	Quick careful movements--avoid further injury	Severe bleeding from other injuries requires attention concurrent with attempt to restore breathing but should not be started prior to resuscitation. Use another assistant if available.
3		Clear airway of obstructions.	Same as task	Same as task	Removal takes 1-5 seconds	Para. 3
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4		Balance airway--head tilt.	Same as task	Same as task	Same as task	Para. 4
4.1		Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



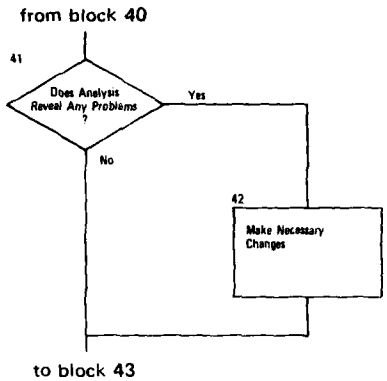
- The task analyst's review will disclose any omissions, inaccuracies and inconsistencies in the task and task element discriptions.

How do I review the Task Analysis Worksheet for accuracy and consistency?

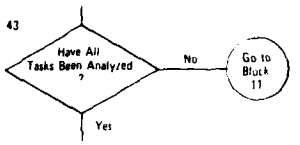
- Conduct vertical analysis
  1) First, read down the list of elements. Do they provide logical, step-by-step instructions for performing the task?
  2) Next, read down lists of element cues, conditions and standards (columns 15, 16, 17). Are they compatible with each other? Are they also consistent with the whole task cues, conditions and standards? (columns 9, 10, 11). For example, if you said steps 1, 2, and 3 had to be completed in 5 minutes each, but the whole task standard was for 10 minutes, you have to change either the standard for the whole task or the standards of the elements.

- Conduct horizontal analysis
  1) Examine each step horizontally with its cues, conditions and standards. Are they still compatible, logical and practical as a result of any changes made in vertical analysis? If not, revise appropriately.

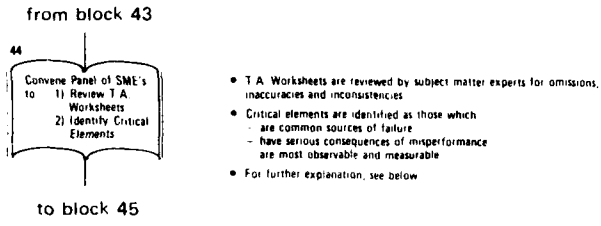
The desired result of each Task Analysis Worksheet is a physical description of "when to do it," "how to do it," and "how to know when it's done for each task."


from block 40
41
Does Analysis Reveal Any Problems ?
Yes
No
42
Make Necessary Changes
to block 43

from blocks 41 and 42



to block 44



How is SME review conducted and how are critical elements identified?

Review

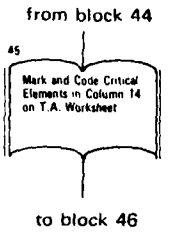
- The purpose of having an alternate (different) group of SME's review each task analysis is to provide an objective view. A panel of three SME's is sufficient. The panel should be asked to verify:
  - — that you have indeed chosen the most typical version of task performance.
  - — that your description is accurate and complete.
- Sources of SME's
  - — peers in your division
  - — course development personnel
  - — job incumbents and supervisors on post
  - — instructors

Initial Identification of Critical Elements

- **Critical elements are those steps in each task performance which will receive greater emphasis in instruction and in SQT Development.** Therefore, it is important for SME's at this stage of the ISD process to have input as to the elements (performance steps) they think should be stressed in training and testing. This is an **Initial Identification.**

- The following guidelines will be helpful in the selection of critical elements.
  1) In reviewing task elements look for the steps which:
     - are common sources of failure in performance of the task. To identify the most common sources of failure ask the question, "Why do most soldiers fail to perform this task correctly?"
     - have serious consequences of failure. Many elements in this category are related to personnel or equipment safety. To identify elements of this category, ask the question, "Would failure to perform this element properly cause serious consequences in terms of mission accomplishment, injury to personnel or damage to equipment?"
     - are the most measurable and observable indicators of task proficiency. To identify the best indicators of task proficiency, ask the question, "Which step(s) would I observe in order to be sure the task has been performed correctly?" In a product task you may only need to observe several steps, or just the last step.
  2) Panel of SME's should come to a consensus view on critical elements.

NOTE: Keep in mind that the critical elements identified at this time may be revised later in the ISD process as a result of learning analysis (the identification of independent, dependent and supportive steps), and SQT development (in which testing constraints of time, personnel, money and safety may preclude the testing of certain elements).



- Each critical element is markes with an asterisk (*) and coded in column 14 as follows
  - Common source of failure - csf
  - Serious consequences - sc
  - Most measurable, observable indicator - moi

How does the panel of SME's mark and code the critical elements?

- Each critical element identified by the panel of SME's is marked with an asterisk (*) and is coded with initials to indicate the reason it is considered critical. The code to be used is as follows:

  CSF = common source of failure

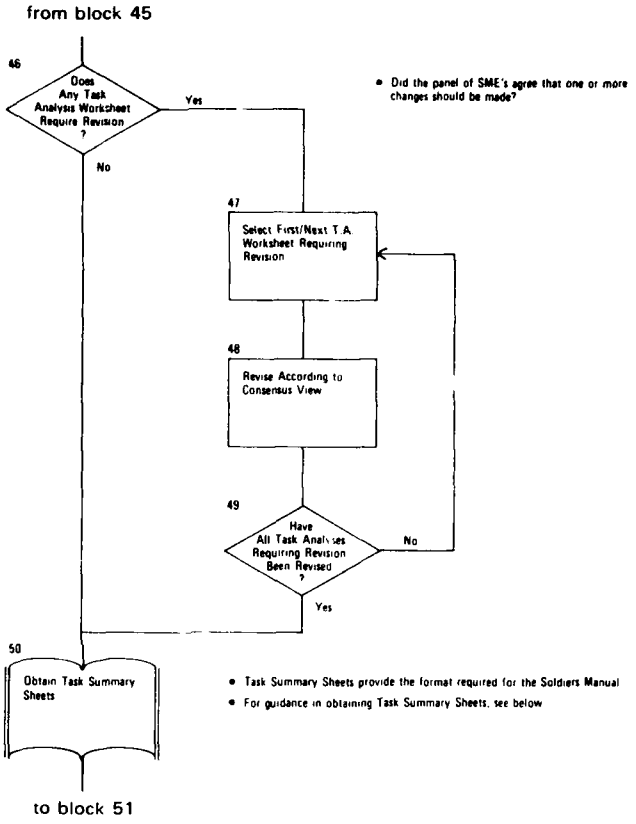
  SC = serious consequences

  MOI = most measurable, observable indicator.

- An element may be identified as critical for more than one reason. If so, code accordingly.

Example:

13. Element Number	14. C.E.	15. Elements (Steps)	16. Initiating Cues	17. Conditions	18. Standards	19. References/Tips
1		Determine if there is a pulse.				
2		Position casualty on his back.				
3	* C.S.F. S.C.	Clear airway of obstructions.				
3.1		Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat.				
3.2		Move fingers across the back of the throat with sweeping motion to remove any vomit, mucus or foreign bodies.				
4	* M.O.I.	Enlarge airway--head tilt.				
4.1		Tilt head back so chin is in jutting-out position. Place rolled blanket, poncho, etc., under casualty's head to help maintain position. If successful, go to Step 7.				



Where do I obtain a Task Summary Sheet and what does it look like when completed?

- Task Summary Sheets are available for duplication in the pocket at the end of this manual.

TASK SUMMARY SHEET

Task Number 441-184-1004

Task Administer artificial respiration by mouth-to-mouth method.

Conditions Performed in all climatic conditions, generally out doors, non-toxic atmosphere.

Standards Within 20 seconds the casualty will be examined, his air passage will be cleared, and mouth-to-mouth resuscitation will be started.

(Continued)

TASK SUMMARY SHEET (Continued)

References: FM 21-11 First Aid for Soldiers, Chapter 3

TBC 911-441-0026F Basic First Aid Measures: Restoring the Breathing

Performance Description:

1. DETERMINE IF THERE IS A PULSE

   - Locate an uninjured area to take pulse if casualty has injuries.

2. POSITION CASUALTY ON HIS BACK

   - Use quick careful movements to avoid further injury. If casualty has other serious wounds, they should be treated concurrently, if you have an assistant. However, restoring the breathing must be your first task if working alone.

3. CLEAR AIRWAY OF OBSTRUCTIONS

   - Open mouth, run fingers down the inside of lower cheeks, over base of tongue, and into throat. Move fingers across the back of the throat with a sweeping motion to remove any vomit, mucus, or foreign bodies from the mouth of the casualty.

4. ENLARGE AIRWAY

   There are three methods:

   1) Place a rolled blanket, poncho or similar object under casualty's head to help maintain this position. If this is successful, go to Step 5.

   2) Thumb jaw-lift method

      - If the head tilt method is unsuccessful, adjust the jaw to a jutting-out position by placing your thumb in the casualty's mouth. Grasp the lower jaw firmly and lift it forward. Do not attempt to hold or depress tongue. If successful, go to Step 5.

   3) Two-hand jaw-lift method

      - If the casualty's jaws are so tightly closed that the thumb cannot be inserted into the mouth, then use both hands. Grasp the angles of the lower jaw just below the earlobes. Lift the jaw forcibly forward; then open the lips by pushing the lower lip toward the chin with the thumbs.

5. PINCH NOSE SHUT

   - Pinch the nose with the thumb and index finger in order to prevent air leakage. Let this same hand exert pressure on the forehead to maintain the backward head tilt.

6. SEAL MOUTH AND BLOW FORCEFULLY

   - Take a deep breath and place your mouth around the casualty's mouth. Blow forecfully into casualty's mouth until you see his chest rise.

7. EXHALE

   - Stop blowing and remove your mouth when casualty's chest rises. Take another breath while listening for casualty's exhalation. If you hear air escape, go to Step 9. Otherwise, continue with Step 8.

8. DISLODGE FOREIGN OBJECT

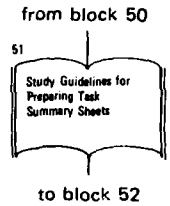
   - If airway is still not clear, then roll casualty on his side. Use the heel of your hand to deliver sharp blows between the casualty's shoulder blades. This should dislodge the foreign object. Then go back to Step 2.

9. BREATHE UNTIL RELIEVED

   - When exhalation is finished, blow in the next breath. On the first several breaths, blow rapidly and strong. Then blow in a normal, even cadence (12-20 times per minute).

NOTE 1: If your breathing has been very deep and rapid for too long a period, you may become faint, tingle, or even lose consciousness if you persist. However, if you administer only four full quick breaths, then adjust your breathing to the rate of approximately once every 5 seconds with only moderate increase in normal volume, you will be able to continue to give artificial respiration for a long period without experiencing temporary ill effects.

NOTE 2: When a casualty begins to breathe for himself, he will automatically resist resuscitation efforts. This is a sign that you can cease your efforts.



- Guidelines provide detailed guidance for completing Task Summary Sheets.
- For information, see below.

What are the guidelines for preparing Task Summary Sheets?

- **Introduction**
  - The end result of a good task analysis is the Task Summary Sheet, a specific standard format that fully describes the task for the soldier in the field. The format will accommodate any product or process task whether it is fixed sequence, alternate sequence, or combination. The Task Summary is used both to train the soldier to perform the task and to evaluate the soldier's ability to perform the task (within testing constraints).

- **Contents**
  - Whole task information includes:
    1) task number
    2) task statement
    3) conditions
    4) standards
    5) references

    (Cues are implied by the conditions.)
  - Performance description includes:
    1) Each major step in large print.
       This will help "fix" the whole procedure in the soldier's mind.
       Alternate methods for performing the same step may be given under one number. In this case it is permissible to alter the original element numbers on the Task Analysis Worksheet.
    2) One or more sentences under each step as needed to fully describe the skills and knowledges required for acceptable performance. This information is derived from the cues, conditions, standards and training tips for each step.

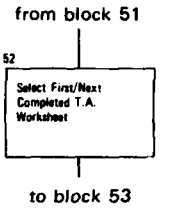
- **Level of detail for performance description.**

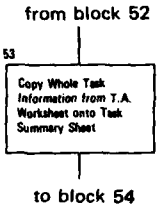
  1) Check whole task conditions to see if a job aid, technical manual, field manual, etc., is to be used by the soldier during on-the-job performance. If yes, only abbreviated descriptions of steps with their cues, conditions and standards will be included. If no, then the description you are preparing must be complete enough to be the soldier's sole source of information.

  2) Likewise, if task performance is well documented in FM's, TM's etc., which are readily available for reference, a more abbreviated task description should be given.

  3) Do not include any information that is not specifically required for task performance.

  4) Give greater emphasis to critical steps.


from block 51
52
Select First/Next Completed T.A. Worksheet
to block 53



- Whole task information includes:
  - task number
  - conditions
  - standards
  - references
- For example, see below.

What does the task summary sheet look like when task, task number, conditions, standards and references have been recorded?

Example:

TASK SUMMARY SHEET

Task Number: 441-184-1004

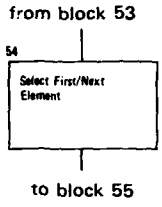
Task: Administer artificial respiration by mouth-to-mouth method.

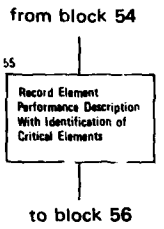
Conditions: Performed in all climatic conditions, generally out doors, non-toxic atmosphere.

Standards: Within 20 seconds the casualty will be examined, his air passage will be cleared, and mouth-to-mouth resuscitation will be started.

References: FM 21-11 First Aid for Soldiers, Chapter 3

TEC 911-441-0026F Basic First Aid Measures: Restoring the Breathing


from block 53
54
Select First/Next Element
to block 55



- Critical elements are identified on the T.A. Worksheet with asterisks (*).
- For example, see below

What does the Task Summary Sheet look like when element performance descriptions have been recorded and critical elements identified?

Performance Description:

1. DETERMINE IF THERE IS A PULSE

   - Locate an uninjured area to take pulse if casualty has injuries.

2. POSITION CASUALTY ON HIS BACK

   - *Use quick careful movements to avoid further injury.* If casualty has other serious wounds, they should be treated concurrently, if you have an assistant. However, restoring the breathing must be your first task if working alone.

* 3. CLEAR AIRWAY OF OBSTRUCTIONS

   - Open mouth, run fingers down the *inside of lower cheeks,* over base of tongue, and into throat. Move fingers across the back of the throat with a sweeping motion to remove any vomit, mucus, or foreign bodies from the mouth of the casualty.

* *4. ENLARGE AIRWAY*

   There are three methods:

   1) Place a rolled blanket, poncho or similar object under casualty's head to help maintain this position. If this is successful, go to Step 5.

   2) Thumb jaw-lift method

      - *If the head tilt method is unsuccessful,* adjust the jaw to a jutting-out position by placing your thumb in the casualty's mouth. Grasp the lower jaw firmly and lift it forward. Do not attempt to hold or depress tongue. *If successful,* go to Step 5.

   3) Two-hand jaw-lift method

      - If the casualty's jaws are so tightly closed that the thumb cannot be *inserted into* the mouth, then use both hands. Grasp the angles of the lower jaw just below the earlobes. Lift the jaw forcibly forward; then open the lips by pushing the lower lip toward the chin with the thumbs.

5. PINCH NOSE SHUT

   - Pinch the nose with the thumb and *index finger* in order to prevent air leakage. Let this same hand exert pressure on the forehead to maintain the backward head tilt.

6. SEAL MOUTH AND BLOW FORCEFULLY

   - Take a deep breath and place your mouth around the casualty's mouth. Blow forcefully into casualty's mouth until you see his chest rise.

(Continued)

TASK SUMMARY SHEET (Continued)

7. EXHALE

- Stop blowing and remove your mouth when casualty's chest rises. Take another breath while listening for casualty's exhalation. If you hear air escape, go to Step 9. Otherwise, continue with Step 8.

8. DISLODGE FOREIGN OBJECT

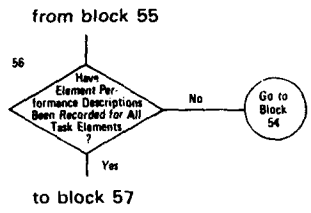
- If airway is still not clear, then roll casualty on his side. Use the heel of your hand to deliver sharp blows between the casualty's shoulder blades. This should dislodge the foreign object. Then go back to Step 2.

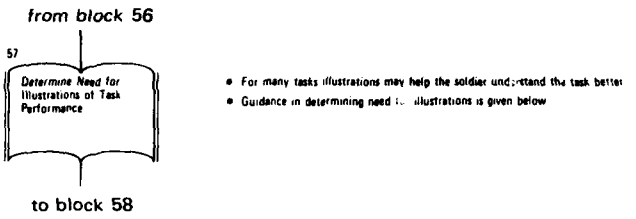
9. BREATHE UNTIL RELIEVED

- When exhalation is finished, blow in the next breath. On the first several breaths, blow rapidly and strong. Then blow in a normal, even cadence (12-20 times per minute).

NOTE 1: If your breathing has been very deep and rapid for too long a period, you may become faint, tingle, or even lose consciousness if you persist. However, if you administer only four full quick breaths, then adjust your breathing to the rate of approximately once every 5 seconds with only moderate increase in normal volume, you will be able to continue to give artificial respiration for a long period without experiencing temporary ill effects.

NOTE 2: When a casualty begins to breathe for himself, he will automatically resist resuscitation efforts. This is a sign that you can cease your efforts.


from block 55
56
Have Element Performance Descriptions Been Recorded for All Task Elements ?
No
Go to Block 54
Yes
to block 57



How do I determine the need for illustrations?

- Illustrations are a very important component of the task summary. Nothing is more dull and uninteresting to a young soldier than page after page of text. Illustrations should be used whenever possible to:
  a) reduce detail burden in the performance description.
  b) emphasize points in the performance description.
  c) motivate soldiers to read their Soldier's Manuals, especially when the Soldier's Manual is the sole source of information for task performance.

* • Examples of how illustrations can reduce detail burden and emphasize points in the text follow. Greater use of illustrations undoubtedly contributes to the soldier's motivation.

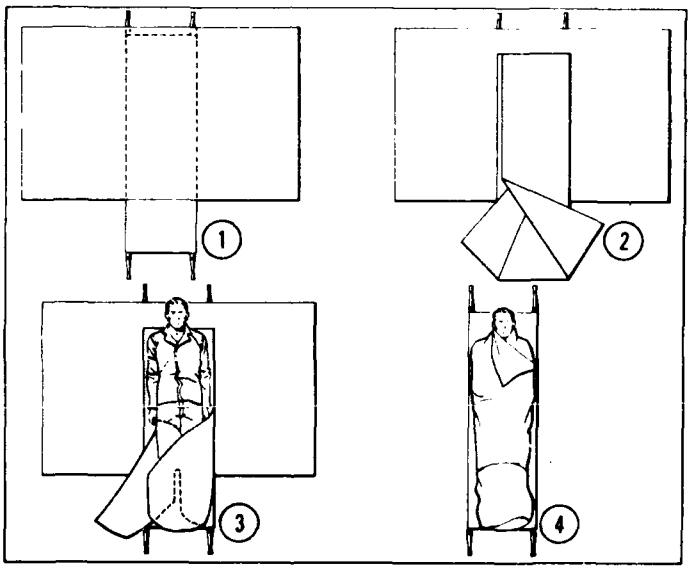
*The illustrations shown on pages B-77 thru B-86 were reproduced from the *Guidebook for the Development of Army Training Literature*, U.S. Army Research Institute, special publication P-75-3, November 1976.

1) NEED FOR ILLUSTRATIONS: To Clarify Performance Description

How you do it: Integrate text with visuals (self-contained illustrations).

When you do it: You are writing a description of how to do something; for example, put something together or take it apart. You want to convey action by words but parts and location by visual aids.

Example:



1. Place the first blanket lengthwise across litter with the blanket edge close to or just beyond the head end of litter.
2. Fold second blanket in thirds, lengthwise, and place over the first, the upper edge of this folded blanket being about 10 inches below the upper edge of the first blanket. The exact position of the second blanket depends upon the height of the patient. (Place lower on litter for taller men.) Open folds of second blanket for about 2 feet at the foot end.
3. To wrap patient, place him in position on the second blanket. Bring bottom of blanket up over the patient's feet, with a small fold between the feet. Tuck the two open folds closely over and around the feet and ankles.
4. Finally, wrap first one, then the opposite, side of the first blanket over patient.

Figure 84. Dressing the litter (with two blankets).

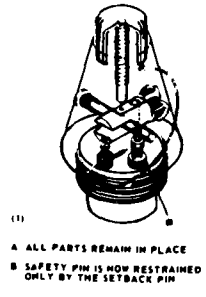
TASK: Dress a litter with two blankets.

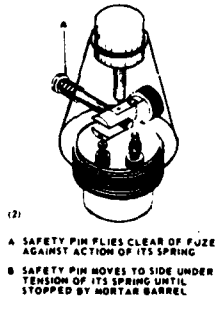
2) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Integrate text with visuals (self-contained illustrations)

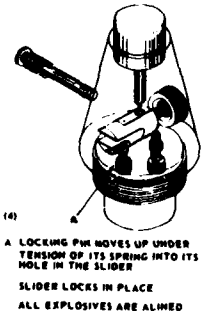
When you do it: You are writing a description of how something works in task performance. You want to identify its component parts, what happens at each stage, and the purpose of each part.

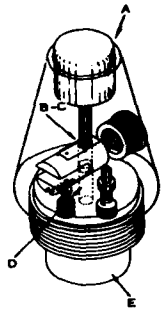
Example:











(5) ACTION ON IMPACT.

A. STRIKER AND FIRING PIN ARE FORCED IN AGAINST ACTION OF THE SPRING.

B. FIRING PIN CRUSHES DETONATOR.

C. DETONATOR EXPLODES.

D. BOOSTER LEAD EXPLODES.

E. BOOSTER CHARGE EXPLODES TNT FILLER OF CARTRIDGE DETONATES.

Figure 19. Functioning of M524B8 fuse.

Preparation for Firing.

(1) Turn the slot in the striker (at the nose of the fuze) to aline with the SQ index or the D index on the fuze body, depending upon which action of the fuze is desired.

(2) Remove the safety pull wire just prior to insertion of the round into the mortar.

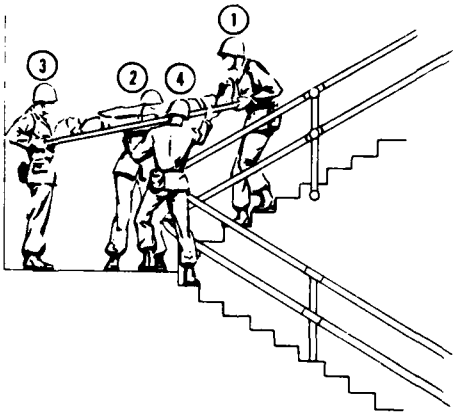
TASK: Fire an 81mm mortar.

3) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Integrate text with visuals (self-contained illustrations).

When you do it: You are writing a description of what each member of a team does when performing a task requiring close cooperation and coordination.

Example:



No. 1 and No. 3, with No. 2 and No. 4 assisting, then lift litter over banister to second flight of stairs.

Figure 98. Carrying litter upstairs where landings are small (step three).

TASK: Carry litter upstairs where landings are small.

4) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Use visuals to expand on information (complementary use)

When you do it: You are writing to tell the soldier when or how he should use certain equipment or techniques in task performance.

Example:

The vertical half-rhombic antenna (fig. 47) and the wave antenna (fig. 48) are the two field-expedient directional antennas that can be used with the FM radio sets. These antennas are directional and will transmit and receive in the direction of the terminated end. If the transmitter loads poorly, add to or subtract from the length of the antenna. These antennas will normally increase the rated operating range of the FM sets.

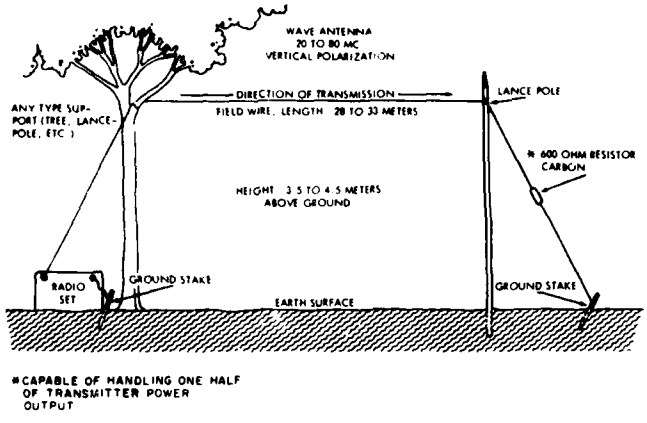


Figure 48. Wave antenna.

TASK: Transmit and receive messages on an FM radio set.

5) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Use visuals to expand on information (complementary use).

When you do it: You want the performance description to carry the information about *when* the soldier will use a technique and need only a brief example or description of *how* the technique is performed.

Example:

Measuring Angles. When instruments are not available, measure angles by the hand or fingers held at arm's length from the eye. Determine the angle subtended by each before you go *into* the field. These angles may vary from the angles shown in figure 43.

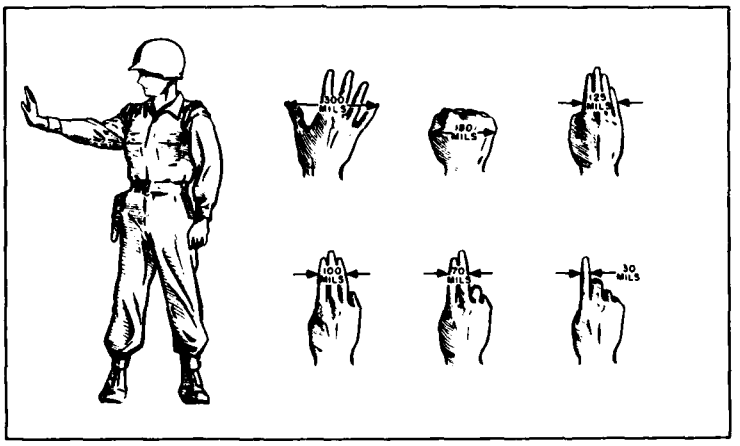


Figure 43. Measurement of angles by hand and fingers.

TASK: Select a radar site.

SUBTASK: Measure angles by hand and fingers.

6) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Use visuals to expand on information (complementary use)

When you do it: You want the soldier to identify the different types of a general class of equipment he will use in task performance.

Example:

b. Several types of transmitting antennas are shown in figure 33.

(1) A is a long-wire nonresonant antenna that is used in large fixed-station installations.

(2) B is a half-wave Hertz antenna that is fed by a resonant (tuned) feeder line from the transmitter.

(3) C is an end-fed, vertical, modified Marconi antenna, also called a whip antenna.

(4) D is a loop antenna that radiates a strong signal in some directions and almost no signal in other directions.

(5) E is a Marconi antenna.

(6) F is a half-wave Hertz antenna that is fed by a nonresonant (untuned) feeder line from the transmitter.

(7) G is a fixed-station radiator that may be hundreds of feet high.

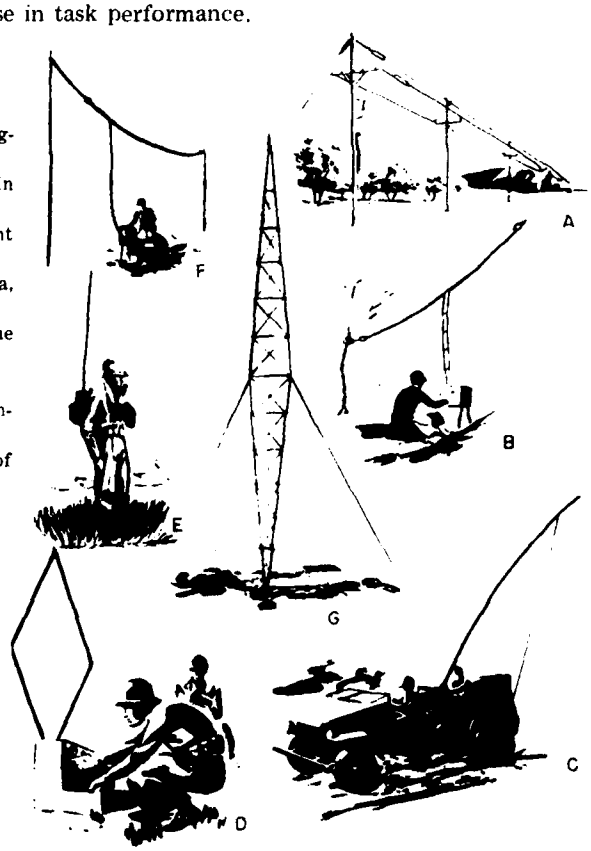


Figure 33. Types of transmitting antennas.

TASK: Transmit and receive messages on an FM radio set.

7) NEED FOR ILLUSTRATIONS: To Clarify Performance Description (Cont'd)

How you do it: Use visuals to expand on information (complementary use).

When you do it: You are describing a task step which requires the use of special terms. You want to keep the performance description focused on how, but also give the soldier a definition of terms.

Example:

Adjustment of Sheaf

It may be necessary for the observer to adjust the sheaf of a section to correct for any errors made in laying the section parallel or to obtain a special sheaf. The front covered by any sheaf is the width of the sheaf plus the width of a burst. The types of sheaves which may require adjustment are parallel and special. A special sheaf may be converged, open, or closed (*fig.* 45).

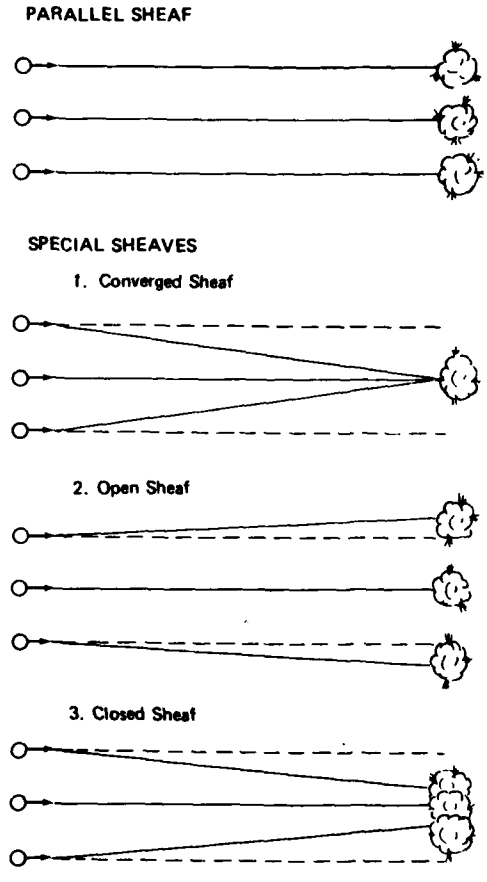


Figure 45. Types of sheaves.

TASK: Select a radar site.

8) NEED FOR ILLUSTRATIONS: To Emphasize Points in the Performance Description

How you do it: Visually confirm information.

When you do it: You are writing a performance description for a task element. You want to <u>show</u> the soldier how it should look if he does it correctly.

Example:

Select an aiming point beyond the range to any likely target. With the eye held several inches behind the breech, aline the axis of the bore on the aiming point by elevating and traversing the rifle.

Look through the telescope and insure that the boresight cross of the sight reticle is alined on the same aiming point. If the boresight cross is not alined, bring it to the aiming point by rotating the elevation and azimuth correction screws with the screwdriver end of the combination wrench. Recheck the alinement through the bore and through the sight. When the sight and the bore are properly alined on the aiming point, the 90mm rifle is boresighted (fig. 42).

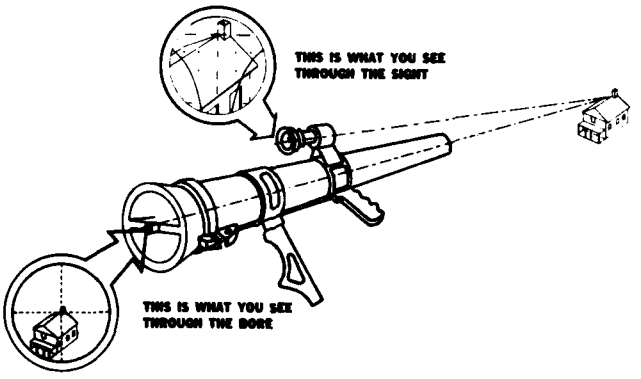


Figure 42. Sight picture in boresighting.

TASK: Zero an M16A1 rifle.

9) NEED FOR ILLUSTRATIONS: To Emphasize Points in the Performance Description (Cont'd)

How you do it: Visually confirm information.

When you do it: You are writing a performance description and want to help the soldier visualize the equipment he must use in task performance.

Example:

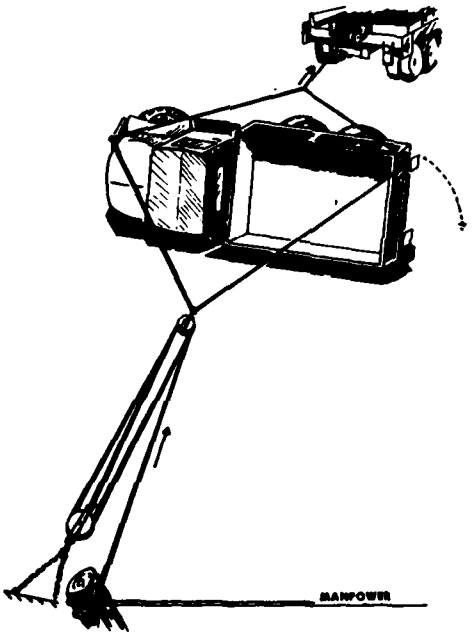


Figure 99. Recovery of overturned truck.

TASK: Recover an overturned truck.

10) NEED FOR ILLUSTRATIONS: To Emphasize Points in the Performance Description (Cont'd)

How you do it: Highlight or summarize main points.

When you do it: You are describing a task which involves several steps, and each step has supporting detail. You want to emphasize the main point of some or all of the steps.

Example:

Categories of Maintenance

There are four broad categories of maintenance (fig. 59) that have been defined by the Department of Defense for all services. They facilitate the assignment of maintenance missions and responsibilities within the Department of Defense.

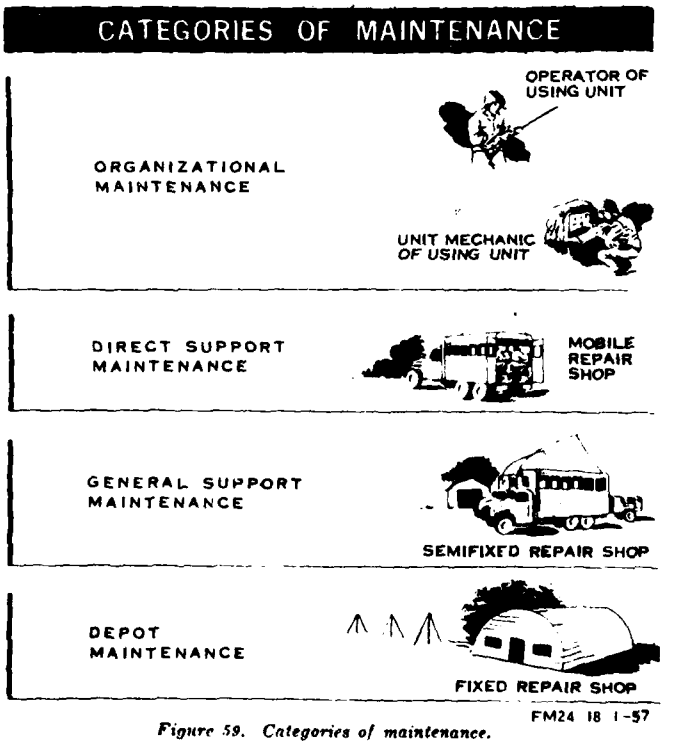
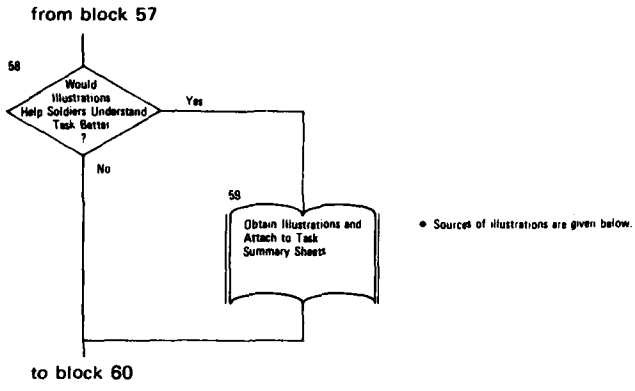


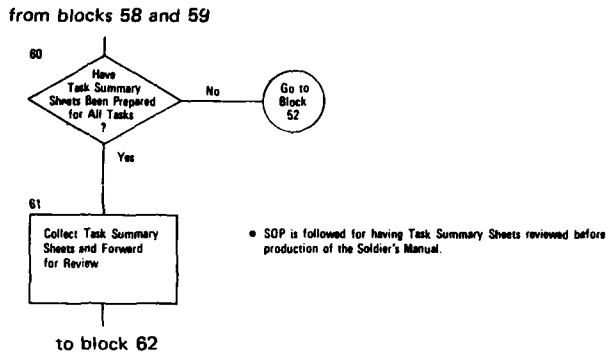
Figure 59. Categories of maintenance.

SUBTASK: Identify the appropriate category of maintenance

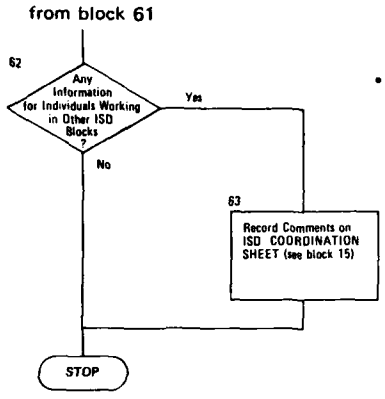


What sources are available for obtaining illustrations?

Source	Remarks
• Field Manuals and Technical Manuals	Excellent
• DAPAM 108-1 Index of Army Motion Pictures and Related Audio-Visual Aids	Excellent
• DAPAM 310-12 Index and Description of Army Training Devices	Good
• Course materials: Correspondance course lessons and materials used in resident courses, such as graphs, charts, etc.	Good
• DAPAM 310-3 Index of Doctrinal, Training, and Organizational Publications (Firing Tables and Trajectory Charts).	Good

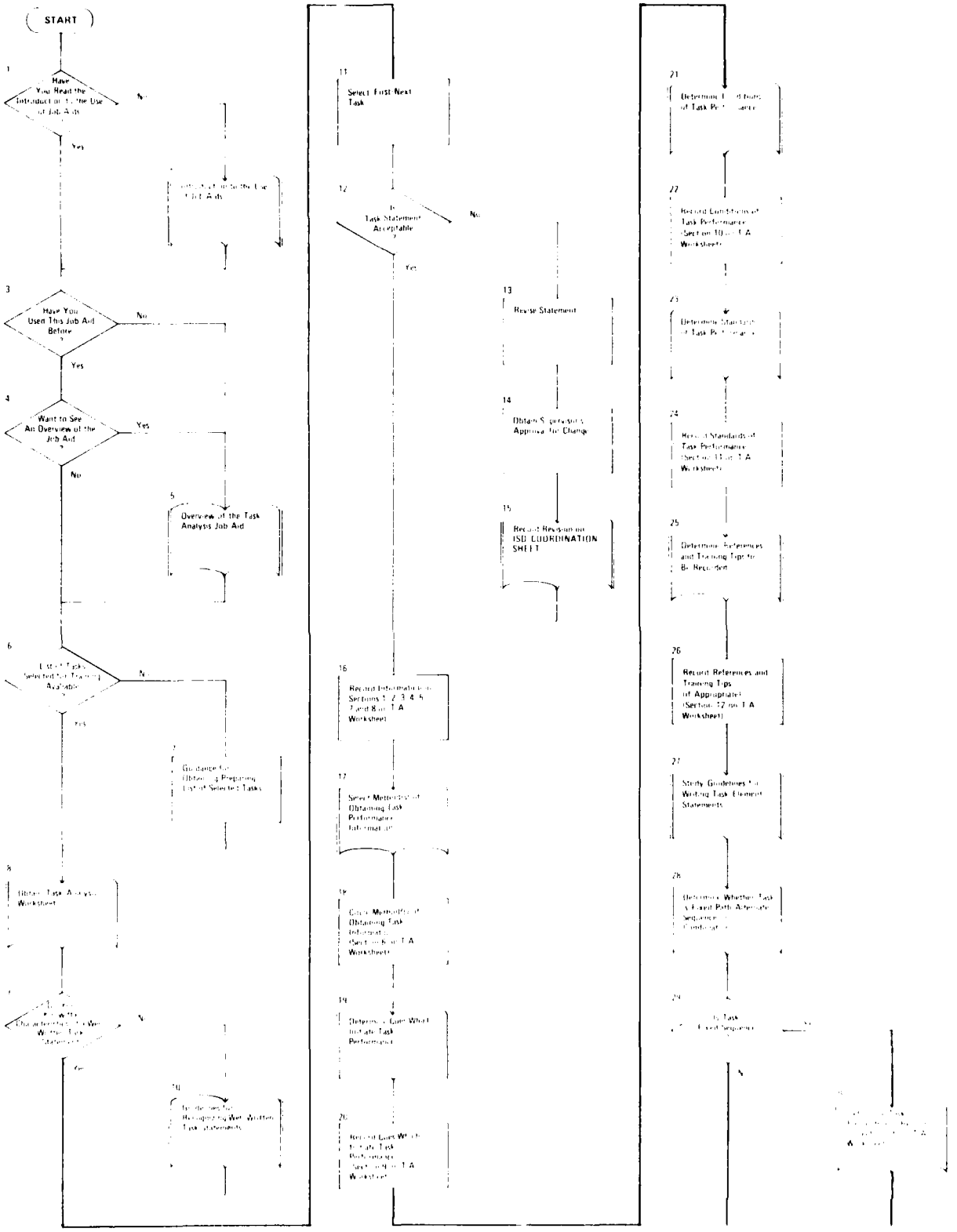


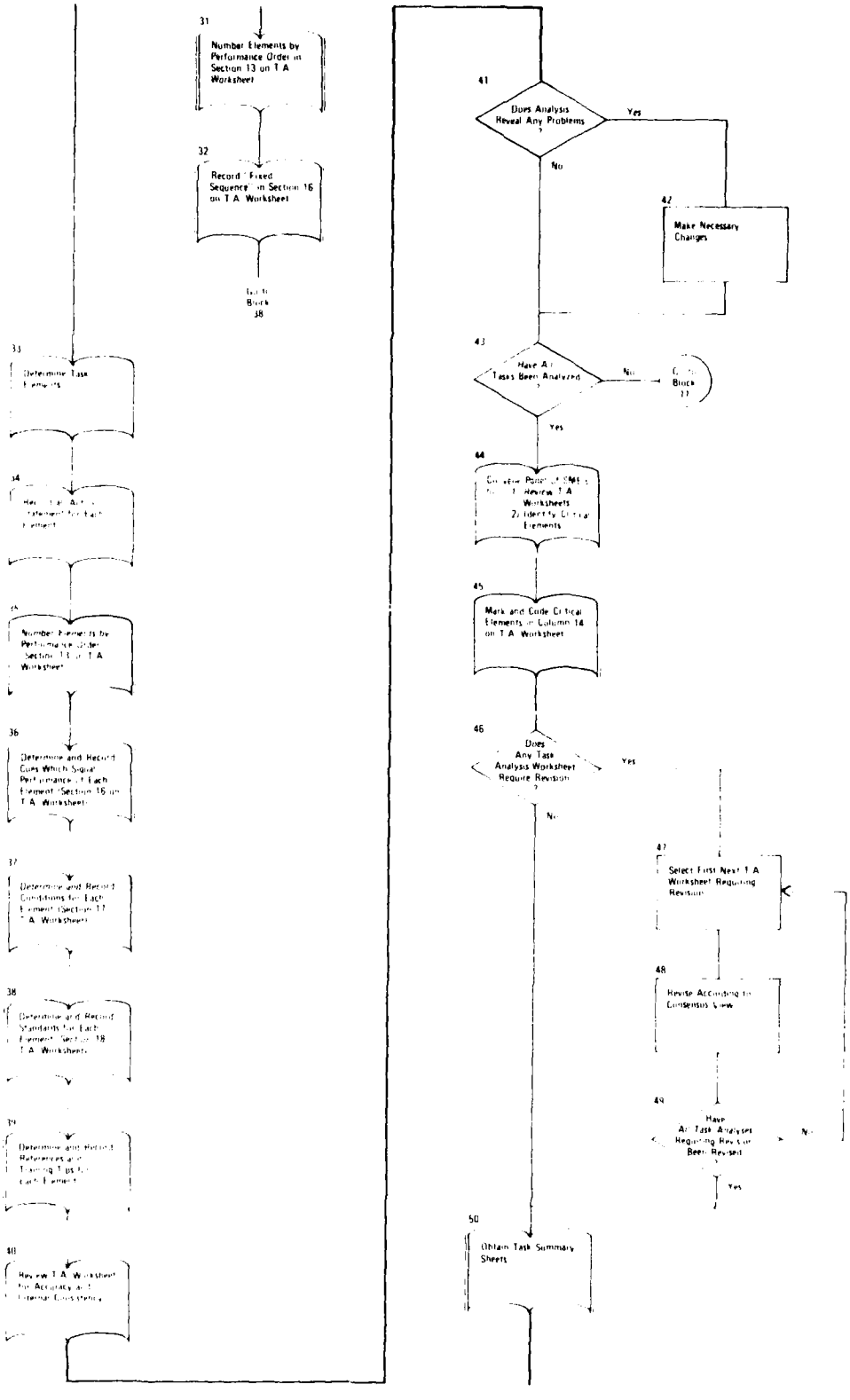
- SOP is followed for having Task Summary Sheets reviewed before production of the Soldier's Manual.

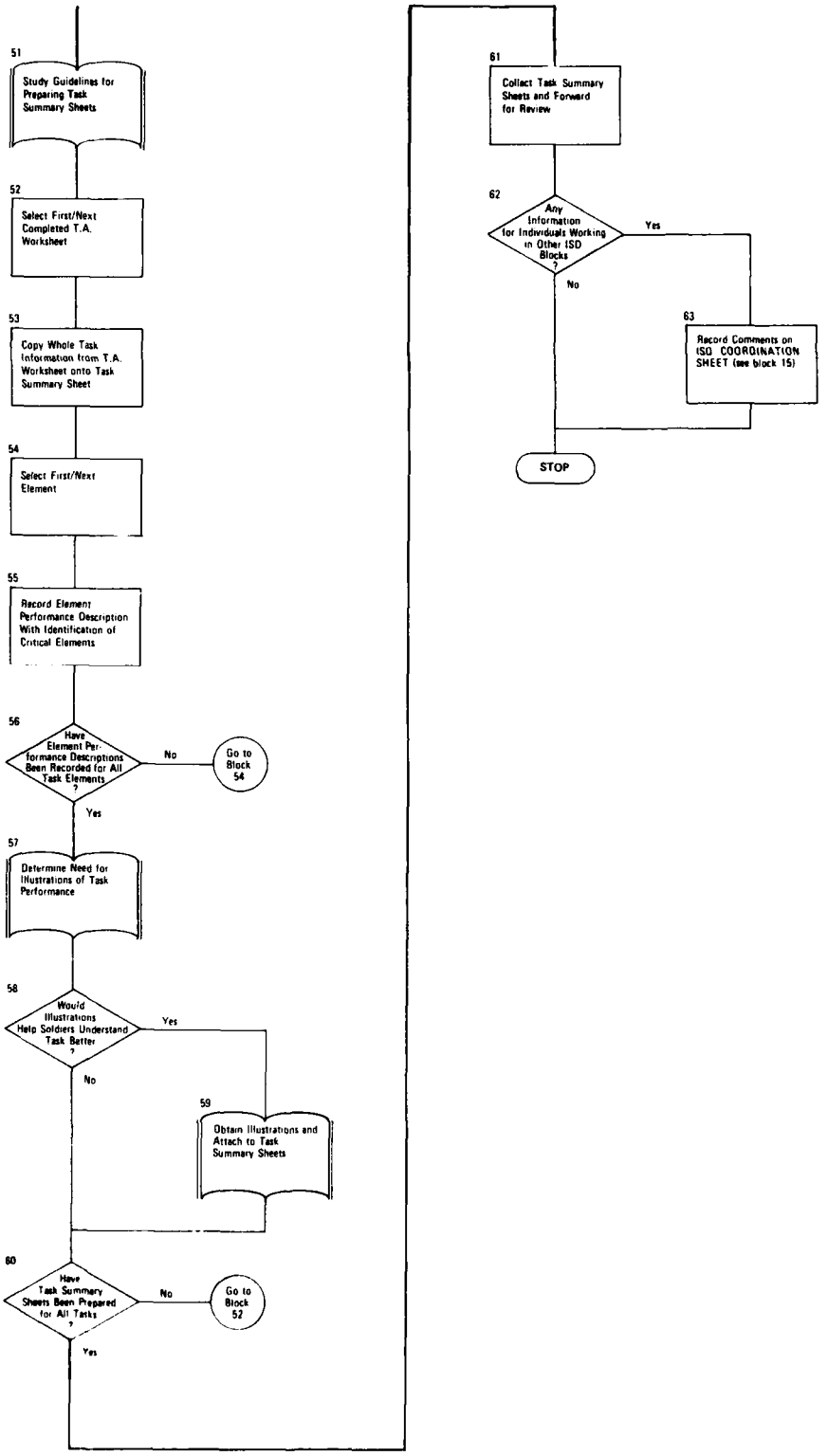


- During the task analysis process information may have been obtained that would be useful to persons who performed activities that fed into the task analysis process. Similarly, information may have been obtained that would be useful to persons who *will* be engaged in the ISD steps that follow this one.

- Purpose of ISD COORDINATION SHEET is explained in block 15 of that job aid.


START
1
Have You Read the Introduction to the Use of Job Aids
No
Yes
3
Have You Used This Job Aid Before
No
Yes
4
Want to See An Overview of the Job Aid
Yes
No
5
Overview of the Task Analysis Job Aid
6
Yes
7
8
Obtain Task Analysis Worksheet
9
No
Yes
10
11
Select First/Next Task
12
Task Statement Acceptable
No
Yes
13
Revise Statement
14
Obtain Supervisor's Approval for Change
15
Record Revision on ISD COORDINATION SHEET
16
Sections 1, 2, 3, 4, 5, 7 and 8 on T A Worksheet
17
18
Obtaining Task Information (Section 6 on T A Worksheet
19
Determine Cues Which Indicate Task Performance
20
21
22
Record Consistency of Task Performance (Section 10 on T A Worksheet)
23
24
Record Standards of Task Performance (Section 11 on T A Worksheet)
25
Determine References and Training Topics to Be Recorded
26
Record References and Training Tips (if Appropriate) (Section 12 on T A Worksheet)
27
Study Guidelines for Writing Task Element Statements
28
29
N


31
Number Elements by Performance Order in Section 13 on T A Worksheet
32
Record Fixed Sequence in Section 16 on T A Worksheet
Go to Block 38
33
Determine Task Elements
34
Number Elements by Performance Order Section 13 on T A Worksheet
36
Determine and Record Cues Which Signal Performance of Each Element (Section 15 on T A Worksheet)
37
Determine and Record Conditions for Each Element (Section 17 T A Worksheet)
38
Determine and Record Standards for Each Element (Section 18 T A Worksheet)
39
Determine and Record References and Training Tasks for Each Element
40
Review T A Worksheet for Accuracy and Internal Consistency
41
Does Analysis Reveal Any Problems ?
Yes
No
42
Make Necessary Changes
43
Have All Tasks Been Analyzed ?
No
Go to Block 17
Yes
44
Review Points of Omission 1) Review T A Worksheets 2) Identify Critical Elements
45
Mark and Code Critical Elements in Column 14 on T A Worksheet
46
Does Any Task Analysis Worksheet Require Revision ?
Yes
No
47
Select First Next T A Worksheet Requiring Revision
48
Revise According to Consensus Given
49
Have All Task Analyses Requiring Revision Been Revised ?
No
Yes
50
Obtain Task Summary Sheets


51
Study Guidelines for Preparing Task Summary Sheets
52
Select First/Next Completed T.A. Worksheet
53
Copy Whole Task Information from T.A. Worksheet onto Task Summary Sheet
54
Select First/Next Element
55
Record Element Performance Description With Identification of Critical Elements
56
Have Element Performance Descriptions Been Recorded for All Task Elements ?
No
Go to Block 54
Yes
57
Determine Need for Illustrations of Task Performance
58
Would Illustrations Help Soldiers Understand Task Better ?
Yes
No
59
Obtain Illustrations and Attach to Task Summary Sheets
60
Have Task Summary Sheets Been Prepared for All Tasks ?
No
Go to Block 52
Yes
61
Collect Task Summary Sheets and Forward for Review
62
Any Information for Individuals Working in Other ISD Blocks ?
Yes
No
63
Record Comments on ISD COORDINATION SHEET (see block 15)
STOP

JOB AID FOR
ANALYZING EXISTING COURSES

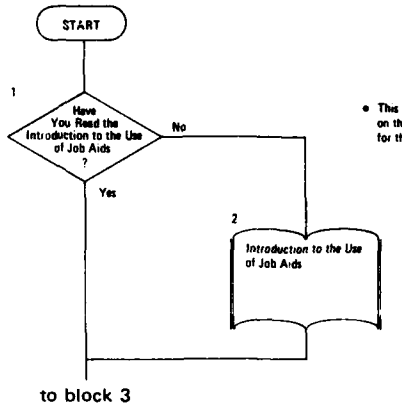
ISD I.4

Manual

This is the 3rd in a series of ISD Job Aids for use in instructional design and development. This volume is to be used as a supplement to the primary document "Job Aids: Descriptive Authoring Flowcharts ISD I.4 Analyze Existing Courses." The flowchart document will direct you to specific guidance, examples, and references provided in this volume. If you do not have the primary flowchart document, request it from your supervisor.

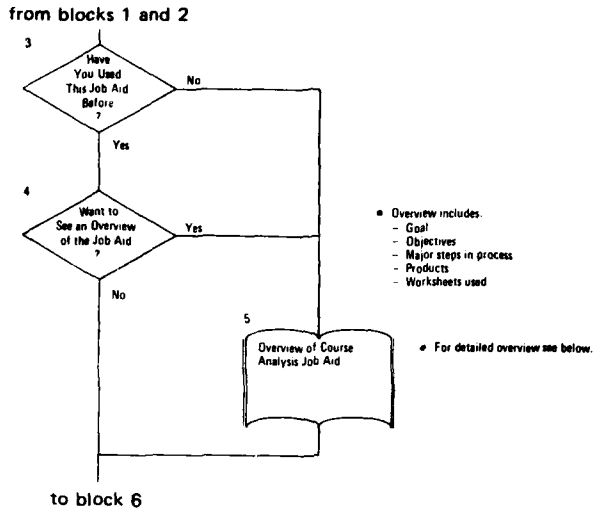
The wording in this manual should not be construed to discriminate between the sexes. In order to avoid a repetitious use of the terminology, "he/she," the terms, "he," "him," and "his," as well as "men," are intended to include both the masculine and feminine gender. Any exceptions to this usage will be so noted.

ISD 1.4 Analyze Existing Courses



- This introduction provides the user with instruction on the basic structure of the Job Aids and guidance for their use.
- *Refer to Introduction.*

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What is the Existing Course Analysis Job Aid all about?

- **GOAL**

  — The purpose of this aid is to eliminate duplication of effort in several ISD processes. Thus it contributes to one of the overall goals of the IPISD program—to increase the cooperative development and use of training throughout the military services. By analyzing existing courses you can accomplish the following:

  — the generation of an initial task list for a particular MOS
  — the identification of suitable courses for training
  — the identification of courses, or parts of courses, which may be suitable after revision by course development personnel.

  In other words, when suitable courses are found, much of the job analysis effort can be eliminated (i.e., ISD, Blocks I.1, I.2 and I.3 of the IPISD process), as well as much of the course design and development effort (Phases II and III).

  Additionally, the courses which are found suitable for training become part of the input to the training materials/references section of the Commander's and Soldier's Manuals.

- **OBJECTIVES**

  — Given an existing course, analyze its development documentation and determine if the course, or part of it, is useful in training development.

  — Given a course which has been developed according to ISD procedures (if one is located) derive an initial task list for the MOS/Skill Level you are analyzing.

• OVERVIEW OF MAJOR STEPS IN ANALYZING EXISTING COURSES

Step 1. Locate existing courses appropriate for MOS for which you are developing training.

Step 2. Locate their course development documentation.

Step 3. Determine if front-end analysis was conducted by acceptable ISD procedures.

Step 4. List tasks included in acceptable courses on Task Listing Sheet.

Step 5. Determine if course requires revision of performance description (performance measures), terms and examples, or if validation is required.

Step 6. Make recommendations for revision/validation.

Step 7. Identify validated courses on Task Listing Sheet and submit to persons responsible for deriving a task list and listing references in the Soldier's Manual.

Step 8. Identify useful parts, if complete course is rejected.

• WORKSHEETS USED

— Catalog Review Sheet, shown on page C-7.

— Existing Course Analysis Sheet—front and back sides of completed form are shown on pages C-8 and C-9.

— Task Listing Sheet, shown on page C-10.

- **PRODUCTS**

  — This job aid will result in:

  1) A listing of all courses which initially seem appropriate to this MOS and the catalogs in which these courses were located.

  2) An analysis sheet for each course indicating whether or not revisions are required, and if so, which ones, (contributes to course development effort).

  3) A verified list of tasks taught in each appropriate course indicating if course is suitable as a reference for those tasks in the Soldier's Manual/ Commander's Manual.

- **DESCRIPTIVE FLOWCHART**

  — The flowchart on pages C- thru C- shows the major steps in the use of the Job Aid for Analyzing Existing Courses. The flowchart will be useful to you in getting a clear picture of the overall process used in this job aid. A more completely described flowchart is provided in Job Aids: Descriptive Authoring Flowcharts, pages C-3 thru C- .

ISD I.4 Analyze Existing Courses

CATALOG REVIEW SHEET

Name/Office Symbol SFC Jose Gonzales/ITAD Date 9/25/78

Column 1 CATALOG TITLE	Column 2 COURSE NO	Column 3 COURSE TITLE
Catalog of Air Force Training Courses	5AZY902X0	Aeromedical Evacuation Technician
	J3ABR90230 000	Medical Service Specialist
	J3ABR90232 000	Operating Room Specialist
	~~J3ABR90270 000~~	~~Medical Service Technician - Independent Duty~~
	J3AZR90270 001	Medical Service Technician
	J3AZR90270 002	Medical Service Technician - Vocational Nurse

ISD I.4 Analyze Existing Courses

EXISTING COURSE ANALYSIS SHEET

(ECA Sheet)

IDENTIFICATION

Your Name/Office Symbol: SFC Jose Gonzales — Date of Review: 9/25/78

Course Title: Basic First Aid for Soldiers

Course No: AHS 263 — Date of Course Publication: 1975

Office Symbol/AUTOVON of Course Author(s): MEDTD/399

SECTION A: FRONT-END ANALYSIS (FEA)

	Yes	No
1. Are Equipment, doctrine, manpower and personnel systems essentially the same as when Front-end Analysis was conducted?	✓	
2. If this was an existing job, did job data sources include on-site interviews and observations and/or questionnaire survey. If this was a new job did the job data sources include a panel of experts?	✓	
3. Were tasks analyzed according to their elements, cues, conditions and standards?	✓	
4. Was selection of tasks based on generally the same criteria as used by your command in critical task selection?	✓	

SECTION B: COURSE CONTENT

	Yes	No
5. Are performance descriptions (performance measures) reasonably well developed for this MOS?	✓	
6. Are examples and terminology appropriate?		✓

SECTION C: VALIDATION

	Yes	No
7. Is validation documentation acceptable for your target population?	✓	

SECTION D: RECOMMENTATIONS FOR REVISIONS OF PERFORMANCE DESCRIPTIONS (Task number and Suggested Change)

Task 051-191-1005	Describe CPR procedures.
Task 198-236-1090	Task description does not directly address the user. State what the soldier will see, what he does, and how he does it.
Task 733-971-3000	Too general, make procedures more specific.
Task 341-508-4113	Time to accomplish task should be changed from 2 minutes to 3 minutes for skill level 1 soldiers.

SECTION E: RECOMMENTATIONS FOR REVISIONS OF TERMS AND EXAMPLES (Suggested Change)

Change term "systems engineering of training" to "instructional systems development of training."

Include women soldiers in illustration 2-B.

SECTION F: USEFUL PARTS (List any parts of course which should be incorporated into new courses)

1. One 10-minute 35 mm slide presentation demonstrating installation of the tail rotor gear box.
2. One set of transparencies demonstrating the maintenance operational check of the main transmission oil system.
3. Student handout describing procedures for troubleshooting the main transmission oil system.
4. Lecture script entitled "Components and Troubleshooting Procedures," explaining the relationships between the components of the main transmission oil system and the procedures for troubleshooting the system.
5. Student outline describing the components of the main transmission oil system.
6. Set of schematic 35 mm slides demonstrating procedures for inspecting the main transmission oil system for external evidence of damage.

ISD 1.4 Analyze Existing Courses

TASK LISTING SHEET

Your Name/Office Symbol: SFC Jose Gonzales Date: 9/25/78

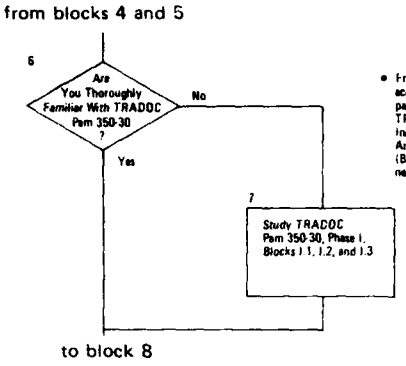
MOS BEING ANALYZED

MOS: 12B Skill Level: 1

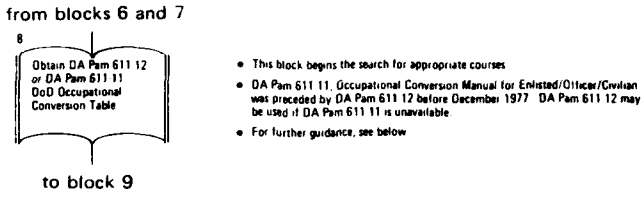
COURSE BEING REVIEWED

Course Title: Basic First Aid for Soldiers Course No.: AHS 263

Tasks	Not Relevant
App y the four life-saving measures.	
Administer artificial respiration.	
Immobilize fractures.	
Perfo m first aid for special wounds.	
Apply first aid measures for burns.	
Apply preventive measures to reduce climatic injuries.	



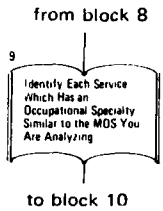
- Front-end analysis must have been accomplished by acceptable ISD procedures before judgement can be passed as to whether an existing course can be used. TRADOC Pam 350-30, Interservice Procedures for Instructional Systems Development (IPISD) Phase I Analyze, describes front-end analysis procedures (Blocks I.1, I.2, and I.3). The user of this job aid needs a thorough familiarity of these IPISD Blocks.



What is DA Pam 611-12 or 611-11 and where can I find it?

- The DoD Occupational Conversion Manual is a compilation of all enlisted officer, and civilian occupational specialties in use in the Armed Services, arranged under a common DoD occupational grouping and numerical coding system.

- DA Pam 611-12 or 611-11, Department of Defense (DoD) Occupational Conversion Manual, is available through your supervisor, MOS library, or school library.



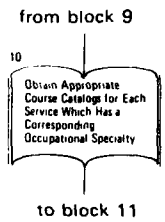
• For guidance in identifying the common DoD occupational groups, see below.

How do I identify which military service has an occupational specialty similar to the one I am analyzing?

1. Locate the definitions of occupational groupings.

2. Using the occupational group and area numbers, locate the occupational specialty you are interested in.

3. Note which services have that occupational specialty. These services are therefore likely to have training courses for their personnel in that specialty.

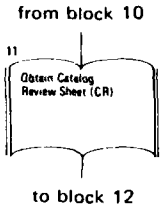


- Course catalogs from each service having a corresponding occupational specialty should be examined
- Course catalogs for each military service are available through the MOS or school library
- For a listing of catalogs, see below

What course catalogs are available?

- **Army**
  1) DA Pam 351-4, U.S. Army Formal Schools Catalog
  2) DA Pam 351-20, Announcement of Army Correspondence Courses
- **Air Force**
  1) AFM 50-5, USAF Formal Schools Catalog
  2) EC IRP 50-1, Extension Course Institute Catalog
  3) Catalog of Air Force Training Courses
- **Navy**
  1) NAVEDTRA 10500, Catalog of Navy Training Courses
  2) NAVEDTRA 10061-AL, List of Training Manuals and Correspondence Courses
- **Marines**
  1) MC0-P1500.12F, Marine Corps Formal School Catalog
  2) MC10-P1550.1, Marine Corps Institute Catalog

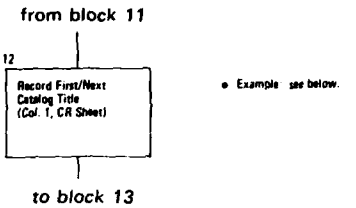
NOTE: The TEC lesson catalog is not listed here. Because TEC lessons generally cover a single task they are not as useful for generating a task list as part of the original job analysis.



- The title, number, etc. of Course Catalogs and candidate courses described in the catalog will later be recorded on the Catalog Review Sheet (CR)
- For guidance in obtaining CR Sheet, see below

Where do I obtain the Catalog Review (CR) Sheet and what identification information is needed?

- The Catalog Review Sheet (CR Sheet) is available for duplication in the pocket at the end of this manual.
- Record on the top of the CR Sheet the following:
  - Name/Office Symbol
  - Date
- To see a sample of a CR Sheet refer to page C-7.



• Example see below.

What does the Catalog Review Sheet look like when catalog titles have been recorded?

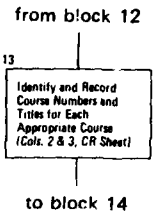
Example:

ISD I.4 Analyze Existing Courses

CATALOG REVIEW SHEET

Name/Office Symbol SFC Jose Gonzales/ITAD Date 9/25/78

Column 1 CATALOG TITLE	Column 2 COURSE NO	Column 3 COURSE TITLE
Catalog of Air Force Training Courses		



- Course descriptions in the Catalog are examined. If they appear to have application to the ARMY MOS their number and title is recorded in columns 2 & 3 so that they can later be obtained and examined in detail.
- *Example: see below.*

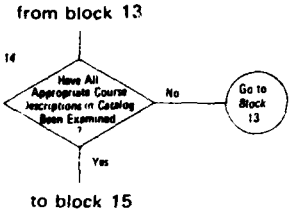
Example:

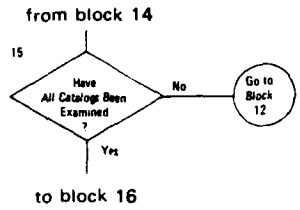
ISD I.4 Analyze Existing Courses

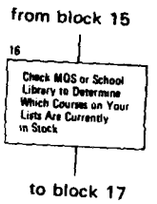
CATALOG REVIEW SHEET

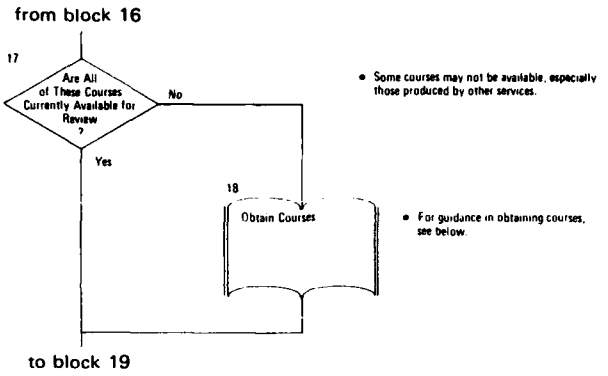
Name/Office Symbol SFC Jose Gonzales/ITAD Date 9/25/78

Column 1 CATALOG TITLE	Column 2 COURSE NO	Column 3 COURSE TITLE
Catalog of Air Force Training Courses	5AZY902X0	Aeromedical Evacuation Technician
	J3ABR90230 000	Medical Service Specialist
	J3ABR90232 000	Operating Room Specialist


from block 13
14
Have All Appropriate Course Descriptions in Catalog Been Examined ?
No
Go to Block 13
Yes
to block 15

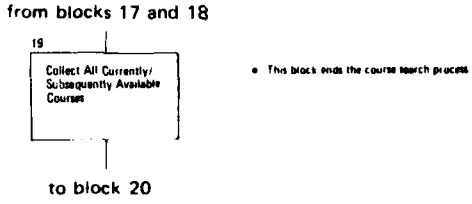

from block 14
15
Have All Catalogs Been Examined ?
No
Go to Block 12
Yes
to block 16


from block 15
16
Check MOS or School Library to Determine Which Courses on Your Lists Are Currently in Stock
to block 17

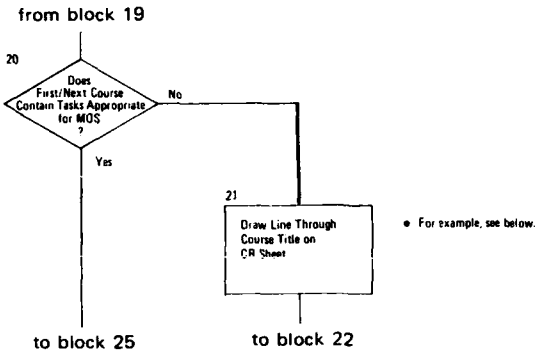


How do I obtain courses which are not currently available in the library?

- Order these courses through the MOS library, school library, or directly from the proponent school.



- This block ends the course search process



What does the Catalog Review Sheet look like when a course has been deleted?

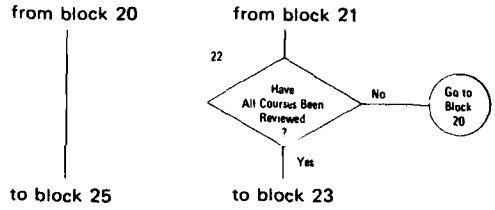
Example:

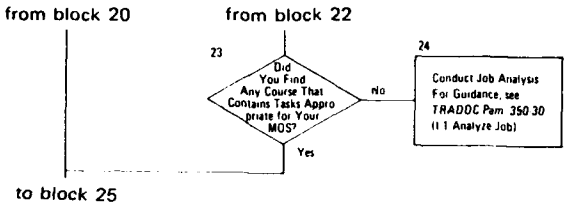
ISD 1.4 Analyze Existing Courses

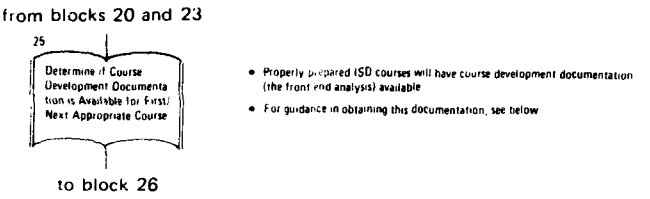
CATALOG REVIEW SHEET

Name/Office Symbol SFC Jose Gonzales/ITAD Date 9/25/78

Column 1 CATALOG TITLE	Column 2 COURSE NO	Column 3 COURSE TITLE
Catalog of Air Force Training Courses	ZY902X0	Aeromedical Evacuation Technician
	ABR90230 000	Medical Service Specialist
	3ABR90232 000	Operating Room Specialist
	~~J3AZR90270 000~~	~~Medical Service Technician - Independent Duty~~
	J3AZR90270 001	Medical Service Technician
	J3AZR90270 002	Medical Service Technician - Vocational Nurse


from block 20
from block 21
22
Have All Courses Been Reviewed ?
No
Go to Block 20
Yes
to block 25
to block 23

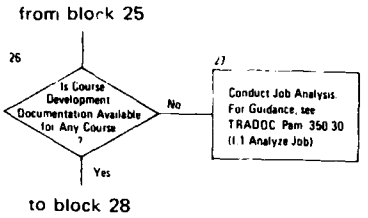

from block 20
from block 22
23
Did You Find Any Course That Contains Tasks Appro priate for Your MOS?
no
Yes
24
Conduct Job Analysis For Guidance, see TRADOC Pam 350 30 (1 1 Analyze Job)
to block 25

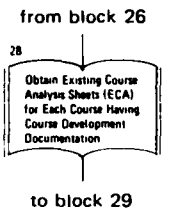


How do I determine if course development documentation is available?

- Course development documentation may be difficult to locate. However, if the course was properly developed the information should be part of the Audit Trail. Different schools and services may call it by various names. Contact the school which developed the course and request information on how the course was developed and validated.

- Look at blocks 30, 31, 32 and 33 to determine the kind of information you need.

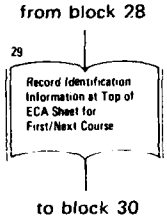

from block 25
26
Is Course Development Documentation Available for Any Course ?
No
Conduct Job Analysis. For Guidance, see TRADOC Pam 350 30 (1 1 Analyze Job)
Yes
to block 28



- Analysis of each appropriate existing course is documented on the Existing Course Analysis Sheet (ECA). The ECA Sheet, therefore, provides a record of each decision in the analysis.
- For guidance in obtaining ECA Sheets, see below

Where do I get an Existing Course Analysis Sheet (ECA Sheet)?

- The Existing Course Analysis Sheet (ECA) is available for duplication in the pocket at the back of this manual.
- To see a sample of a completed ECA Sheet refer to page C-8.



- *Identification includes*
  - Your name/office symbol
  - Date of Review
  - Course Title
  - Course No
  - Date of Course Publication
  - Office Symbol/AUTOVON of Course Author(s)
- For sources of information and an example of the form when information has been recorded, see below

---

Where do I obtain identification information and what does the ECA Sheet look like when recorded?

Information Required	Source(s)
Course Title, Course Number	• Appropriate catalog
Catalog Title	• Catalog cover
Date of Review	• Date on which you begin course analysis
Date of Course Publication	• Course or course development documentation
Office Symbol/Autovon of Course Author(s)	• Course description in catalog or contact with *proponent school*

Example:

ISD I 4 Analyze Existing Courses

EXISTING COURSE ANALYSIS SHEET

(ECA Sheet)

IDENTIFICATION

Your Name/Office Symbol: SFC Jose Gonzales — Date of Review: 9/25/78

Course Title: Basic First Aid for Soldiers

Course No: AHS 263 — Date of Course Publication: 1978

Office Symbol/AUTOVON of Course Author(s): MEDTDC 999

SECTION A FRONT END ANALYSIS (FEA)

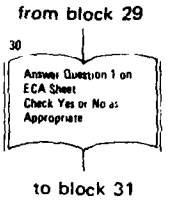
Yes / No

1. Are Equipment, doctrine, manpower and personnel systems [illegible] the same as when Front End Analysis was conducted?

2. If this was an existing job, did job data sources include observations and interviews and/or questionnaires?
   If this was a new job, did the job data sources include a panel of experts?

3. Were tasks analyzed according to their elements and

4. Was selection

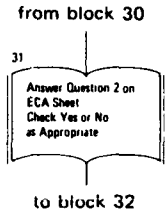


- Question 1 asks if the equipment, doctrine, manpower and personnel systems are essentially the same as when the Front-End Analysis was conducted.
- For a further explanation and guidance in answering Question 1, see below

---

How do I determine the answer to Question 1?

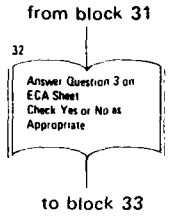
- Note the date on which course was published.
- Check the following sources to determine what changes in equipment, doctrine, manpower and personnel systems have taken place since the course was published.
  - — Tables of Organization and Equipment (TOE)
  - — Tables of Distribution and Allowances (TDA)
  - — Job supervisor interviews
  - — Subject Matter Experts (SME)
  - — Equipment modification work orders
  - — Directorates of Combat Development (Organization and Operations Concepts)
  - — DA/TRADOC Circulars and Pamphlets
  - — Army Regulations
  - — Technical Manuals
  - — Soldier's Manuals



- Question 2 asks if on-site interviews and observations and/or questionnaire surveys were a source of job data for an existing job, or if panel of experts was a source of job data for a new job.
- *For a further explanation and guidance in answering Question 2, see below*

How do I determine the answer to Question 2?

- This information concerning the original job analysis should be part of the Audit Trail, listed under the data collection plan.
- From studying IPISD Block I.1 (TRADOC Pam 350-30) you know that the more contact the job analyst has with the field, the better the product, both in terms of accuracy and acceptability by the field. Look for evidence of this contact. You cannot accept the Front-End Analysis if it was based solely on old course lesson plans or other sources removed from the field.



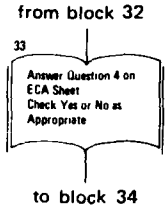
- *Question 3 asks if tasks were analyzed according to their steps in performance, conditions, cues and standards.*
- *For a further explanation and guidance in answering Question 3, see below.*

How do I determine the answer to Question 3?

- The procedures used in task analysis should be identified in the Audit Trail. If not, you may have to look at the course content itself to determine if tasks are performance-oriented rather than topic-oriented. (Complete your review of course development documentation before reviewing course content.)

- If the tasks are performance-oriented it should be easy to identify the steps in performance (elements) and their associated conditions, cues and standards. (Also called performance measures.)

- If the tasks are topic-oriented there will be no mention of these things. Rather than a course based on "what to do" or "how to do it" the course will simply tell "about" a subject area.



- Question 4 asks if the selection of critical tasks was based on generally the same criteria as used by your command in critical task selection
- For a further explanation and guidance in answering Question 4, see below

---

How do I determine the answer to Question 4?

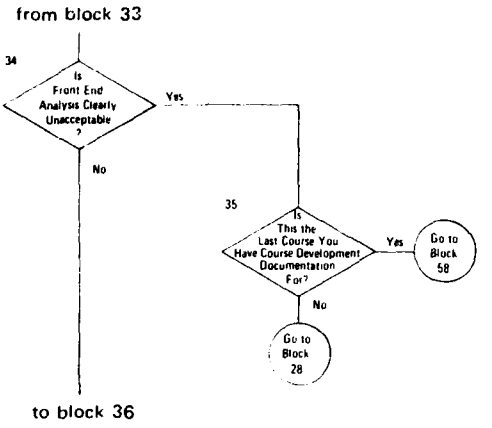
- The purpose of this question is to determine if the proper tasks are being taught for the needs of the MOS and skill level you are analyzing.

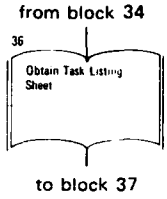
- In reviewing course development documentation look for evidence that the following criteria were considered:

  a) time to train OJE
  b) consequences of inadequate performance
  c) probability of emergency performance

- Also try to determine if the data upon which selection of tasks was based, was obtained from a population similar to the one you are working on in skill level and geographical locations.

- Finally, try to determine if those who developed the existing course were working with basically the same time, money and other resource constraints that exist in your command.


from block 33
34
Is Front End Analysis Clearly Unacceptable ?
Yes
No
35
Is This the Last Course You Have Course Development Documentation For?
Yes
Go to Block 58
No
Go to Block 28
to block 36

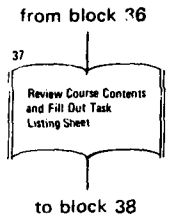


- The Task Listing Sheet is used to record all the tasks taught in a particular course
- For guidance in obtaining the Task Listing Sheet, see below

---

Where do I get a Task Listing Sheet?

- The Task Listing Sheet is available for duplication in the pocket at the back of this manual.
- To see an example of a completed Task Listing Sheet, refer to page C-37.



• For guidance in filling out the Task Listing Sheet, see below.

What is the purpose of filling out the Task Listing Sheet?

- The purpose is:
  - — to identify tasks taught in systems-engineered courses similar to those required for your MOS
  - — to provide input to personnel responsible for deriving task inventory for this MOS

How do I complete the Task Listing Sheet?

1) Fill in identification information at the top:
   - Your name/office symbol
   - Date
   - MOS being analyzed
     - — MOS
     - — Skill Level
   - Course being reviewed
     - — Course Title
     - — Course Number
2) List all tasks included in the course being reviewed.
3) Place a check (✓) in the column labeled "Not relevant" opposite any task that you consider is not relevant to your MOS.

What does the Task Listing Sheet look like after it has been filled out?

Example:

ISD I.4 Analyze Existing Courses

TASK LISTING SHEET

Your Name/Office Symbol: SFC Jose Gonzales Date: 9/25/78

MOS BEING ANALYZED

MOS: 12B Skill Level: 1

COURSE BEING REVIEWED

Course Title: Basic First Aid for Soldiers Course No: AHS 263

Tasks	Not Relevant
Apply the four life-saving measures.	
Administer artificial respiration.	
Immobilize fractures.	
Perform first aid for special wounds.	
Apply first aid measures for burns.	
Apply preventive measures to reduce climatic injuries.	
Apply first aid for headaches.	✓

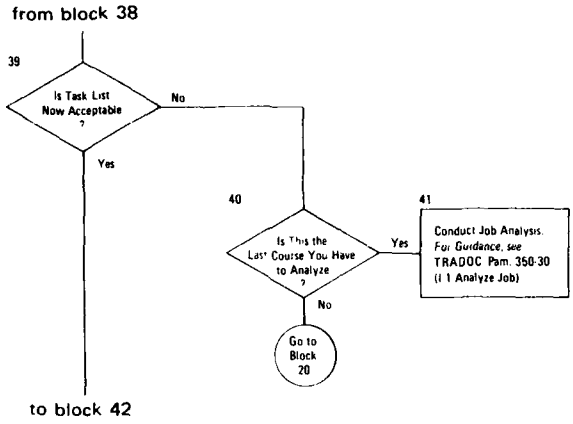


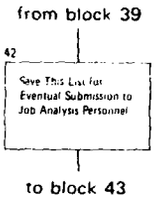
• For a further explanation and guidance, see below

Why and how should a jury of experts verify/alter the task list?

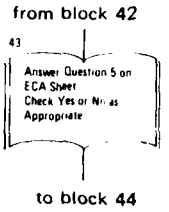
- Although you have accepted the job analysis conducted by the developers of the existing course you should check with other subject matter experts (SME's) to be sure the tasks included in the course are the same ones required in the skill level of the MOS you are analyzing.

- Ask at least two other SME's to review the task list. Any tasks which are inappropriate should be checked (✓) in the column labelled "Not relevant."


from block 38
39
Is Task List Now Acceptable ?
No
Yes
40
Is This the Last Course You Have to Analyze ?
Yes
41
Conduct Job Analysis. For Guidance, see TRADOC Pam. 350-30 (I 1 Analyze Job)
No
Go to Block 20
to block 42



- The list of tasks taught in this course will provide input to the job analysis



- This step begins examination of course content
- Question 5 asks if the performance descriptions (measures) for the tasks taught in the course have been reasonably well developed
- For a further explanation and guidance in answering Question 5, see below

---

How do I answer Question 5?

- Careful review of a small sample of performance descriptions (measures) will give you an idea of whether most of the performance descriptions are generally acceptable. If the ones in the sample appear reasonably well developed, then you will want to review all of them.

- The following three examples will explain the basis for judgement.

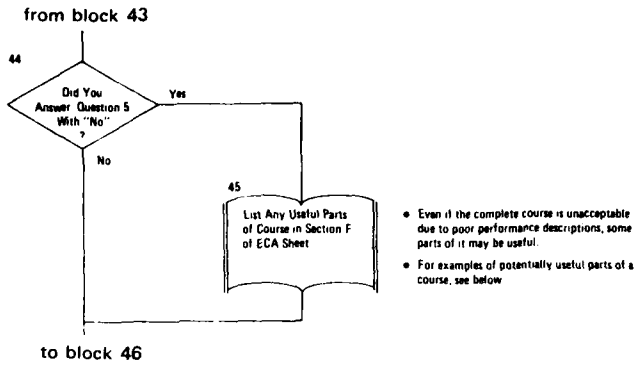
  1) If the task is "adjust carburetor" and the performance description is "tell why well-adjusted carburetors are important," the performance description is very poorly developed. The match between "adjust" and "tell why" lacks validity and fidelity.

  2) If the task is "destroy bridge," and the performance description is "given appropriate tools and equipment, destroy bridge, in the face of enemy fire, in one hour or less," you can reject the existing course because the performance test is impossible to administer.

  3) If the task is "field strip an M203 Grenade Launcher under night conditions, in two minutes, you have a reasonably well developed performance description.

- Remember, if the majority of performance descriptions are reasonably well developed you should answer "yes." You will be given space to revise the few which you do not agree with on the ECA Sheet in a later step.

- If the majority of performance descriptions are really unacceptable you should reject the whole course.



How do I determine and list potentially useful parts of this course?

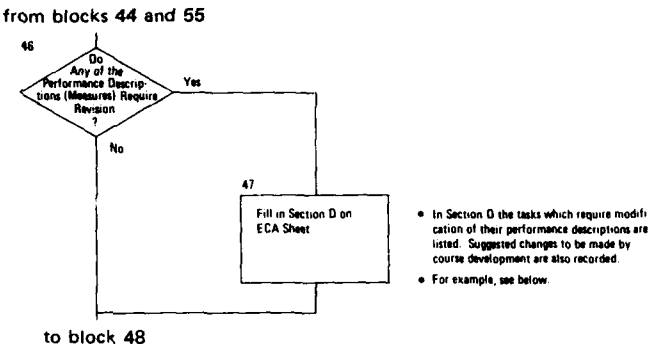
- Look for segments of the course which could be incorporated into a new course by course development personnel. As an SME you will be able to identify such things as graphics, slides, skill performance aids, etc., which are useful in themselves.

What does the ECA Sheet look like when Section F is completed?

Example:

SECTION F: USEFUL PARTS (List any parts of course which should be incorporated into new courses)

1. One 10-minute 35 mm slide presentation demonstrating installation of the tail rotor gear box.
2. One set of transparencies demonstrating the maintenance operational check of the main transmission oil system.
3. Student handout describing procedures for troubleshooting the main transmission oil system.
4. Lecture script entitled "Components and Troubleshooting Procedures," explaining the relationships between the components of the main transmission oil system and the procedures for troubleshooting the system.
5. Student outline describing the components of the main transmission oil system.
6. Set of schematic 35 mm slides demonstrating procedures for inspecting the main transmission oil system for external evidence of damage.



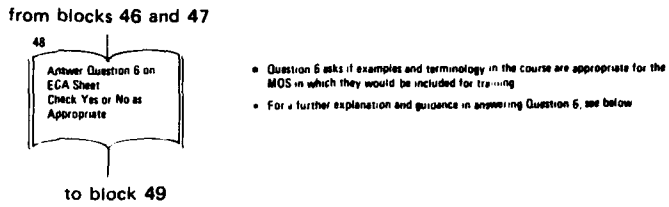
- In Section D the tasks which require modification of their performance descriptions are listed. Suggested changes to be made by course development are also recorded.
- For example, see below.

Example:

7. Is validation documentation acceptable for your target population? _____ _____

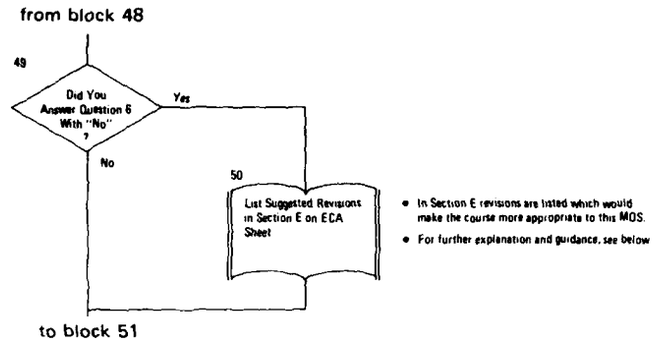
SECTION D: RECOMMENTATIONS FOR REVISIONS OF PERFORMANCE DESCRIPTIONS (Task number and Suggested Change)

Task 051-191-1005	Describe CPR procedures.
Task 198-236-1090	Task description does not directly address the user. State what the soldier will see, what he does, and how he does it.
Task 233-971-3000	Too general, make procedures more specific.
Task 341-508-4113	Time to accomplish task should be changed from 2 minutes to 3 minutes for skill level 1 soldiers.



How do I determine the answer to Question 6?

- Even though you may have found an acceptable course there may be language barriers created by specialized terminology.
  - Check to see if the vocabulary is familiar to soldiers who would be using the materials, e.g., a Navy course may refer to a "deck" rather than a floor, or a "head" rather than a "latrine."
  - Check to see if examples are ones the soldiers in your MOS could relate to. Many customs and duties common to the Army of 10 years ago may be unfamiliar to today's soldier; examples taken from other services are even more likely to be unfamiliar.



How do I indicate needed revisions in examples and terminology?

- Make a list of all inappropriate terms and/or examples. Opposite each inappropriate term/example record your suggested change in Section E.
- If, however, you think there are so many revisions to be made that the course would be altered drastically, indicate this by recording "revisions impractical" in Section E.

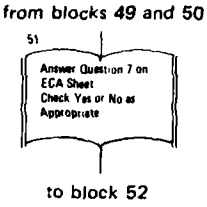
What does the ECA Sheet look like when Section E is completed?

Example:

SECTION E: RECOMMENTATIONS FOR REVISIONS OF TERMS AND EXAMPLES (Suggested Change)

Change term "systems engineering of training" to "instructional systems development of train'ng."

Include women soldiers in illustration 2-8.

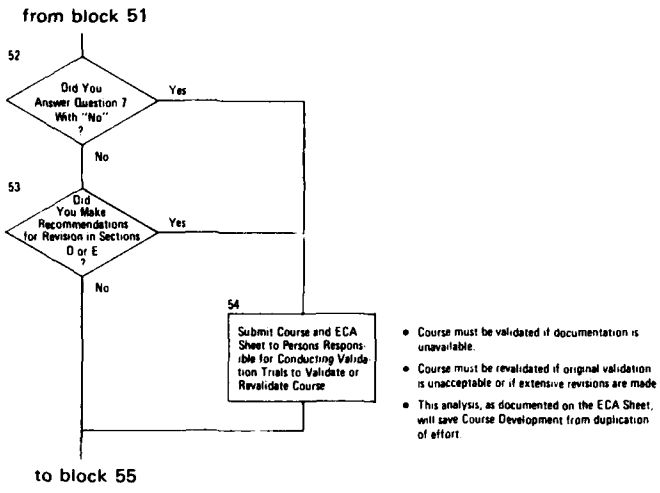


- Question 7 asks if validation documentation is acceptable. If it is not available as part of course development documentation, check "No"
- For further explanation and guidance in answering Question 7, see below

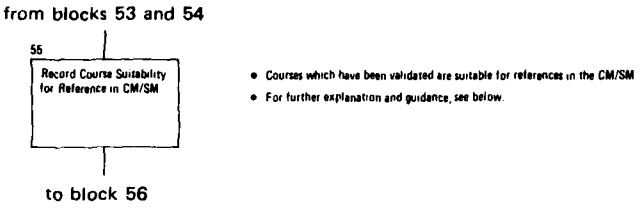
---

How do I determine if validation documentation is acceptable?

- Check to see what kind of a group was used to validate the course. Was it similar to the soldiers in the skill level of the MOS you will be training in:
  - previous military training
  - education level
- Check to determine if field feedback data is available. Analyze this data.
- Analyze feedback from students and instructors, if available.



- Course must be validated if documentation is unavailable.
- Course must be revalidated if original validation is unacceptable or if extensive revisions are made
- This analysis, as documented on the ECA Sheet, will save Course Development from duplication of effort



How do I determine whether course is suitable for reference in Commander's Manual or Soldier's Manual?

- Earlier, you were asked whether the validation documentation for the course being examined was acceptable for your target population. (See page C-46)
- The course should be considered as acceptable for reference in Commander's and Soldier's Manuals when:
  - validation documentation is acceptable and no revisions are necessary
  - validation trials have been completed for those portions of the course that require revision. (See blocks 53 and 54, Manual page C-47).

How do I record that the course is suitable for reference in Commander's Manual and Soldier's Manual?

- If suitable for use as a reference in the CM/SM print across top of Task Listing Sheet, "REFERENCE FOR CM/SM" (Use Bold Letters)
- If not suitable for use as a reference print across top of Task Listing Sheet, "NOT SUITABLE FOR REFERENCE FOR CM/SM"

What does the Task Listing Sheet look like after I have recorded that the course is suitable for use as a reference in the Commander's and Soldier's Manual?

Example:

REFERENCE FOR CM/SM

ISD I.4 Analyze Existing Courses

TASK LISTING SHEET

Your Name/Office Symbol SFC Jose Gonzales Date 9/25/78

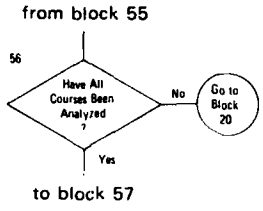
MOS BEING ANALYZED

MOS 12B Skill Level 1

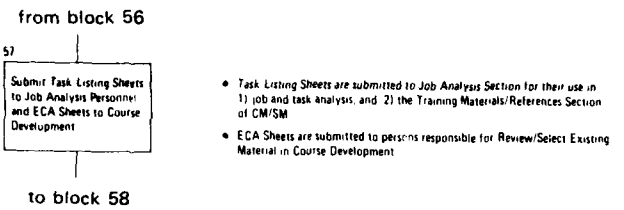
COURSE BEING REVIEWED

Course Title Basic First Aid for Soldiers Course No AHS 263

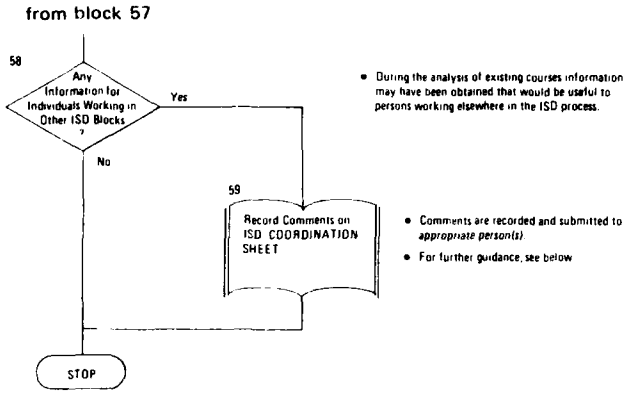
Tasks	Not Relevant



- Is this the last course you have to analyze?



- *Task Listing Sheets are submitted to Job Analysis Section for their use in* 1) job and task analysis, and 2) the Training Materials/References Section of CM/SM
- ECA Sheets are submitted to persons responsible for Review/Select Existing Material in Course Development



What is the importance of preparing comments for people working in other steps of the instructional systems development process? How do I record them?

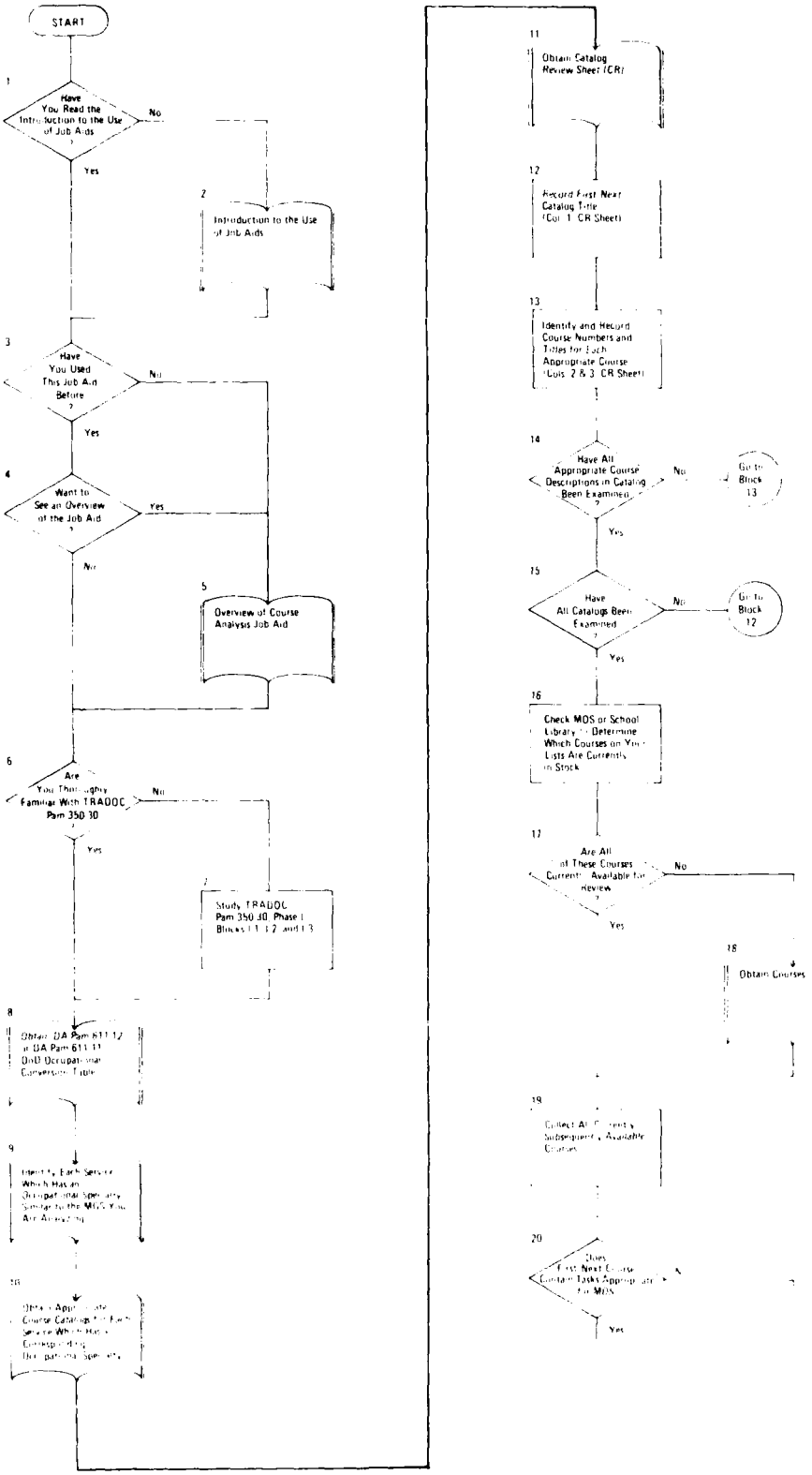
- In order for the Instructional Systems Development process to work effectively it is imperative that there be forward and backward communication between the people involved in the process. At some time or other you have probably complained about the input that has been provided to you. Sometimes, you may have had to do work that should have been performed in previous steps.

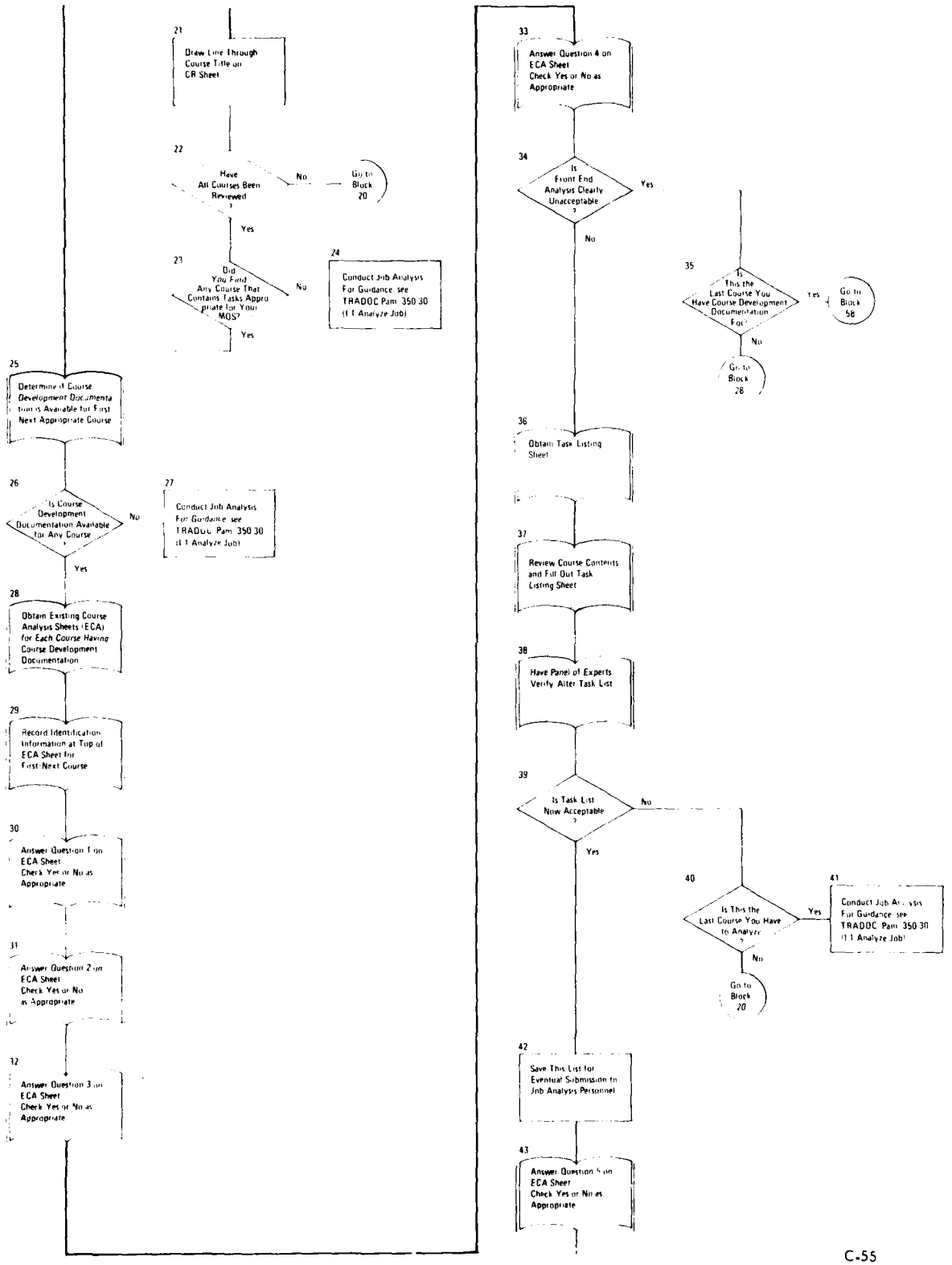
> IT IS IMPORTANT THAT YOU FEED THIS INFORMATION BACK TO THE APPROPRIATE PEOPLE SO THAT REVISIONS CAN BE MADE TO EFFECT IMPROVEMENT IN THE END PRODUCT.

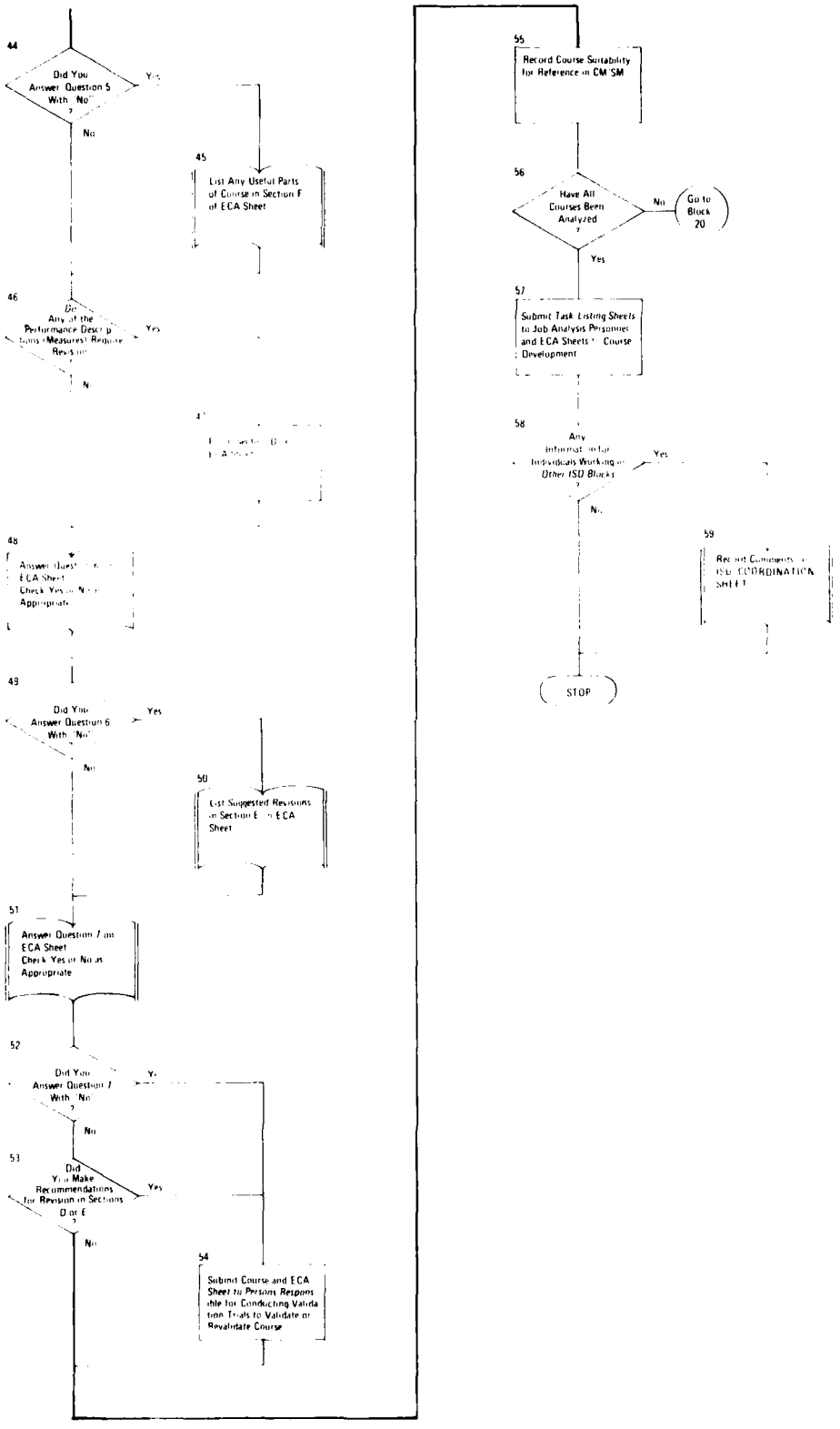
In your research for this step of the Instructional Systems Development process you may have discovered additional information that you think may be useful to people who will be working in steps that follow this one. If so, it is equally important that you pass this information on to the appropriate people.

> REMEMBER, COMMUNICATION WITHIN THE INSTRUCTIONAL SYSTEMS DEVELOPMENT PROCESS IS CRITICAL FOR EFFECTIVE INSTRUCTIONAL DEVELOPMENT

- A copy of the ISD COORDINATION SHEET can be found in the back of this manual. Make sufficient copies to enable you to send one to every individual you wish to communicate with—plus copies for your records.
- Complete the ISD COORDINATION SHEET in duplicate. Send one copy to the individual and attach one copy to the Instruction Settings Selection Package (ISR Sheets).


START
1
Have You Read the Introduction to the Use of Job Aids ?
No
Yes
2
Introduction to the Use of Job Aids
3
Have You Used This Job Aid Before ?
No
Yes
4
Want to See an Overview of the Job Aid ?
Yes
No
5
Overview of Course Analysis Job Aid
6
Are You Thoroughly Familiar With TRADOC Pam 350-30 ?
No
Yes
7
Study TRADOC Pam 350-30, Phase I Blocks 1, 1-2, and 1-3
8
Obtain DA Pam 611-12 or DA Pam 611-13 DoD Occupational Conversion Table
9
Identify Each Service Which Has an Occupational Specialty Similar to the MOS You Are Analyzing
10
Obtain Appropriate Course Catalogs for Each Service Which Has a Corresponding Occupational Specialty
11
Obtain Catalog Review Sheet (CR)
12
Record First Next Catalog Title (Col. 1, CR Sheet)
13
Identify and Record Course Numbers and Titles for Each Appropriate Course (Cols. 2 & 3, CR Sheet)
14
Have All Appropriate Course Descriptions in Catalog Been Examined ?
No
Go to Block 13
Yes
15
Have All Catalogs Been Examined ?
No
Go to Block 12
Yes
16
Check MOS or School Library to Determine Which Courses on Your Lists Are Currently in Stock
17
Are All of These Courses Currently Available for Review ?
No
Yes
18
Obtain Courses
19
Collect All Currently Subsequently Available Courses
20
Does First Next Course Contain Tasks Appropriate for MOS
Yes


21
Draw Line Through Course Title on CR Sheet
22
Have All Courses Been Reviewed ?
No
Go to Block 20
Yes
23
Did You Find Any Course That Contains Tasks Appropriate for Your MOS?
No
24
Conduct Job Analysis For Guidance see TRADOC Pam 350 30 (I I Analyze Job)
Yes
25
Determine if Course Development Documents (COs) is Available for First Next Appropriate Course
26
Is Course Development Documentation Available for Any Course ?
No
27
Conduct Job Analysis For Guidance see TRADOC Pam 350 30 (I I Analyze Job)
Yes
28
Obtain Existing Course Analysis Sheets (ECA) for Each Course Having Course Development Documentation
29
Record Identification Information at Top of ECA Sheet for First Next Course
30
Answer Question 1 on ECA Sheet Check Yes or No as Appropriate
31
Answer Question 2 on ECA Sheet Check Yes or No as Appropriate
32
Answer Question 3 on ECA Sheet Check Yes or No as Appropriate
33
Answer Question 4 on ECA Sheet Check Yes or No as Appropriate
34
Is Front End Analysis Clearly Unacceptable ?
Yes
No
35
Is This the Last Course You Have Course Development Documentation For?
Yes
Go to Block 58
No
Go to Block 28
36
Obtain Task Listing Sheet
37
Review Course Contents and Fill Out Task Listing Sheet
38
Have Panel of Experts Verify Alter Task List
39
Is Task List Now Acceptable ?
No
Yes
40
Is This the Last Course You Have to Analyze ?
Yes
41
Conduct Job Analysis For Guidance see TRADOC Pam 350 30 (I I Analyze Job)
No
Go to Block 20
42
Save This List for Eventual Submission to Job Analysis Personnel
43
Answer Question 5 on ECA Sheet Check Yes or No as Appropriate


44
Did You Answer Question 5 With "No"?
Yes
No
45
List Any Useful Parts of Course in Section F of ECA Sheet
46
Do Any of the Performance Descriptions/Measures Require Revision?
Yes
No
48
Answer Question 6 on ECA Sheet Check Yes or No as Appropriate
49
Did You Answer Question 6 With "No"?
Yes
No
50
List Suggested Revisions in Section E of ECA Sheet
51
Answer Question 7 on ECA Sheet Check Yes or No as Appropriate
52
Did You Answer Question 7 With "No"?
Yes
No
53
Did You Make Recommendations for Revision in Sections D or E?
Yes
No
54
Submit Course and ECA Sheet to Persons Responsible for Conducting Validation Trials to Validate or Revalidate Course
55
Record Course Suitability for Reference in CM SM
56
Have All Courses Been Analyzed?
No
Go to Block 20
Yes
57
Submit Task Listing Sheets to Job Analysis Personnel and ECA Sheets to Course Development
58
Any Information for Individuals Working on Other ISD Blocks?
Yes
No
59
Record Comments on ISD COORDINATION SHEET
STOP

JOB AID FOR
SELECTING INSTRUCTIONAL SETTINGS

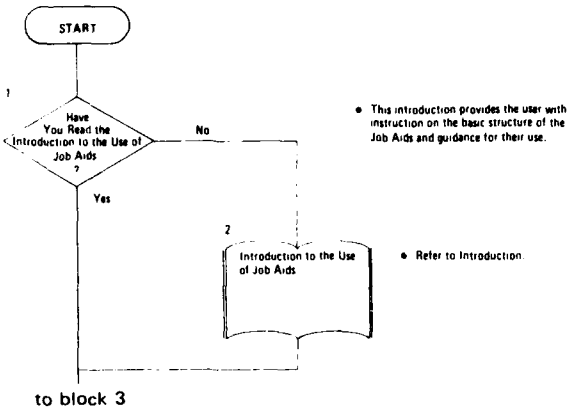
ISD I.5

Manual

This is the 4th in a series of ISD Job Aids for use in instructional design and development. This volume is to be used as a supplement to the primary document, "Job Aids: Descriptive Authoring Flowcharts ISD I.5 Select Instructional Setting." The flowchart document will direct you to specific guidance, examples, and references provided in this volume. If you do not have the primary flowchart document, request it from your supervisor.

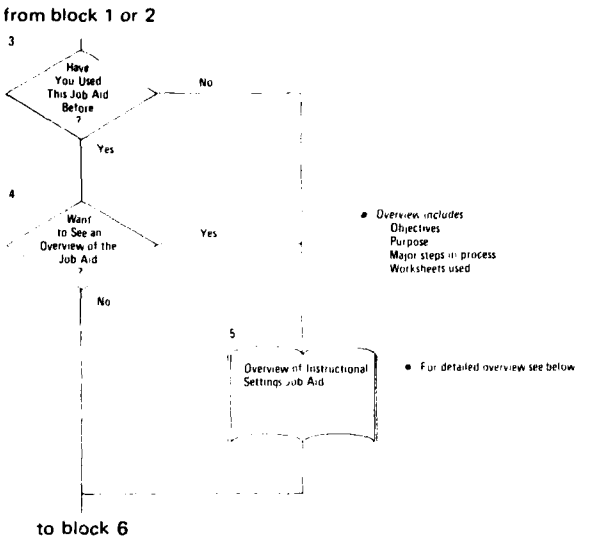
The wording in this manual should not be construed to discriminate between the sexes. In order to avoid a repetitious use of the terminology, "he/she," the terms, "he," "him," and "his," as well as "men," are intended to include both the masculine and feminine gender. Any exceptions to this usage will be so noted.

ISD 1.5 Select Instructional Setting



- This introduction provides the user with instruction on the basic structure of the Job Aids and guidance for their use.
- Refer to Introduction.

PRECEDING PAGE BLANK-NOT FILMED



What is the Instructional Settings Job Aid all about?

• OBJECTIVE

1. Given a list of tasks selected for training within a single skill level, select the most appropriate instructional setting for training each task to the *Soldier's Manual Standard*. (Qualification Training)

2. Given the appropriate worksheets and instructions on how to fill them out, record the basis for each instructional setting selection.

• PURPOSE

The purpose of this aid is to help you choose instructional settings (training locations) for tasks selected for training within each skill level. Due to advancements in instructional technology it is often more cost-beneficial and efficient to train tasks in a non-institutional (extension) setting. This aid is designed to help you identify as many tasks as possible for which extension training is appropriate.

- **PRODUCT**

  — This job aid will result in a listing of all critical tasks in which each task is assigned for training to one of the following instructional settings:

    a. Institution (Resident school training)

    b. Supervised On-the-Job Training (SOJT)

    c. Self-study

  — This output will be especially useful in the preparation of the Commander's Manual.

- **DESCRIPTIVE FLOWCHART**

  — The flowchart on pages D-70 thru D-73 shows the major steps in the use of the Job Aid for Selecting Instructional Settings for all critical tasks. The flowchart will be useful to you in getting a clear picture of the overall process used in this job aid. A more completely described flowchart is provided in *Job Aids: Descriptive Authoring Flowcharts*, pages D-1 thru D-21.

- **OVERVIEW OF MAJOR STEPS IN SELECTING INSTRUCTIONAL SETTING:**

  Step 1. Tasks selected for training are listed and categorized by skill level and duty position.

  Step 2. Task performance data is obtained and recorded for each task. That is:

    a. In which duty position is the task performed?

    b. What percentage of soldiers perform the task?

Step 3. Initial assignment of the task to one of three instructional settings (institution, supervised on-the-job training, or self-study) is made based on the answers to the following 14 questions:

(1) Is task a common skill level task?

(2) Is task performed by a high percentage of soldiers?

(3) Is task performed in a similar manner in various duty positions and units?

(4) Is proficiency in task performance retained over time? (i.e., Not easily forgotten)

(5) Does task require considerable theoretical knowledge?

(6) Must the task be performed immediately on entry to the job?

(7) Is the task a prerequisite for learning to perform other school trained tasks?

(8) Is training equipment and/or facilities only available at the school?

(9) Is the equipment required for individual training of the task in the unit available at most units?

(10) Are personnel with the necessary expertise to conduct training of the task available at most units?

(11) Do operational requirements at most units allow sufficient time for the soldier to receive training in the unit?

(12) Can the task be learned with very little supervision?

(13) Does the soldier's schedule allow sufficient time for independent study?

(14) Can everything required for training (which is not already available in the unit) be included in the exportable training package at a cost competitive with school (institution) training?

The complete list of questions is not necessarily asked for each task. Questions are asked only until a decision is reached for task assignment to a particular instructional setting. As a consequence of the sequence of questions, only a few tasks require that all 14 questions be asked before an initial instructional setting is selected.

Step 4. Administrative review and final selection of instructional setting.

a. In Step 3, tasks were assigned initially to one of the three instructional settings. In this step each task is reviewed to determine if the initial assignment is still the best instructional setting on the basis of expert opinion.

b. After reviewing each task and asking questions similar to those above, any indicated changes in instructional setting is made. The rationale for each change is to be carefully documented.

c. The task listing with the final selections of instructional settings is submitted to the supervisor for review and revision.

- **WORKSHEET USED**

— The Tables on pages D-8 and D-9 show a sample of the front and back of a completed Instructional Settings Recording Sheet (ISR).

Table D-8

ISD 1.5 Select Instructional Setting

INSTRUCTIONAL SETTING RECORDING SHEET

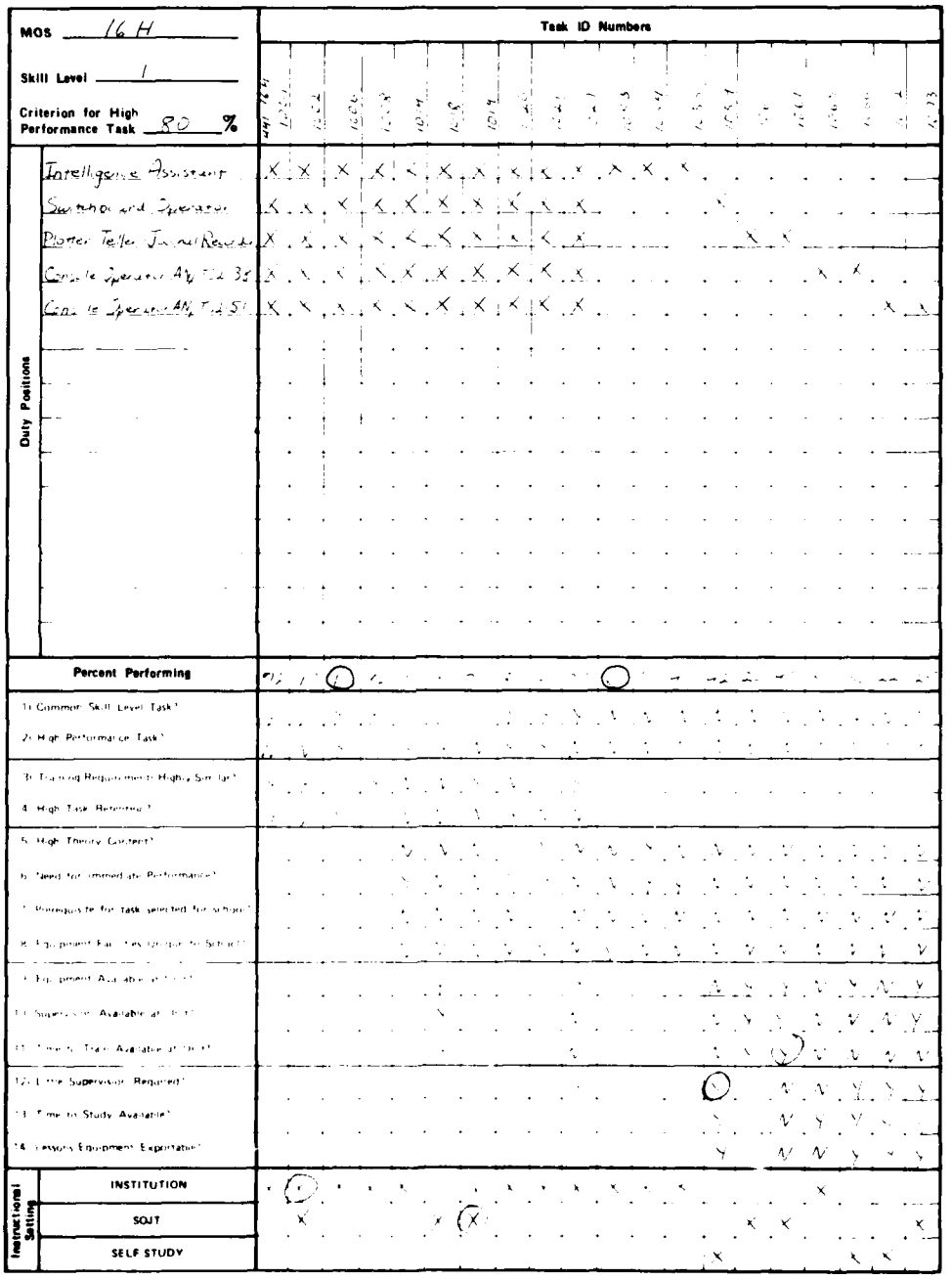
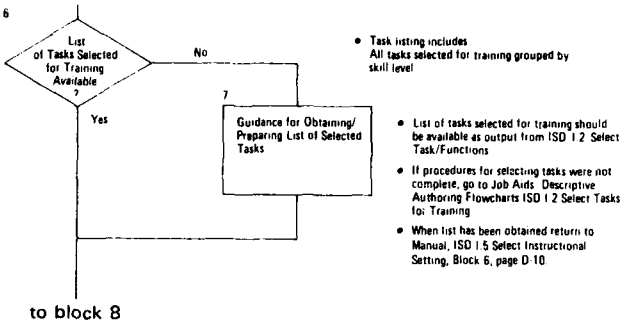


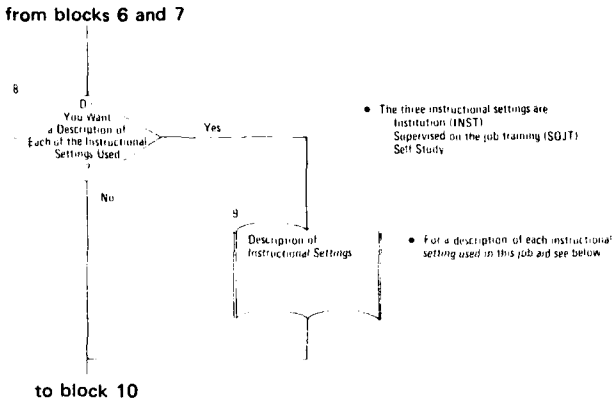
Table D-9

Reverse Side of Instructional Setting Recording Sheet

TASK ID NUMBER	REASON FOR CHANGING INITIAL INSTRUCTIONAL SETTING
441-16H	
1002	Recent SQT results indicate that a majority of soldiers scored "NO-GO" on this task. It would be more easily learned in the unit where appropriate cues and stimuli are available
1019	Even though task retention is low and task meets all 3 requirements for SOJT, it should be trained in the institution because nearly 100% of soldiers <u>should</u> be performing it

from blocks 4 and 5





What are the three instructional settings?

- The instructional setting will often determine both the location and manner in which instruction on a task is to take place. The following table provides a brief description of each of the instructional settings. Table D-12 shows some of the advantages and disadvantages of each.

- Selecting the most appropriate instructional setting is important for several reasons. Among them are:

  — Soldiers learn tasks better in the proper setting and retain them longer.

  — With training requirements increasing in a time of decreasing resources, the best possible use must be made of our trainers and our training dollars.

Table D-12

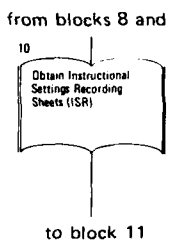
Description of Instructional Settings

Institution (INST)	Supervised On-The-Job Training (SOJT)	Self-Study
Training conducted at TRADOC resident schools and includes: OSUT - One Station Unit Training PNCOC - Primary Noncommissioned Officer Course BNCOC - Basic Noncommissioned Officer Course ANCOC - Advanced Noncommissioned Officer Course	Training conducted at the soldier's unit	Training administered during individuals own time, usually at the soldier's unit and includes: Self-teaching exportable packages (STEP) Training Extension Courses Job Performance Aids Study Guides Correspondence Courses Films, tapes, etc.
Training always conducted under supervision of qualified instructors	Training supervised by best qualified NCOs in unit	Little supervision required

Table D-13

Advantages and Disadvantages of Three Instructional Settings

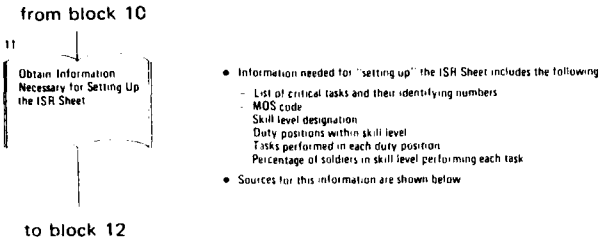
Instructional Setting	Advantages	Disadvantages
INSTITUTION	Usually best setting for training common skill level tasks or tasks that are performed by large percentage of soldiers in the MOS/skill level Sophisticated training resource and expertise available	Lack of real world environment High cost of soldier's housing and travel Time is spent away from job assignment
SUPERVISED *ON-THE-JOB* TRAINING	Effective for training tasks that can be learned faster or better with hands-on experience Soldier contributes to unit's mission while learning	May tie up unit's equipment and thus equipment may not be available for operational use May overburden supervisors Reduces time available in unit for operational requirements
SELF-STUDY	Effective for training tasks which can be learned without an instructor or where little supervision is required Can be accomplished at trainee's convenience	If study occurs during normal duty hours, this type of training may reduce time available in unit for operational requirements May require soldier to devote considerable off-duty time to study



- Instructional settings decisions are recorded on the Instructional Settings Recording Sheet (ISR). The ISR Sheet, therefore, provides an historical record of these decisions and the basis for each.
- For guidance in obtaining ISR Sheets, see below.

Where do I get an Instructional Settings Recording Sheet (ISR)?

- The Instructional Settings Recording Sheet (ISR) is available for duplication in the pocket at the end of this manual.
- To see a sample of a completed ISR Sheet refer to pages D-8 and D-9.



What information do I need and where do I get it?

- The following information is needed before you can set-up the ISR Sheet. Sources for locating each item of information are identified and in most cases throughout this manual the source will be rated as "excellent," "good," or "fair." Understandably not all sources of information will be readily available to you. However, where a source rated "excellent" is available, use that source in preference to one rated "good" or "fair."

Information Required	*Source(s)*	Remarks
MOS and Skill Level designation	• Supervisor	• Excellent source
	• AR 611-1 (for a new MOS)	• Excellent source.
Critical Tasks and Identifying Numbers	• Output from ISD I.2 Select Tasks/Functions	• Excellent source.
	• Output from ISD I.3 Construct Job Performance Measures	• Excellent source.
	• Soldiers Manual	• Excellent source if already prepared

Continued

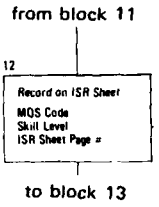
Information Required	Source(s)	Remarks
Duty Position Designations	• Output from ISD I.2 Select Tasks/Functions	• Excellent source if list of tasks selected for training were broken out by duty position.
	• Output from ISD I.3 Construct Job Performance Measures	• Excellent source if completed.
	• AR 611 series for existing jobs – AR611-101 (Officer Personnel) – AR611-112 (Warrant Officer Personnel) – AR611-201 (Enlisted Personnel)	• Excellent source.
	• Check with individuals who developed the job identification. For a new MOS only.	• Good source
	• Soldiers Manual	• Fair source
	• TOE/MTOE/TDA's	• Fair source.

Continued

Information Required	Source(s)	Remarks
Tasks Performed in each Duty Position	• Output from ISD I.2 Select Tasks/Functions	• Excellent source if list of tasks selected for training was broken out by duty position.
	• Field Survey	• Excellent source if time permits. See Resource Manual
	• Output from ISD I.3 Construct Job Performance Measures	• Fair source.
	• CODAP Group Summary Report	• Excellent source. See Resource Manual
	• Panel of recent incumbents	• Fair source. See Resource Manual
	• Soldiers Manual	• Excellent source if tasks were broken out by duty position
	• Panel of Subject Matter Experts	• Use only if above sources are not available
	• Your own judgment	• Use only as a last resort

Continued

Information Required	Source(s)	Remarks
Percentage of Soldiers in Skill Level Performing Each Task	• CODAP Group Summary Report	• Excellent source. See Resource Manual
	• Field Survey	• Excellent source if time permits. See Resource Manual
	• Panel of recent incumbents	• Fair source. See Resource Manual
	• Panel of Subject Matter Experts	• Use only if above sources are not available
	• Your own judgment	• Use only as a last resort



- MOS code, skill level and ISR Sheet page number are recorded on all ISR Sheets
- For sources of required information see Manual, pages D 20 thru D 23.
- Example See below

What does the ISR sheet look like after the MOS code, skill level and page number have been recorded?

Example

Page 1 of 6 Pages

ISD 1.5 Select Instructional Setting

INSTRUCTIONAL SETTING RECORDING SHEET

MOS 16H

Skill Level 1

Criterion for High Performance Task _____%

Task ID Numbers

Duty Positions

from block 12

13

Record Duty Positions on ISR Sheet

to block 14

- Duty positions for skill level are recorded under the heading: DUTY POSITIONS
- For sources of information Block 11.
- Example: See Below.

What does the ISR sheet look like after duty positions are recorded?

Example

Page 1 of 6 Pages

ISD 1.5 Select Instructional Setting

INSTRUCTIONAL SETTING RECORDING SHEET

MOS 16H

Skill Level 1

Criterion for High Performance Task _____%

Task ID Numbers

Duty Positions

- Intelligence Assistant
- Switchboard Operator
- Plotter-Teller-Journal Recorder
- Console Operator AN/TSQ-38
- Console Operator AN/TSQ-51

from block 13

14

Record Task Identification Numbers on ISR Sheet and Attach Critical Task Listing

- Record the identification number shown on the critical task listing (e.g. 051-191-3397) for each of the critical tasks in the skill level.
- Attach a copy of the critical task listing to the ISR Sheet to assist in the identification of the tasks the numbers refer to.
- Example: See below.

to block 15

What does the ISR sheet look like after ID numbers for all critical tasks have been recorded?

Example

ISD 1.5 Select Instructional Setting

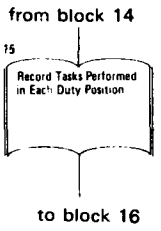
INSTRUCTIONAL SETTING RECORDING SHEET

MOS 16H

Skill Level 1

Criterion for High Performance Task 80 %

Duty Positions	Task ID Numbers																			
	051-164	1001	1002	1006	1008	1014	1018	1019	1020	1021	1047	1053	1054	1055	1059	1060	1061	1065	1066	1072	1073
Intelligence Assistant																					
Switchboard Operator																					
Plotter-Teller Journal Recorder																					
Console Operator AN/TSQ-38																					
Console Operator AN/TSQ-38																					



- For guidance in recording task performance in each duty position see below.

How do I record tasks performed in each duty position and how do I determine if the task is performed?

- To record task performance complete the following steps:
  - Step 1: Examine the first task.
  - Step 2: Place an "X" on the ISR Sheet under the task ID number for each duty position in which the task is performed.
  - Step 3: Repeat Steps 1 and 2 until performance data have been recorded on the ISR Sheet for all tasks in the skill level.
- Sources of task performance information: See Manual, page D-18.

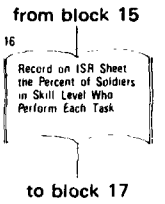
Example

MOS 16 H

Skill Level 1

Criterion for High Performance Task 80 %

	Task ID Numbers																				
	401-16H 1001	1002	1006	1008	1014	1018	1019	1020	1021	1027	1033	1034	1035	1054	1060	1061	1065	1066	1072	1073
Intelligence Assistant	X	X	X	X	X	X	X	X	X	X	X	X	X							
Switchboard Operator	X	X	X	X	X	X	X	X	X	X				X						
Plotter-Teller-Journal Recorder	X	X	X	X	X	X	X	X	X	X					X	X				
Console Operator AN/TSQ-39	X	X	X	X	X	X	X	X	X	X							X	X		
or AN/TSQ-51	X	X	X	X	X	X	X	X	X	X									X	X



- For each task on the ISR Sheet, the percent of soldiers within the skill level who perform the task is recorded.
- *The percent of soldiers in skill level performing each task* is one criterion for determining the instructional setting for tasks.
- For guidance in determining and recording the percent performing each task see below.

What are the sources of information for determining the percent of soldiers who perform each task?

- Sources of information:

  — ISD I.2. Check with the individual who selected the tasks for training (ISD I.2). Did this individual use the Job Aid for Selecting Tasks for Training? If so, the percent of soldiers in skill level who perform each task will be recorded on the Critical Task List used in that Job Aid.

  — CODAP Group Summary Report. CODAP data, when available, are excellent for determining the percent of soldiers within the skill level who perform each task. However, it is likely that not all tasks listed on the ISR Sheet will be represented on the CODAP Report. Consequently, even when a CODAP Report is available, it will probably be necessary to supplement the data from the Report with data from other sources. See Resource Manual for guidance in using the CODAP Group Summary Report.

  — Field Survey. Field Survey data are excellent for determining the percent of soldiers who perform each task. However, a field survey should only be conducted when CODAP data are not available (or badly out of date) and when there is sufficient time to conduct the survey. See Resource Manual for guidance in conducting a field survey.

  — Panel of recent job incumbents. This represents a fair source of information. See Resource Manual for guidance in establishing and using a panel of recent job incumbents.

  — Panel of subject matter experts. Use this source only if none of the above sources are available. See Resource Manual for guidance in establishing and using this type of panel.

  — Your own judgment. Use only as a last resort.

What steps are followed in determining and recording on the ISR sheet the percent of soldiers performing each task in the skill level?

- If the percent of soldiers in the skill level who perform each task has already been recorded in ISD Block I.2, copy the information from that source.

- Use one or both of the following procedures for determining and recording on the ISR Sheet the percent of soldiers in the skill level who perform each task (hereafter referred to as "percent performing").

  — Procedure A. When CODAP Group Summary Report or field survey data are available.

  Step 1: Examine data to determine if task is listed. If listed, proceed to Step 2. If not listed, repeat Step 1 with next task on ISR Sheet.

  Step 2: Identify the percent performing from data.

  Step 3: Record percent performing under the task on the line labeled PERCENT PERFORMING.

  Step 4: Examine next task listed on ISR Sheet and repeat Steps 1 thru 4. When all tasks have been examined proceed to Step 5.

  Step 5: Are there any tasks for which you do not have percent performing data recorded? If no, proceed to block 17, Job Aids: Descriptive Authoring Flowcharts (page D-6). If yes, follow the steps shown in Procedure B.

— Procedure B. When Panel of recent job incumbents or panel of subject matter experts are used as data source.

Step 1: Examine first task for which percent performing data have not been recorded.

Step 2: Arrive at consensus opinion within panel as to an approximation of the percent of soldiers who perform the task.

Step 3: Record estimated percent performing the task on the line labeled PERCENT PERFORMING.

Step 4: Circle the percent performing number you entered. This will identify the task as one in which percent performing was estimated by a panel rather than obtained from CODAP or field survey data.

Step 5: Repeat Steps 1 thru 4 for all remaining tasks for which percent performing data have not been recorded. When finished proceed to block 27, Job Aids: Descriptive Authoring Flowcharts (page D-8).

What does the ISR sheet look like after percent performing data have been recorded?

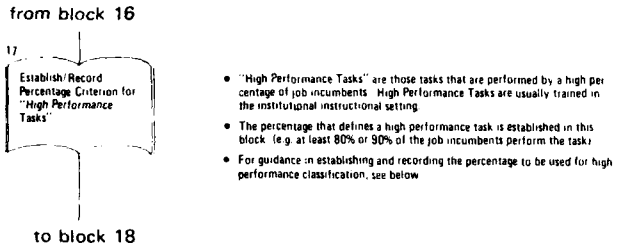
Example

MOS 16H

Skill Level 1

Criterion for High Performance Task 80 %

Duty Positions	Task ID Numbers: 441-16H	1001	1002	1006	1008	1014	1015	1019	1020	1021	1027	1053	1054	1055	1059	1060	1061	1065	1066	1072	1073
Intelligence Assistant		X	X	X	X	X	X	X	X	X	X	X	X	X							
Switchboard Operator		X	X	X	X	X	X	X	X	X	X				X						
Plotter-Teller-Journal Recorder		X	X	X	X	X	X	X	X	X	X					X	X				
Console Operator AN/TSQ-38		X	X	X	X	X	X	X	X	X	X							X	X		
Console Operator AN/TSQ 51		X	X	X	X	X	X	X	X	X	X									X	X
																				/	
Percent Performing		78	77	(90)	92	95	81	75	85	81	75	(60)	50	40	42	20	40	35	30	22	25
Common Skill Level Task?																					
High Performance Task?																					



What sources of information do I use for establishing the percentage criterion for high performance task classification?

- Sources of information:
  - — Check with your supervisor. Your installation may have already established a certain percentage as the criterion for training a task in the institution.
  - — Check with subject matter experts working in other MOSs. Find out what value(s) they have used and their reasons for selecting that value.

Where do I record the percentage criterion for high performance task classification?

- Refer to ISR Sheet
- The percentage to be used for classifying high performance tasks is recorded on the ISR Sheet in the space labeled CRITERION FOR HIGH PERFORMANCE TASK. See the example below.

Example

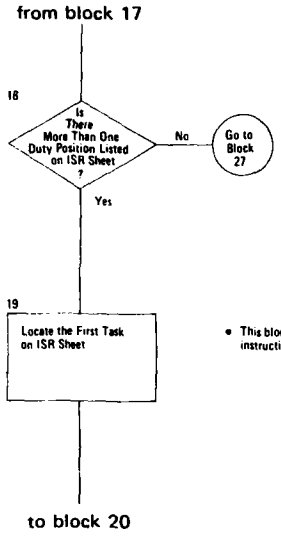
MOS 16H

Skill Level 1

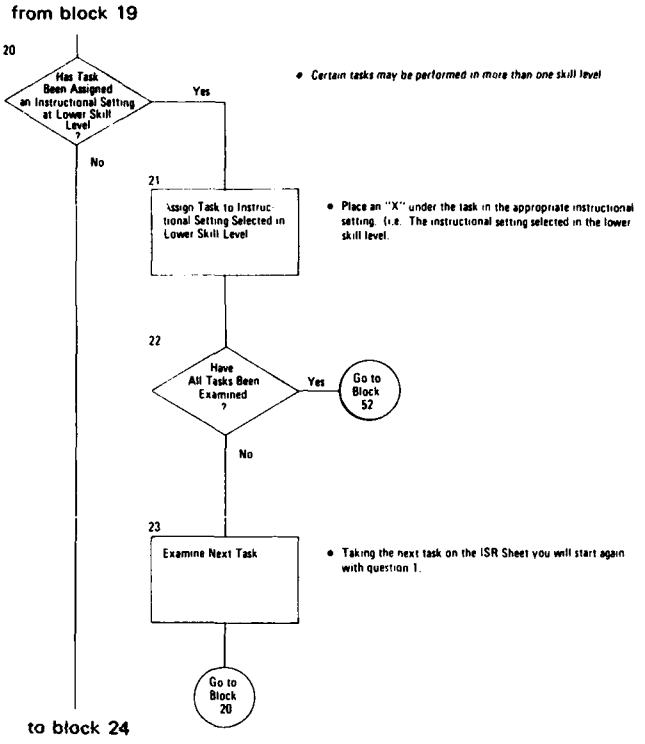
Criterion for High Performance Task 80 %

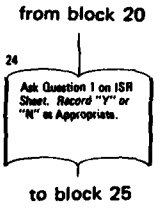
441-764	1001	1002	1006	1003	1014	1018	1019	1020	1021	1027
Intelligence Assistant	X	X	X	X	X	X	X	X	X	X
Switchboard Operator	X	X	X	X	X	X	X	X	X	X
Plotter-Teller-Journal Recorder	X	X	X	X	X	✓				
Console O.										

Task ID Numbers



- This block begins the process of initial assignment of tasks to one of three instructional settings.


from block 19
20
Has Task Been Assigned an Instructional Setting at Lower Skill Level ?
Yes
No
* Certain tasks may be performed in more than one skill level
21
Assign Task to Instructional Setting Selected in Lower Skill Level
• Place an "X" under the task in the appropriate instructional setting. (i.e. The instructional setting selected in the lower skill level.
22
Have All Tasks Been Examined ?
Yes
Go to Block 52
No
23
Examine Next Task
• Taking the next task on the ISR Sheet you will start again with question 1.
Go to Block 20
to block 24



- Question 1 determines if task is performed in all duty positions and should therefore be classified as a "common skill level task".
- For further guidance in answering question 1, see below.

How do I decide whether a task is a common skill level task?

- Steps to follow:
  - Step 1: Check the task against each duty position listed on ISR Sheet.
  - Step 2: Is task performed in all duty positions? (i.e., Is there an "X" recorded for each duty position?)
  - Step 3: Enter a "Y" (yes) or "N" (no) as appropriate under the task in question 1 row.

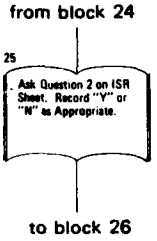
What does the ISR sheet look like after question 1 has been answered?

Example

Skill Level 1

Criterion for High Performance Task 80 %

Duty Positions	441-16H 1001	1002	1006	1008	1014	1018	1019	1020	1021	1027	1053	1054	1055	1059	1060	1061	1065	1066	1072	1073
	Task ID Numbers																			
Intelligence Assistant	X	X	X	X	X	X	X	X	X	X	X	X	X							
Switchboard Operator	X	X	X	X	X	X	X	X	X	X				X						
Plotter-Teltr-Journal Recorder	X	X	X	X	X	X	X	X	X	X					X	X				
Consolc Operator AN/TS2-38	X	X	X	X	X	X	X	X	X	X							X	X		
Console Operator AN/TS2-51	X	X	X	X	X	X	X	X	X	X									X	X
Percent Performing	78	77	(90)	92	95	81	75	85	81	75	(60)	50	40	42	20	40	35	30	22	25
1) Common Skill Level Task?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
2) High Performance Task?																				



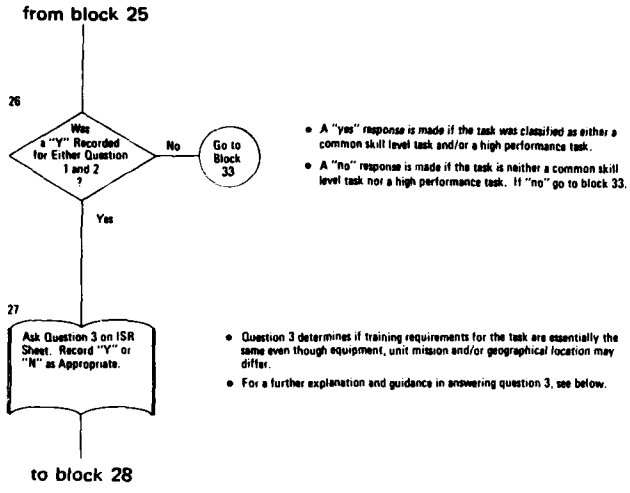
- Question 2 determines if task should be classified as a "high performance task". (Percentage was established in block 17.)
- For further guidance in answering question 2, see below.

How do I decide if a task is a high performance task and how is it recorded?

- Steps to follow:
  - Step 1: Look at the entry in the row: PERCENT PERFORMING.
  - Step 2: Is this percentage at least equal to the percentage entered on the ISR Sheet in Block: CRITERION FOR HIGH PERFORMANCE TASK?
  - Step 3: Enter a "Y" or "N" as appropriate under the task in question 2 row.

Example

Percent Performing	78	77	(90)	92	95	81	75	85	81	75	(60)	50	40	42	20	40	35	30	22	25
1) Common Skill Level Task?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
2) High Performance Task?	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
3) Training Requirements Highly Similar?																				
4) High Task Retention?																				
5) High Theory Content?																				
6) Need for Immediate Performance?																				
7) Prerequisite for task selected for school?																				
8) Equipment/Facilities																				



What is question 3 all about?

- Question 3 (Training Requirements Highly Similar?) is asked only if the task is a common skill level task and/or a high performance task.

- Generally a task classified as either a common skill level task or a high percent performing task will be trained in the resident school (institution) setting. In question 3 you are questioning whether task training requirements are essentially the same independent of the mission, equipment allocation, geographical location, etc., of units in which the job incumbent is assigned. If task training requirements are pretty much the same an institution training setting should be strongly considered. On the other hand, if training requirements differ considerably between units or duty positions, training in the unit (SOJT or self-study) should be considered.

What sources of information are available for answering question 3?

- Sources of information

  — Job performance measures or task performance descriptions developed in ISD I.3 Construct Job Performance Measures will be an excellent source of equipment used in task performance. This will assist in determining whether equipment differences between units will have an effect on training requirements.

  — TOE/MTOE and TDA is another excellent source of information concerning equipment allocation in various units.

  — Training Manuals and supply bulletins used in conjunction with TOE should be considered as a good source of information.

— Panel of recent job incumbents can provide good information for answering question 3. See Resource Manual for guidance in establishing and using this particular panel.

— Panel of subject matter experts. This also is a good source. See Resource Manual for guidance in establishing and using a panel of subject matter experts.

— Your own judgment. Use only as a last resort or in conjunction with other sources.

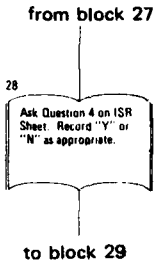
How and where do I record my answer to question 3?

- Procedure

  — Record a "Y" or "N" as appropriate under the task in question 3 row of the ISR Sheet.

Example

Percent Performing	78	77	(90)	92	95	81	75	85	81	75	(60)	50	40	42	20	40	35	30	22	25
1) Common Skill Level Task?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
2) High Performance Task?	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
3) Training Requirements Highly Similar?	Y	Y	Y	Y	N	N	Y	N	Y	Y										
4) High Task Retention?																				



- Question 4 asks if school training for a task would be remembered until the task is performed in the field.
- For a further explanation and guidance in answering question 4, see below.

What factors are involved in determining if a task taught in the school will still be remembered by the time the soldier has to perform the task on the job?

- We all know that there are some tasks we remember how to do more easily than others. Factors which influence retention must be considered when you select the instructional setting. There is no point in training a task in the institution if the soldier can't remember how to perform the task when he arrives on the job. SOJT or self-study should be considered when training retention is likely to be low.

- The following are examples of factors to consider in answering question 4:

  — Tasks for which the soldier has had previous civilian or military experience will usually be easily remembered. (e.g., driving a vehicle.)

  — Tasks which the soldier considers important to remember will be better learned and more easily recalled.

  — Some tasks require frequent opportunities for practice in order to retain task proficiency.

  — In general, motor tasks (physical activities) are more easily remembered than mental tasks.

  — Tasks which involve short regular procedures are more easily remembered than those for which there is no clear cut procedure to follow.

- In answering question 4 consider the above factors plus any others you think may affect task retention.

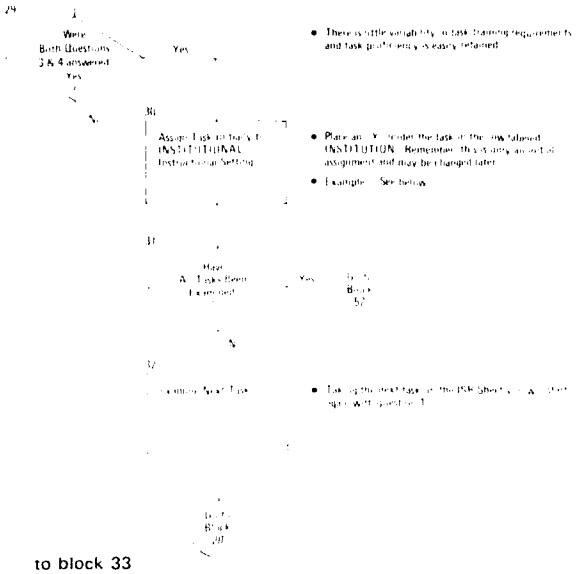
- Procedure

  — If you decide that a task trained in the school would still be remembered until performed in the field enter a "Y" under the task in question 4 row. Otherwise, enter an "N."

Example

Percent Performing	78	77	(40)	42	45	81	75	85	81	75	(60)	8	40	42	20	40	35	30	22	25
1) Common Skill Level Task?	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	N	N	N	N	N	N	N	N	N
2) High Performance Task?	N	N	Y	Y	Y	Y	N	Y	Y	N	N	N	N	N	N	N	N	N	N	N
3) Training Requirements Highly Similar?	Y	Y	Y	Y	N	N	Y	N	Y	Y										
4) High Task Retention?	Y	Y	Y	Y	N	N	N	Y	N	N										
5) High Theory Content?																				
6) Need for Immediate Performance?																				
7) Prerequisite for task selected for school?																				
8) Equipment/Facilities Unique to School?																				
9) Equipment Available at Unit?																				
10) Supervision Available at Unit?																				
11) Time to Train Available																				

from block 28

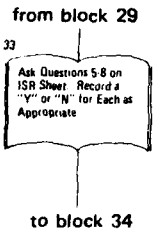


to block 33

What does the ISR sheet look like for tasks when assigned to Institutional instructional setting?

Example

3) Training Requirements Highly Similar?	Y	Y	Y	Y	N	N	Y	N	Y	Y
4) High Task Retention?	Y	Y	Y	Y	N	N	N	Y	N	N
5) High Theory Content?										
6) Need for Immediate Performance?										
7) Prerequisite for task selected for school?										
8) Equipment Facilities Unique to School?										
9) Equipment Available at Unit?										
10) Supervision Available at Unit?										
11) Time to Train Available at Unit?										
12) Little Supervision Required?										
13) Time to Study Available?										
14) Lessons/Equipment Exportable?										
Instructional Setting: INSTITUTION	X	X	X	X						
Instructional Setting: OJT					X					
Instructional Setting: SELF-STUDY										



- Questions 5-8 ask the following questions
  - High theory content?
  - Need for immediate performance?
  - Task a prerequisite skill/knowledge for another task already assigned for institutional training?
  - Equipment/facilities for training only available in the institutional setting?
- For a further explanation and guidance in answering questions 5-8, see below.

What do questions 5 thru 8 mean?

- **Question 5: High Theory Content?**

  — Is there a considerable amount of theory to be taught with this task?

- **Question 6: Immediate Performance?**

  — Must this task be performed immediately on entry to the job? (i.e., Before it could be trained on the job)

- **Question 7: Prerequisite for task selected for school?**

  — Is this task a prerequisite for learning and/or performing other school trained tasks? (i.e., Must the soldier be able to perform this task in order to learn other tasks taught in the school?)

- **Question 8: Equipment/Facilities Unique to School?**

  — Are equipment and/or facilities only available for training at the school?

What sources are available to help in answering questions 5 thru 8?

- Sources of information for these questions are:

Question 5: High Theory Content?

— Output from ISD I.3 Construct Job Performance Measures or Job Aid for Conducting Task Analysis. Examine task descriptions to determine how task is performed. This should provide an excellent insight into the amount of theoretical content that will be required for training the task.

— Training Manuals are an excellent source of information.

— Field survey of Job Supervisors is an excellent source if time for survey is available. (See Resource Manual for guidance in conducting a field survey)

— Panel of Recent Job Supervisors. Fair Source. (See Resource Manual for guidance in establishing panel)

Question 6: Immediate Performance?

— Field Survey of Job Supervisors and/or Incumbents. Excellent source when time for survey is available and if information is not available through CODAP. (See Resource Manual for guidance in conducting the survey.)

— Panel of Recent Job Incumbents. Good Source. (See Resource Manual for guidance in selecting panel.)

— Your own judgment. Use only if all other sources are unavailable.

Question 7: Prerequisite for task selected for school?

— Review of other tasks already assigned to resident school setting.

Question 8: Equipment/Facilities Unique to School?

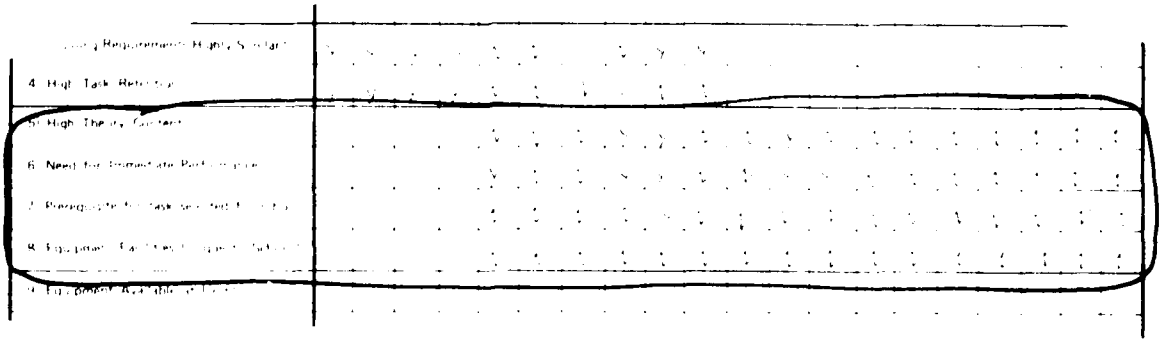
— Check Training Manuals, task description etc. to determine training equipment requirements. Survey field supervisors to determine if training equipment is available in field units.

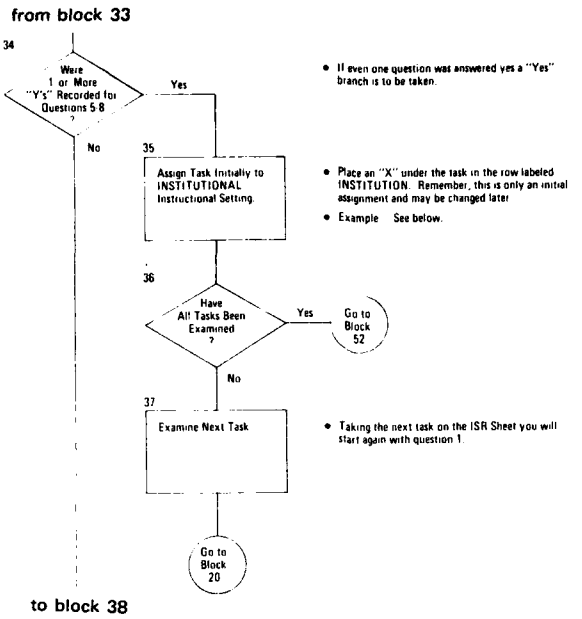
— Panel of Recent Job Supervisors. Use in conjunction with Training Manuals, Job Performance Measures, etc. (See Resource Manual for guidance in selecting panel.)

How and where do I record my answers to questions 5 thru 8?

- For each question (5 thru 8) record a "Y" or "N" as appropriate under the task and in the appropriate question row.

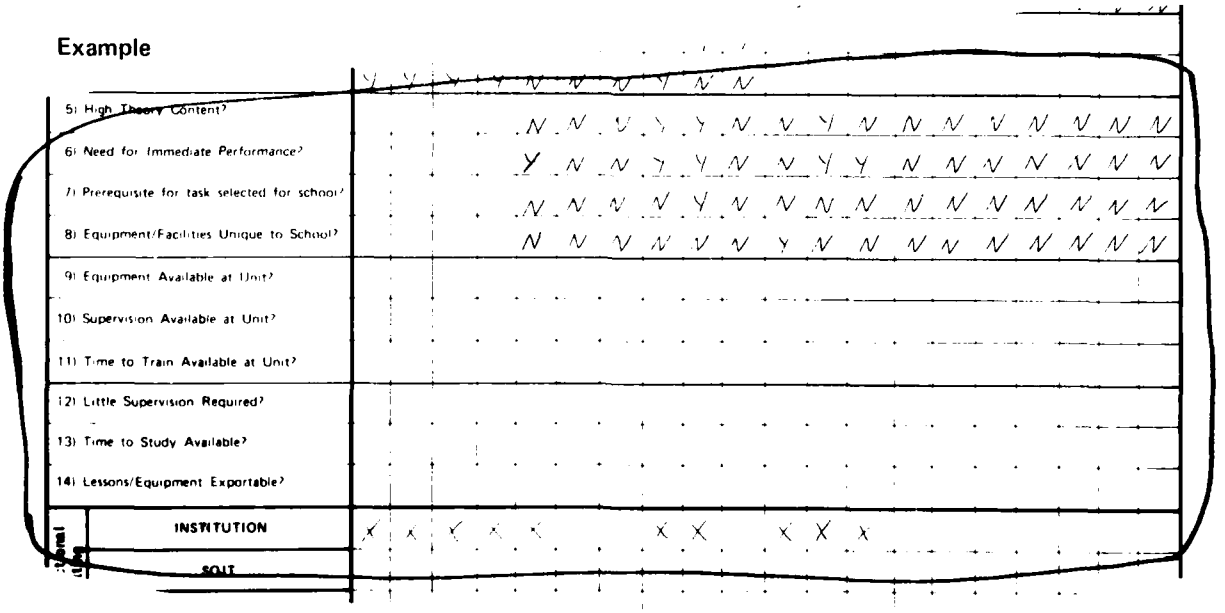
Example

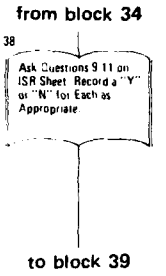




What does the ISR sheet look like when all appropiate tasks have been assigned to Institutional instructional setting?

Example





- Question 9-11 help in determining whether the task can be assigned initially to SQJT (Supervised on the job training)
- The questions asked are
  - Equipment available at unit?
  - Supervision available at unit?
  - Time to train available at unit?
- For a further explanation and guidance in answering questions 9-11, see below

What do questions 9 thru 11 mean?

- **Question 9: Equipment Available at Unit?**

  — Is the equipment required for individual training of this task in the unit available at most units?

- **Question 10: Supervision Available at Unit?**

  — Are personnel with the necessary expertise available at most units to conduct the training for this task?

- **Question 11: Time to Train Available at Unit?**

  — Do operational requirements at most units allow sufficient time for the soldier to be trained in the unit?

What sources are available to help in answering questions 9 thru 11?

- Sources of information for these questions are:

Question 9: Equipment Available at Unit?

— Field Survey of Supervisors is an excellent source of information if time for survey is available. (See Resource Manual)

— Panel of Recent Job Supervisors is a good source of information. (See Resource Manual for guidance in selecting panel.)

— Training Manuals to determine equipment requirement followed by review of TOE/MTOE or TDA for appropriate units. Good source of information.

Question 10: Supervision Available at Unit?

— Field Survey of Supervisors is an excellent source of information if time for survey is available. (See Resource Manual)

— Panel of Recent Job Supervisors. Good source. (See Resource Manual)

— Your own judgment. Use only if other sources are not available.

Question 11: Time to Train Available at Unit?

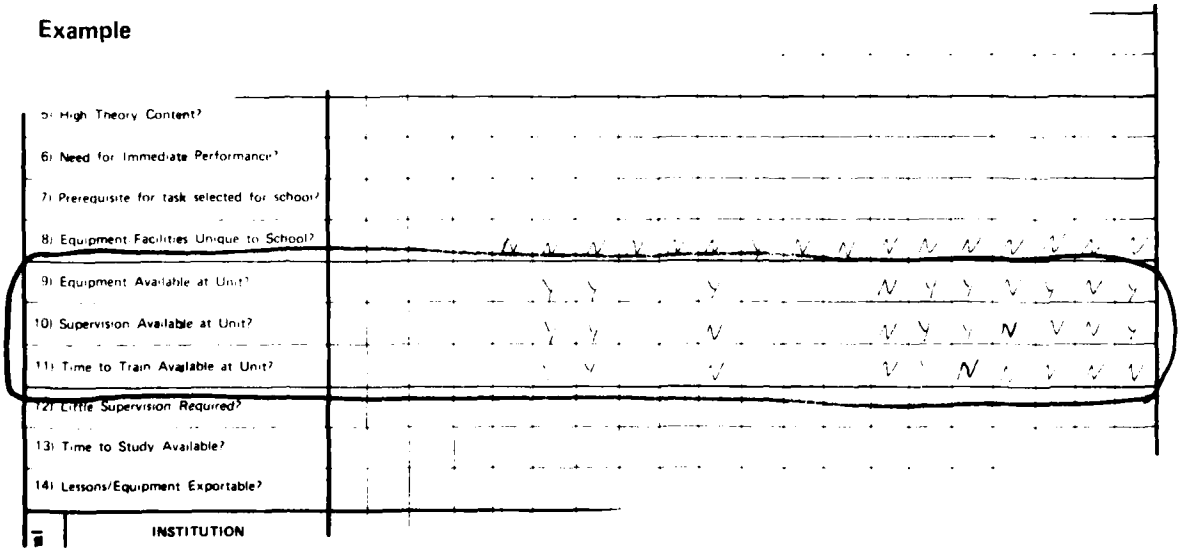
— Field Survey of Supervisors is an excellent source of this information. (See Resource Manual)

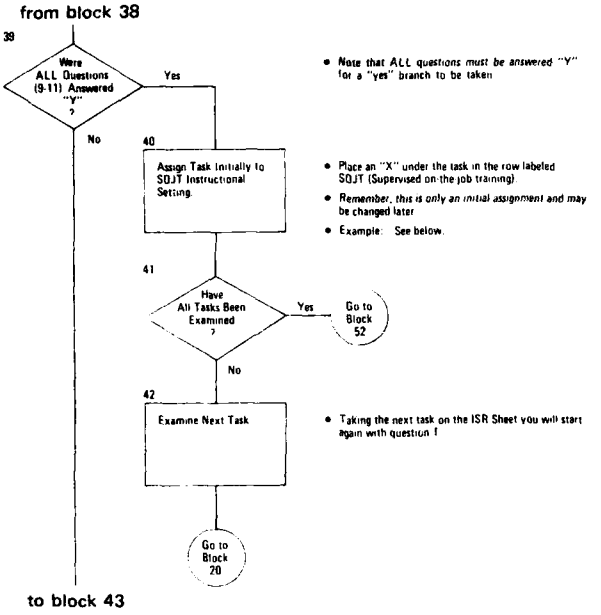
— Panel of Recent Job Supervisors. Good source. (See Resource Manual for guidance in selecting panel)

How and where do I record my answers to questions 9 thru 11?

- For each question (9 thru 11) record a "Y" or "N" as appropriate under the task and in the appropriate question row.

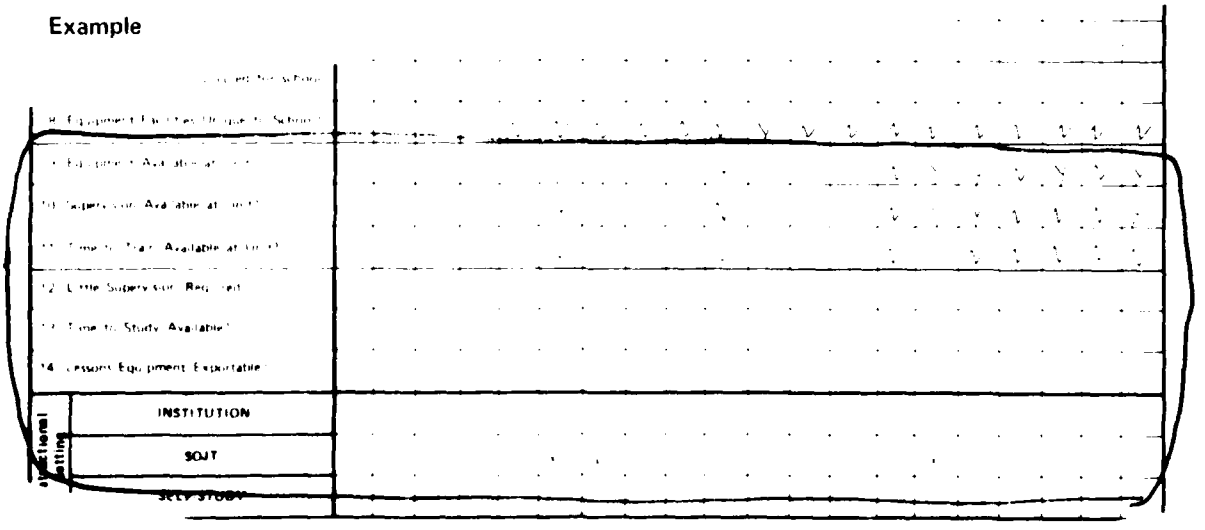
Example

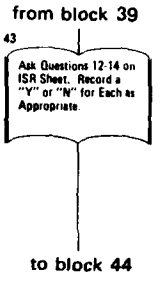




What does the ISR sheet look like after all appropriate tasks have been assigned to SOJT?

Example





- Questions 12-14 help in determining whether the task should be initially assigned to a self-study instructional setting.
- The questions asked are
  - *Little supervision required?*
  - Time to study available?
  - Lessons/equipment exportable?
- For a further explanation and guidance in answering questions 12-14, see below.

What do questions 12 thru 14 mean?

- **Question 12: Little Supervision Required?**

  — Can this task be learned with very little supervision? (i.e., Can the soldier learn the task through self-study?)

- **Question 13: Time to Study Available?**

  — Does the soldier's schedule allow sufficient time for independent study?

- **Question 14: Lessons/Equipment Exportable?**

  — Can everything required for training (which is not already available in the field) be included in the training package and is it inexpensively exportable.

What sources are available to help in answering questions 12 thru 14?

- Sources of information for these questions are:

Question 12: Little Supervision Required?

— Output from ISD I.2 Select Tasks/Functions. Task learning difficulty should have been established on a rating scale of 1 to 7 and will therefore be an excellent indication of the amount of supervision required.

— Field Survey of Job Supervisors. Excellent source if time for survey is available. (See Resource Manual for guidance in conducting field survey.)

— Panel of Recent Job Supervisors. Good source of information. (See Resource Manual for guidance in selecting panel.)

— Your own judgment. Use only if other sources are not available.

Question 13: Time to Study Available?

— Field Survey of Job Incumbents and Job Supervisors. Excellent source especially when a comparison is made between the two sources. (See Resource Manual for guidance in conducting a field survey.)

— Panel of Recent Job Incumbents and Recent Job Supervisors. Good source. (See Resource Manual for guidance in selecting panels.)

— Your own judgment. Use only if other sources are not available.

Question 14: Lessons/Equipment Exportable?

— Check with Course Development Personnel.

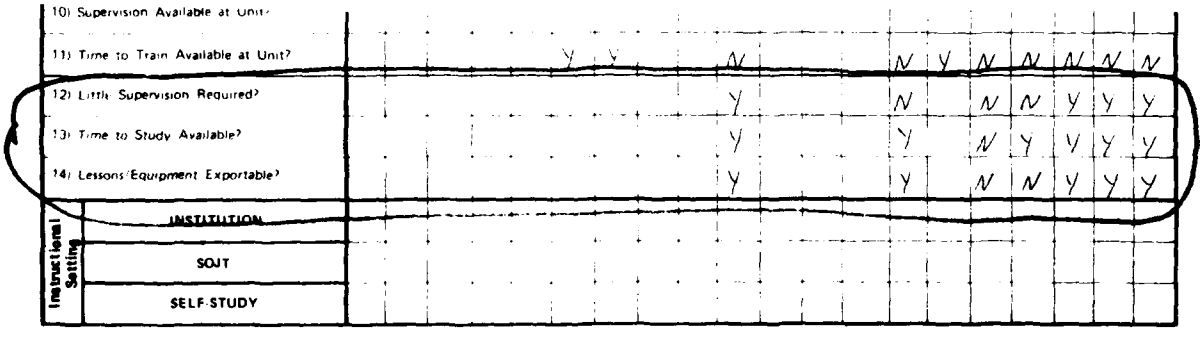
— Panel of Subject Matter Experts. Fair source. (See Resource Manual for guidance in selecting panel)

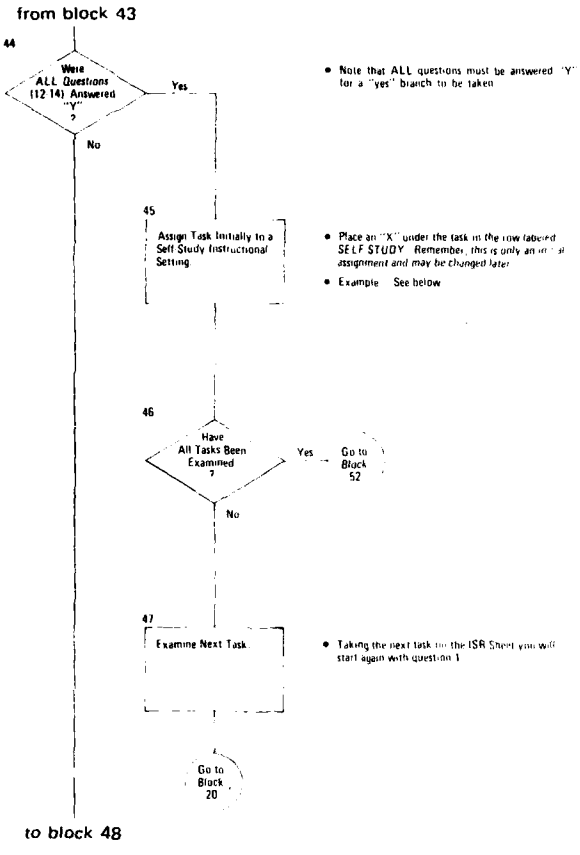
— Your own judgment. Use only if other sources are not available.

How and where do I record my answers to questions 12 thru 14?

- For each question (12 thru 14) record a "Y" or "N" as appropriate under the task and in the appropriate question row.

Example



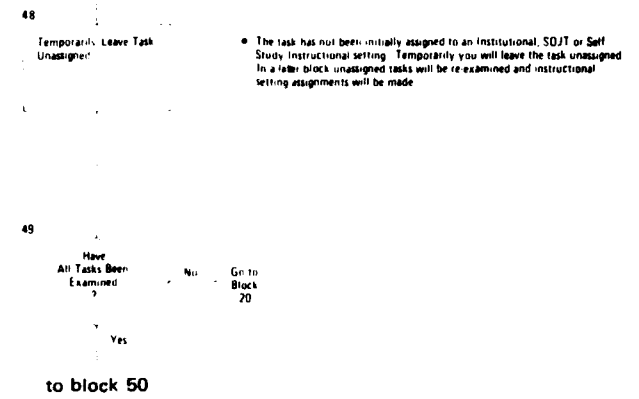


What does the ISR sheet look like for tasks when assigned to a Self-Study instructional setting?

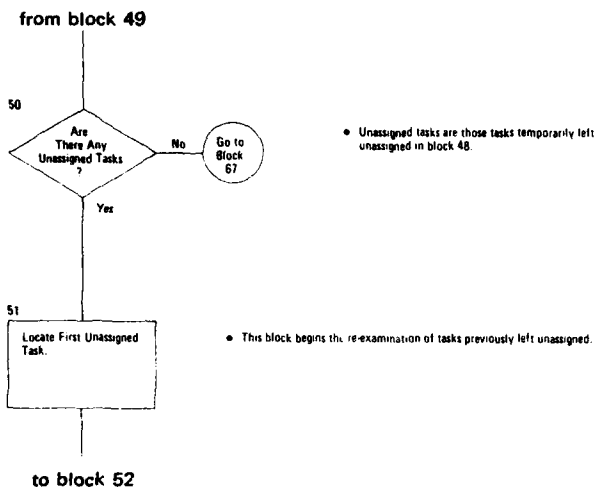
Example

11) Time to Train Available at Unit?		Y Y N N Y N N N Y Y N
12) Little Supervision Required?		Y N N N Y Y Y
13) Time to Study Available?		Y Y N Y Y Y Y
14) Lessons/Equipment Exportable?		Y Y N N Y Y Y
Instructional Setting	INSTITUTION	
	SOJT	
	SELF-STUDY	X X X X

from blocks 43 and 47

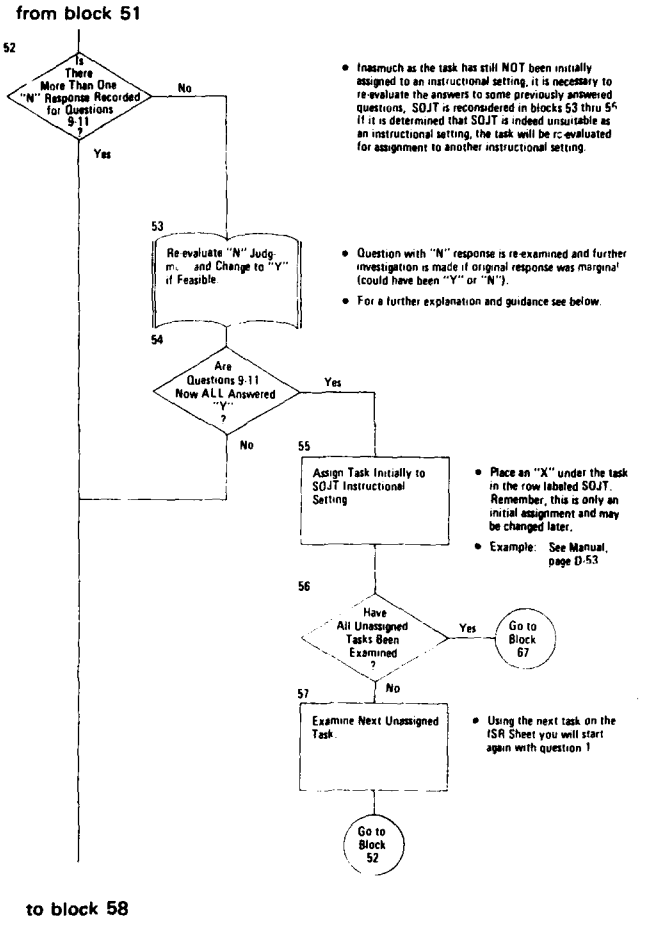


to block 50



- Unassigned tasks are those tasks temporarily left unassigned in block 48.

- This block begins the re-examination of tasks previously left unassigned.



What should I consider when I re-evaluate the "N" response made to question 9, 10, or 11?

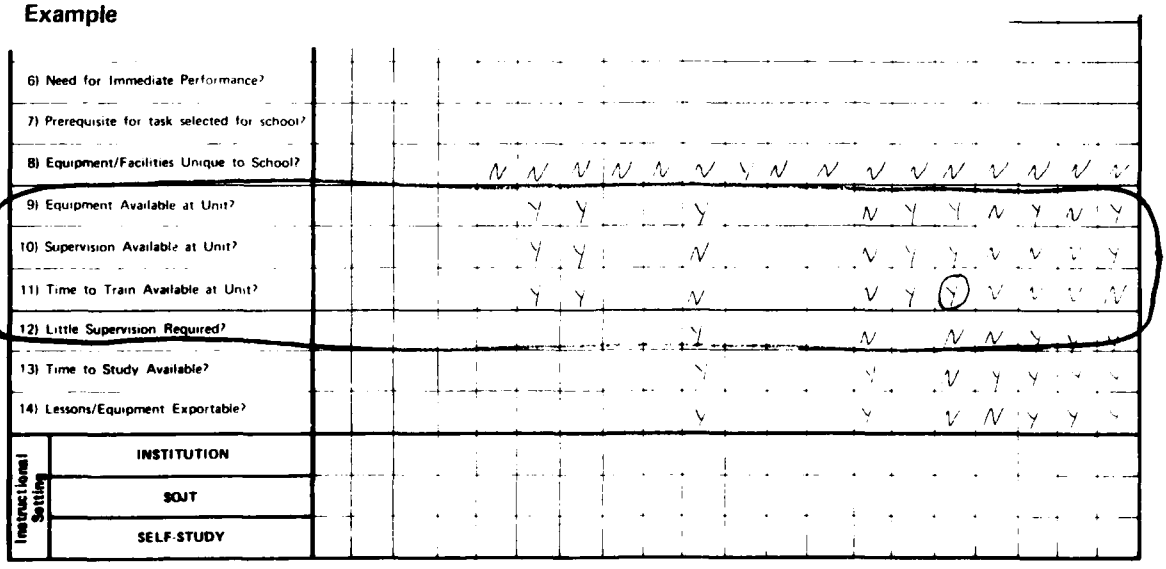
- At the time you recorded this "N" response you may have been in doubt about your answer. If this is the case, do some additional checking to determine if your initial judgment was correct. Check with your supervisor, a new sample of recent job incumbents, or other subject matter experts.

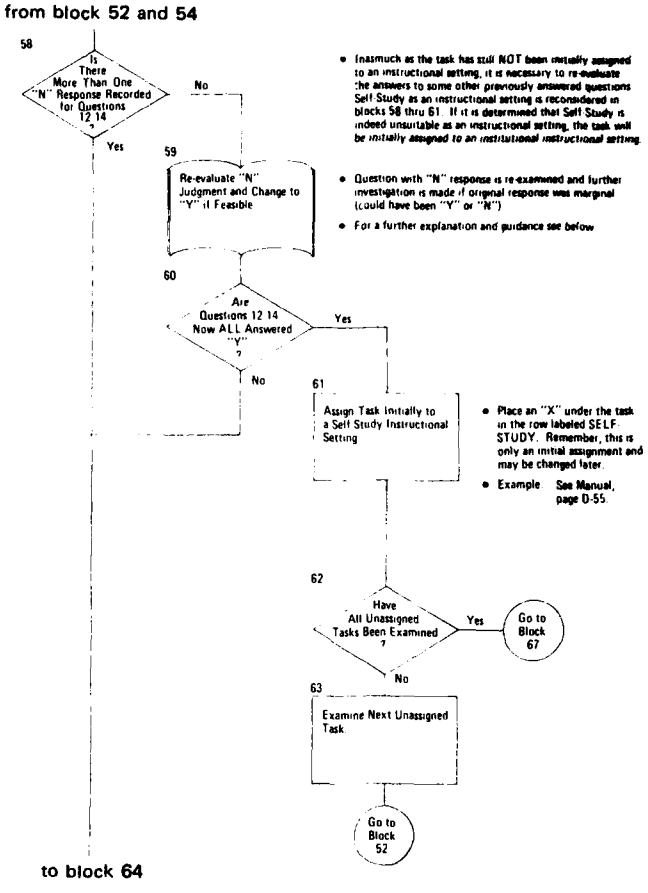
> **NOTE:** It is important that you DO NOT change your "N" response unless you definitely think there is a legitimate basis for changing it to "Y."

How and where do I record a change from "N" to "Y" for question 9, 10, or 11?

- Follow these steps for recording a change from "N" to "Y"
  - — Step 1: Erase the "N" response
  - — Step 2: Enter a "Y" response
  - — Step 3: Circle the ("Y") response as an indication that this response was previously recorded as a "N." You and/or your supervisor may want to pay particular attention to this task when you are reviewing the initial instructional setting assignments.

Example





What should I consider when I re-evaluate the "N" response made to question 12, 13, or 14?

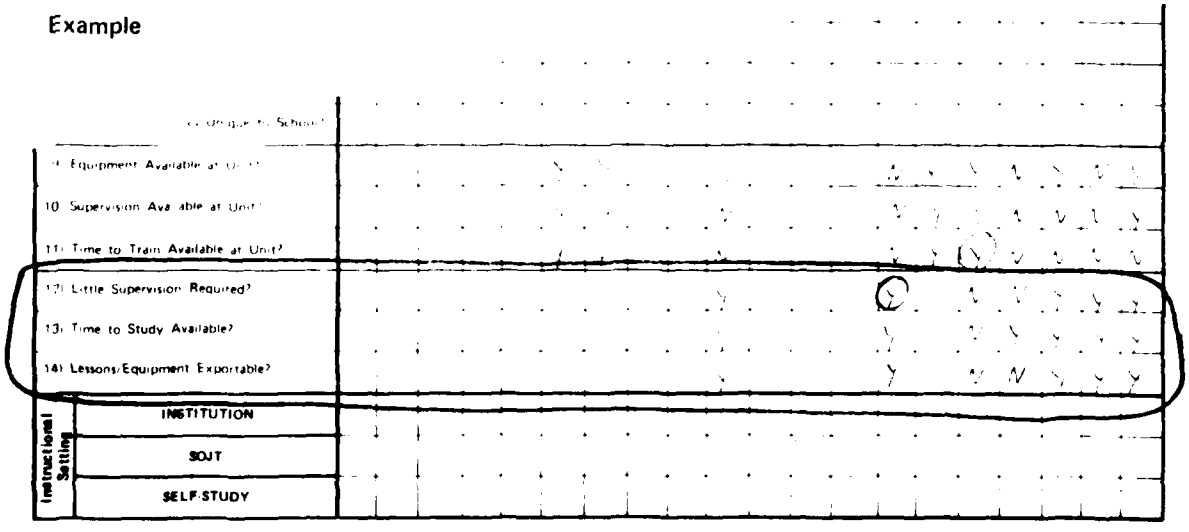
- At the time you recorded this "N" response you may have been in doubt about your answer. If this is the case, do some additional checking to determine if your initial judgment was indeed correct. Check with your supervisor, a new sample of recent job incumbents, or other subject matter experts, etc.

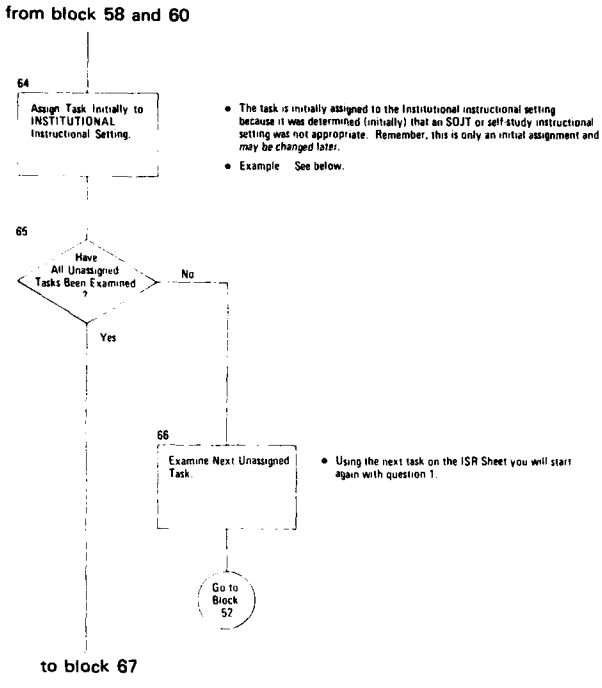
> **NOTE:** It is important that you DO NOT change your "N" response unless you definitely think there is a legitimate basis for changing it to "Y".

How and where do I record a change from "N" to "Y" for question 12, 13, or 14?

- Follow these steps for recording a change from "N" to "Y."
  - Step 1: Erase the "N" response
  - Step 2: Enter a "Y" response
  - Step 3: Circle the "Y" response as an indication that this response was previously recorded as an "N." You and/or your supervisor may want to pay particular attention to this task when you are reviewing the initial instructional setting assignments.

Example

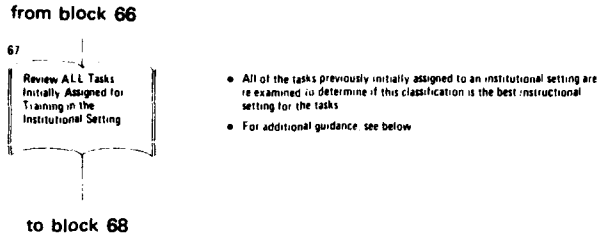




What does the ISR sheet look like for tasks when assigned to institutional instructional settings?

Example

6) Need for Immediate Performance?	N N N Y Y N N Y N N N N N N N
7) Prerequisite for task selected for school?	Y N N Y Y N N Y Y N N N N N N
8) Equipment/Facilities Unique to School?	N N N N N Y N N N N N N N N N
9) Equipment Available at Unit?	N N N N N Y Y N N N N N N N N
10) Supervision Available at Unit?	N N N N N Y Y N N N N N N N N
11) Time to Train Available at Unit?	N N N N N Y Y (Y) N N N N N N
12) Little Supervision Required?	N N N N N (Y) N N N N N N N N
13) Time to Study Available?	N N N N N Y N Y Y Y Y Y Y Y
14) Lessons/Equipment Exportable?	N N N N N Y N N N Y Y Y Y Y
INSTITUTION	X X X X X X X X X X X X X X



What factors do I consider when I re-examine the tasks initially assigned to an institutional instructional setting?

- Your initial selection of the Institution as the instructional setting was based on questions 1 through 4 or 5 through 8 on the ISR Sheet. There may be some reasons why the task should not be trained in the institution even though it was initially assigned to an institutional setting.

- For each task initially assigned to the Institution consider any reason why the task should NOT be trained in an institutional setting. Following are examples of questions you might want to ask as you review each task:

  — Do feedback from the field or SQT results indicate that an Institutional setting has proven ineffective for any of these tasks?

  — Are appropriate cues or stimuli not available in the school for any task?

  — Are skilled instructors available for teaching the task in the school?

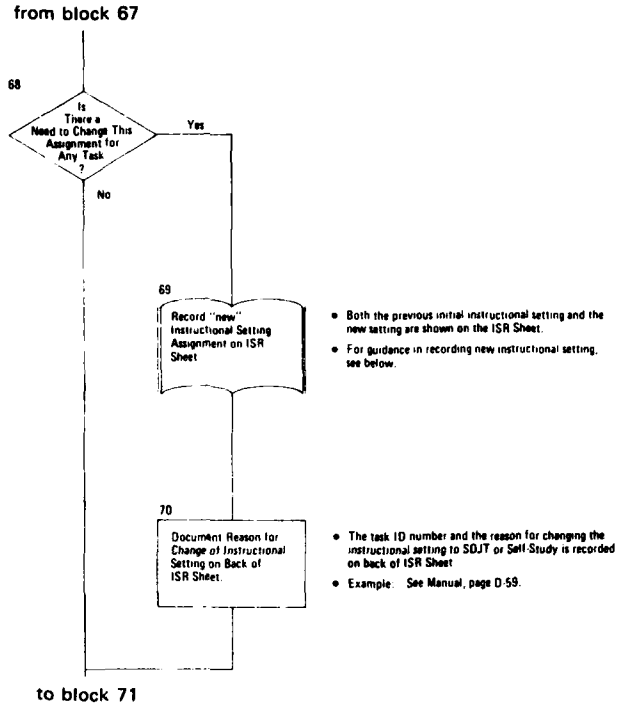
  — Is time and money available for training the task in the school?

  — Are there any job factors unique to this MOS which would cause you to change this instructional setting?

  — Will new equipment/simulators soon to be available cause you to change this setting?

  You may have other reasons why the task should not be taught at the institution. Consider each reason carefully.

- If you decide that an institutional instructional setting is unsuitable review questions 7 through 14 on the ISR Sheet to determine if the task can be assinged to SOJT or Self-Study. If necessary, consult with other subject matter experts or your supervisor to arrive at a suitable instructional setting for the task.

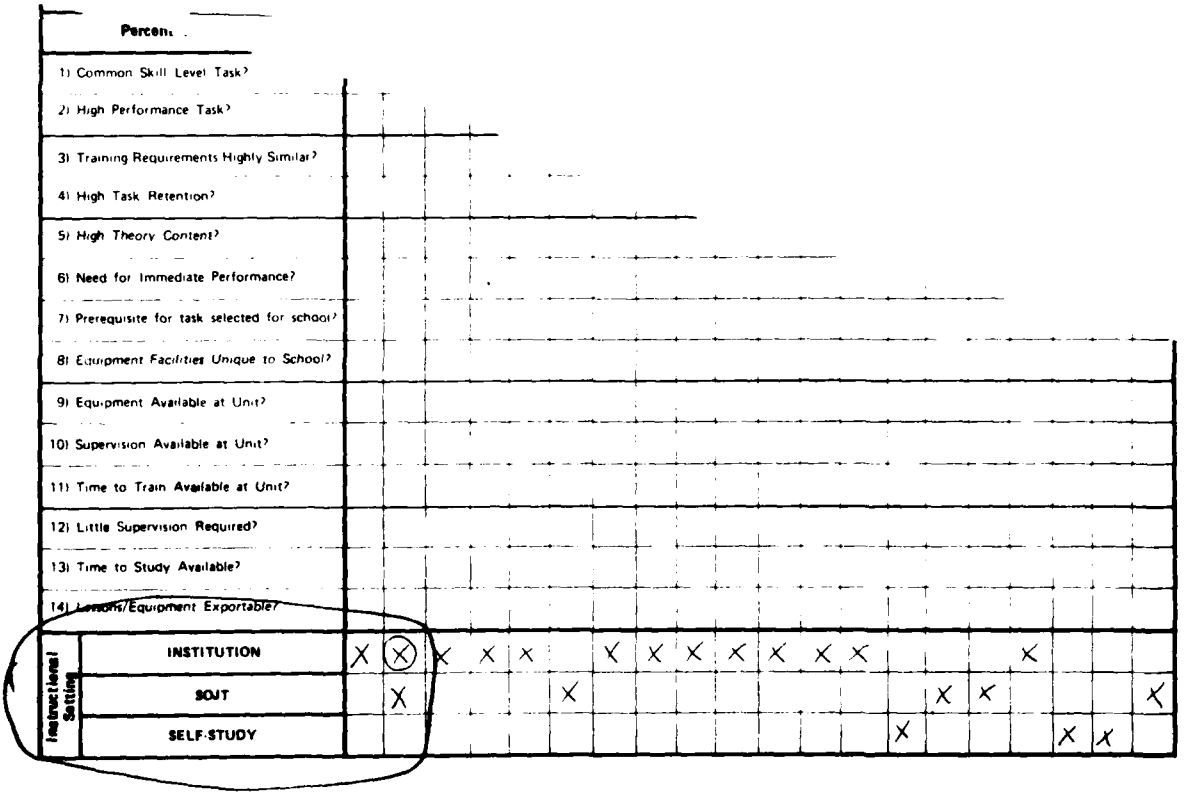


How do I record the new instructional setting on the ISR sheet?

- Procedure to use in recording new instructional setting:
  - Step 1: Record an "X" under the task in the SOJT or Self-Study row.
  - Step 2: Circle the "X" recorded under the task in the INSTITUTION row. DO NOT erase the originally recorded "X." This will later allow you and/or your supervisor to easily determine that the initial instructional setting was changed from INSTITUTION to SOJT or SELF-STUDY.

What does the ISR sheet look like for tasks changed from an institutional setting to an SOJT or Self-Study instructional setting?

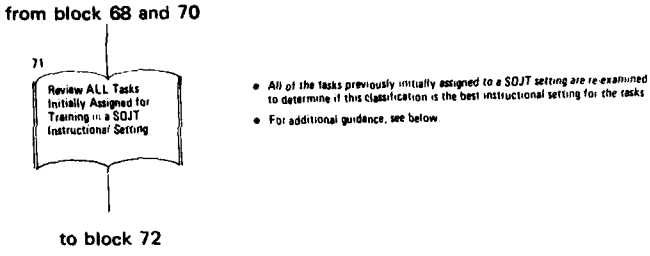
EXAMPLE



How do I document on the back of the ISR sheet the reason for changing the instructional setting from institution to SOJT or self-study?

Example

TASK ID NUMBER	REASON FOR CHANGING INITIAL INSTRUCTIONAL SETTING
1111 - 1611	
1002	Recent SQT results indicate that a majority of soldiers scored NO-GO on this task. It would be more easily learned in the unit where appropriate cues and stimuli are available.
1019	~~Even though~~ task retention is low and task meets all 3 requirements for SOJT it should be trained in the institution because nearly 100% of soldiers *should* be performing it.



What factors do I consider when I re-examine the tasks initially assigned to an SOJT instructional setting?

- Your initial selection of SOJT as the instructional setting was based on questions 7 through 9 on the ISR Sheet. There may be some reasons why the task should not be trained by SOJT even though initially assigned to a SOJT setting.

- For each task initially assigned to SOJT consider any reason why the task should NOT be trained in a SOJT setting. Following are examples of questions you might want to ask as you review each task.

  — Do feedback from the field or SQT results indicate that a SOJT setting has proven ineffective for any of these tasks?

  — Is the environment too hazardous for training this task in the field? For example, would errors made during training in a field environment be critical to the student, to others, or to equipment?

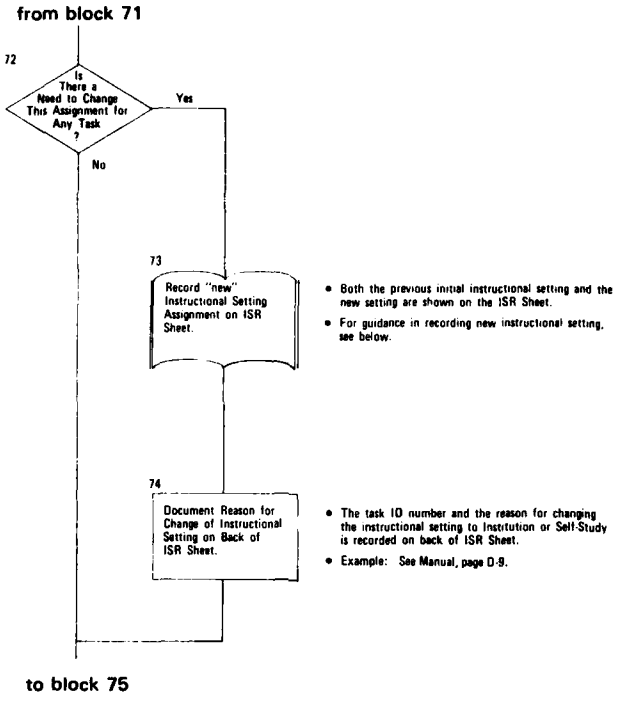
  — Will new equipment/simulators soon be available which would cause you to change the setting?

  — Do "percentage performing" figures indicate that fewer soldiers are performing this task than should be? If so, does the percent which should be performing meet the criterion for high task performance and therefore consideration for Institutional training?

  — Are there any job factors unique to this MOS which would cause you to change this instructional setting?

  You may have other reasons why the task should not be taught by SOJT. Consider each reason carefully.

- If you decide that a SOJT instructional setting is unsuitable, review all of the questions on the ISR Sheet to determine if the task should be assigned to an Institutional or Self-Study instructional setting. If necessary, consult with other subject matter experts or your supervisor to arrive at a suitable instructional setting for the task.

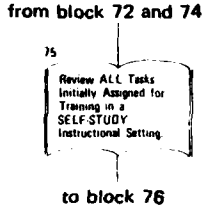


How do I record the new instructional setting on the ISR sheet?

- Procedure to use in recording new instructional setting:

  — Step 1: Record an "X" under the task in the INSTITUTION or Self-Study row.

  — Step 2: Circle the "X" recorded under the task in the SOJT row. DO NOT erase the originally recorded "X." This will later allow you and/or your supervisor to easily determine that the initial instructional setting was charged from SOJT to INSTITUTION or Self-Study.



- *All of the tasks previously initially assigned to a Self-Study setting are re-examined to determine if this classification is the best instructional setting for the tasks.*
- *For additional guidance, see below.*

What factors do I consider when I re-examine the tasks initially assigned to a self-study instructional setting?

- Your initial selection of Self-Study as the instructional setting was based on questions 12 through 14 on the ISR Sheet. There may be some reasons why the task should not be trained by Self-Study even though initially assigned to a Self-Study setting.

- For each task initially assigned to Self-Study consider any reason why the task should NOT be trained in a Self-Study setting. Following are examples of questions you might want to ask as you review each task:

  — Do feedback from the field or SQT results indicate that a Self-Study setting has proven ineffective for any of these tasks?

  — Will new equipment/simulators soon be available which would cause you to change the setting?

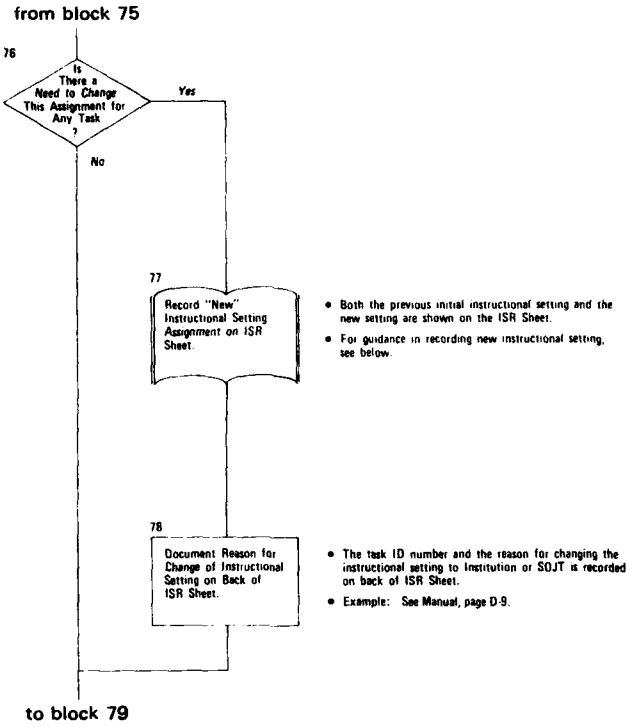
  — Do "percentage performing" figures indicate that fewer soldiers are performing this task than should be? If so, does the percent which should be performing meet the criterion for high task performance and therefore consideration for Institutional training?

  — Would the percent performing figure change radically during mobilization? Would the task then become a candidate for training in the Institution?

  — Are there any job factors unique to this MOS which would cause you to change this instructional setting?

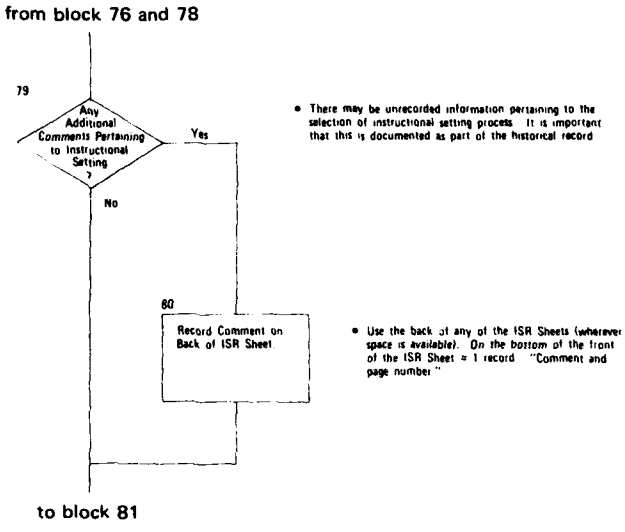
  You may have other reasons why the task should not be taught by Self-Study. Consider each reason carefully.

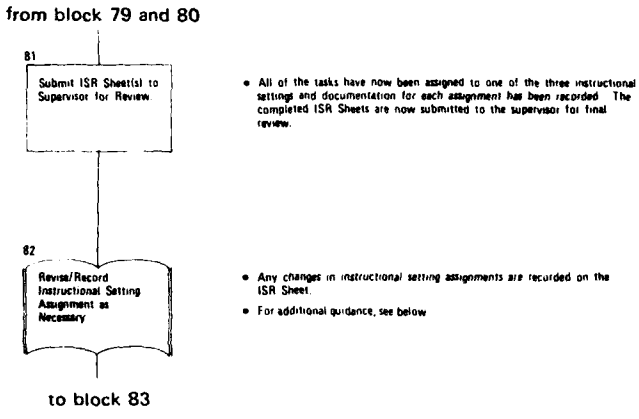
- If you decide that a Self-Study instructional setting is unsuitable, review all of the questions on the ISR Sheet to determine if the task should be assigned to an Institutional or SOJT instructional setting. If necessary, consult with other subject matter experts or your supervisor to arrive at a suitable instructional setting for the task.



How do I record the new instructional setting on the ISR sheet?

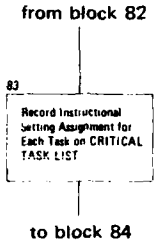
- Procedure to use in recording new instructional setting:
  - — Step 1: Record an "X" under the task in the INSTITUTION or SOJT row.
  - — Step 2: Circle the ("X") recorded under the task in the SELF-STUDY row. DO NOT erase the originally recorded "X". This will later allow you and/or your supervisor to easily determine that the initial instructional setting was changed from INSTITUTION to SOJT or SELF-STUDY.


from block 76 and 78
79
Any Additional Comments Pertaining to Instructional Setting ?
Yes
No
80
Record Comment on Back of ISR Sheet
• There may be unrecorded information pertaining to the selection of instructional setting process. It is important that this is documented as part of the historical record
• Use the back of any of the ISR Sheets (wherever space is available). On the bottom of the front of the ISR Sheet = 1 record. "Comment and page number"
to block 81

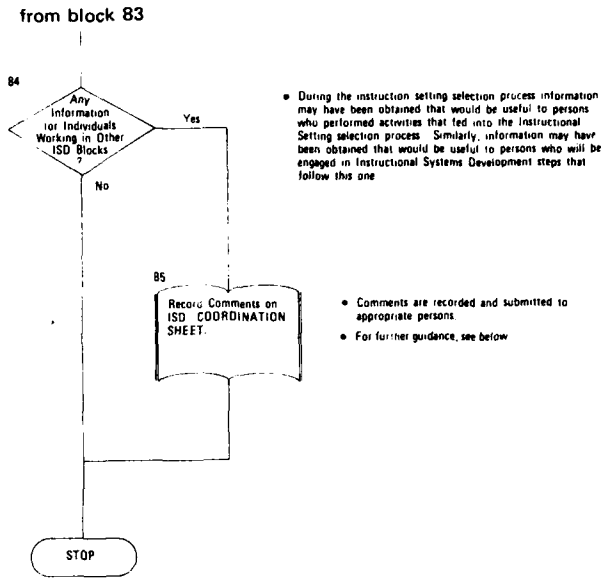


How do I record changes in the instructional setting made as a result of my supervisor's review?

- Changes in instructional setting made by the supervisor are recorded in the same way that you recorded your changes. That is:
  - Step 1: Record an "X" under the task in the NEW instructional setting row.
  - Step 2: Circle the ("X") recorded under the task in the previously assigned instructional setting. DO NOT erase the originally recorded "X."
  - Step 3: Record task ID number on back of ISD Sheet.
  - Step 4: Record reason for change in instructional setting and record that this change was as a result of supervisor review.



- The final instructional setting assignment has now been arrived at and recorded on the ISR Sheet. In this block the instructional setting assigned for each task is recorded on the Critical Task List
- To see a copy of a Critical Task List see Job Aid for Selecting Tasks *for Training (ISD 1.2)*



What is the importance of preparing comments for people working in other steps of the instructional systems development process? How do I record them?

- In order for the Instructional Systems Development process to work effectively it is imperative that there be forward and backward communication between the people involved in the process. At some time or other you have probably complained about the input that has been provided to you. For example, you may have thought that other tasks should have been included in the critical task listing, or that the job performance measures were incomplete or inaccurate. Sometimes, you may have had to do work that should have been performed in previous steps.

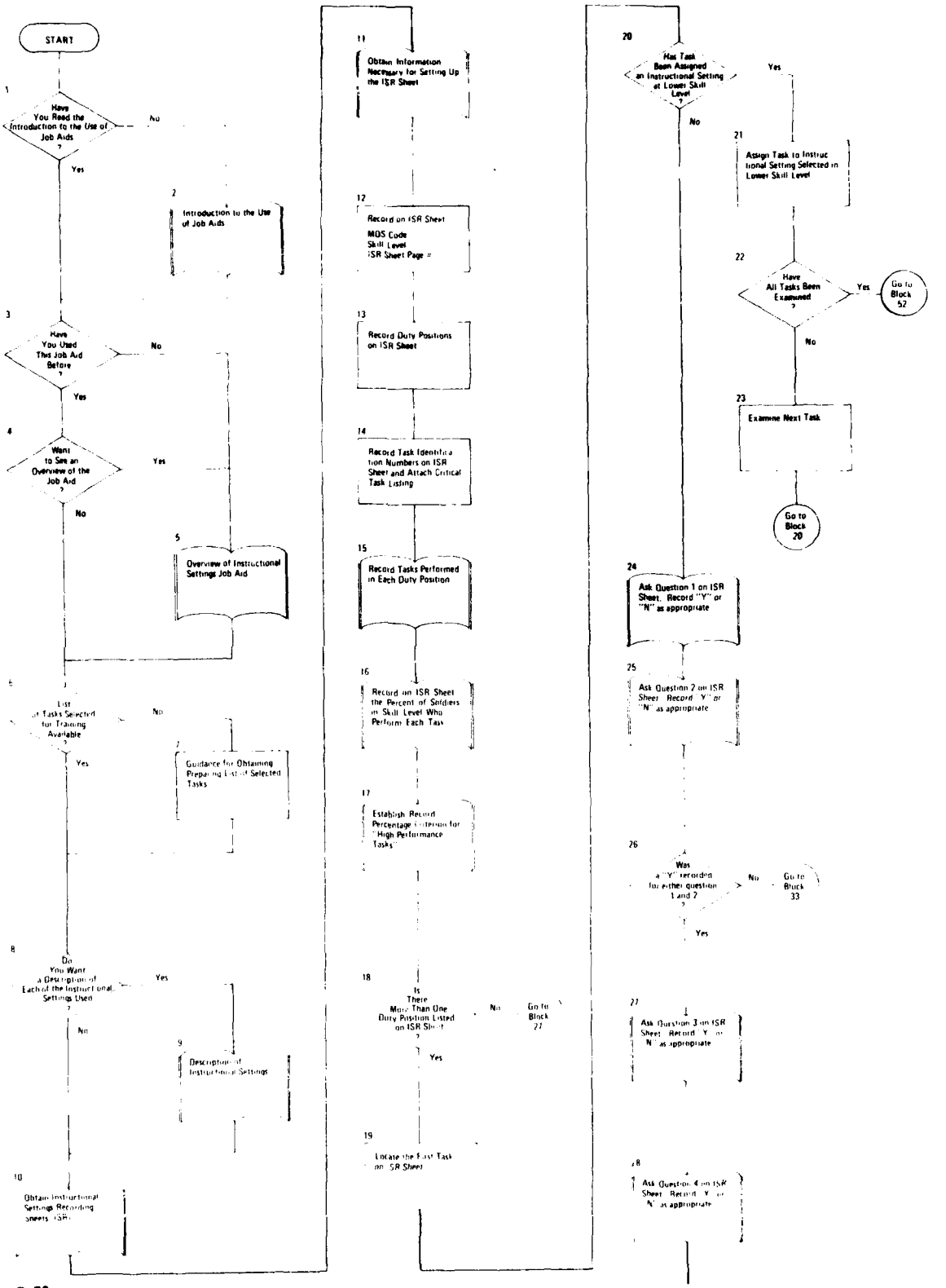
> IT IS IMPORTANT THAT YOU FEED THIS INFORMATION BACK TO THE APPROPRIATE PEOPLE SO THAT REVISIONS CAN BE MADE TO EFFECT IMPROVEMENT IN THE END PRODUCT.

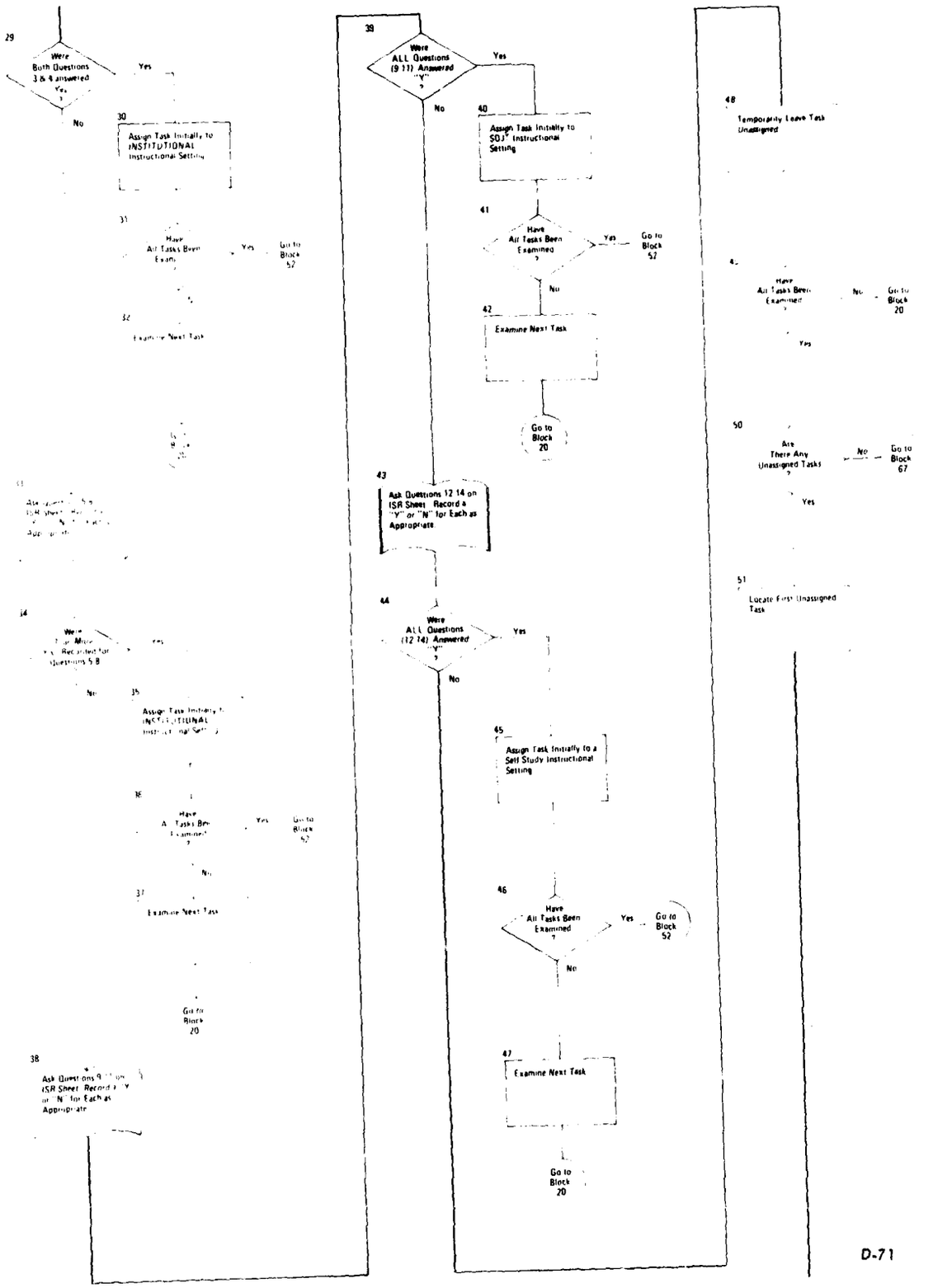
In your research for this step of the Instru tional Systems Development process you may have discovered additional information that you think may be useful to people who will be working in steps that follow this one. If so, it is equally important that you pass this information on to appropriate people.

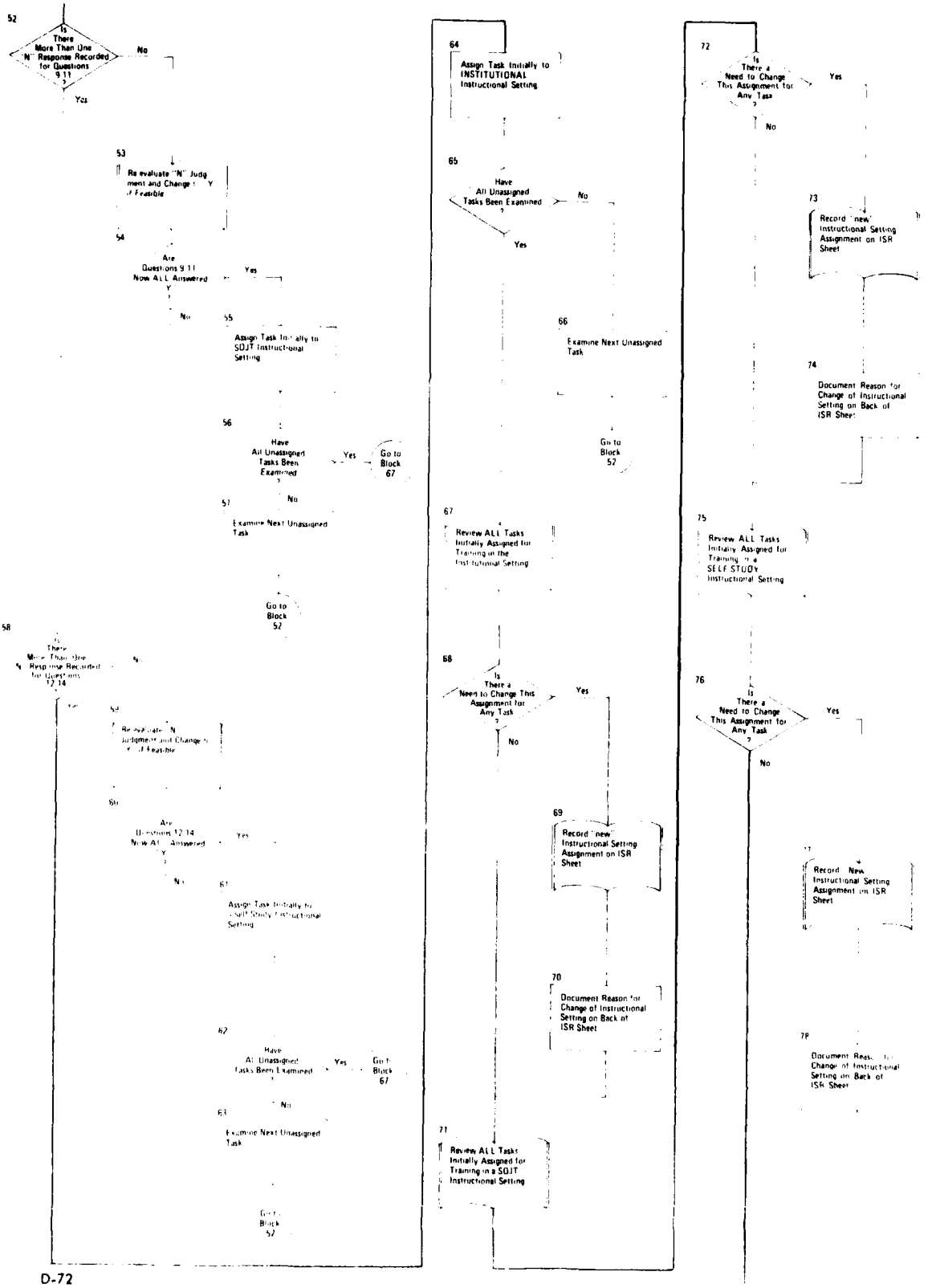
REMEMBER, COMMUNICATION WITHIN THE INSTRUCTIONAL SYSTEMS DEVELOPMENT PROCESS IS CRITICAL FOR EFFECTIVE INSTRUCTIONAL DEVELOPMENT

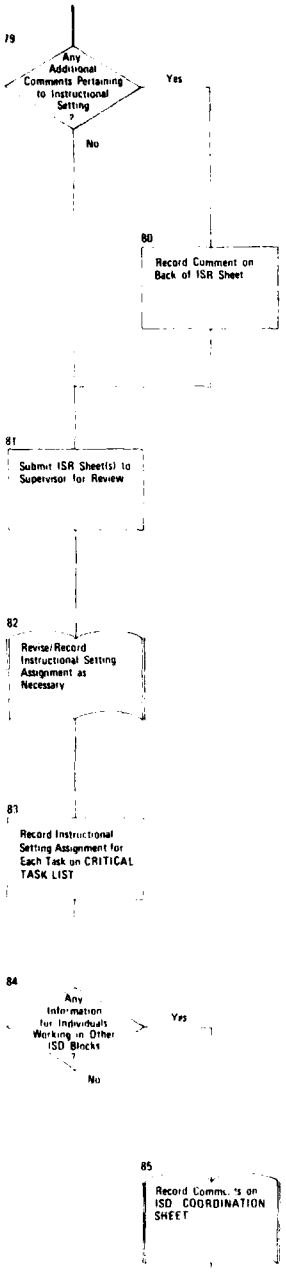
- A copy of the ISD COORDINATION SHEET can be found in the back of this manual. Make sufficient copies to enable you to send one to every individual you wish to communicate with—plus copies for your records.

- Complete the ISD COORDINATION SHEET in duplicate. Send one copy to the individual and attach one copy to the Instruction Settings Selection Package (ISR Sheets).


START
1
Have You Read the Introduction to the Use of Job Aids ?
No
Yes
2
Introduction to the Use of Job Aids
3
Have You Used This Job Aid Before ?
No
Yes
4
Want to See an Overview of the Job Aid ?
Yes
No
5
Overview of Instructional Settings Job Aid
6
List of Tasks Selected for Training Available ?
No
Yes
7
Guidance for Obtaining Preparing List of Selected Tasks
8
Do You Want a Description of Each of the Instructional Settings Used ?
Yes
No
9
Description of Instructional Settings
10
Obtain Instructional Settings Recording sheets (ISR)
11
Obtain Information Necessary for Setting Up the ISR Sheet
12
Record on ISR Sheet
MOS Code
Skill Level
ISR Sheet Page #
13
Record Duty Positions on ISR Sheet
14
Record Task Identification Numbers on ISR Sheet and Attach Critical Task Listing
15
Record Tasks Performed in Each Duty Position
16
Record on ISR Sheet the Percent of Soldiers in Skill Level Who Perform Each Task
17
Establish Record Percentage Criterion for "High Performance Tasks"
18
Is There More Than One Duty Position Listed on ISR Sheet ?
No
Go to Block 27
Yes
19
Locate the First Task on ISR Sheet
20
Has Task Been Assigned an Instructional Setting at Lower Skill Level ?
Yes
No
21
Assign Task to Instructional Setting Selected in Lower Skill Level
22
Have All Tasks Been Examined ?
Yes
Go to Block 52
No
23
Examine Next Task
Go to Block 20
24
Ask Question 1 on ISR Sheet. Record "Y" or "N" as appropriate
25
Ask Question 2 on ISR Sheet. Record "Y" or "N" as appropriate
26
Was a "Y" recorded for either question 1 and 2 ?
No
Go to Block 33
Yes
27
Ask Question 3 on ISR Sheet. Record "Y" or "N" as appropriate
28
Ask Question 4 on ISR Sheet. Record "Y" or "N" as appropriate


29
Were Both Questions 3 & 4 answered Yes ?
Yes
No
30
Assign Task Initially to INSTITUTIONAL Instructional Setting
31
Have All Tasks Been Exam ?
Yes
Go to Block 52
No
32
Examine Next Task
Go to Block 20
39
Were ALL Questions (9 11) Answered "Yes" ?
Yes
No
40
Assign Task Initially to SOJ Instructional Setting
41
Have All Tasks Been Examined ?
Yes
Go to Block 52
No
42
Examine Next Task
Go to Block 20
43
Ask Questions 12 14 on ISR Sheet Record a "Y" or "N" for Each as Appropriate
44
Were ALL Questions (12 14) Answered "Yes" ?
Yes
No
45
Assign Task Initially to a Self Study Instructional Setting
46
Have All Tasks Been Examined ?
Yes
Go to Block 52
No
47
Examine Next Task
Go to Block 20
48
Temporarily Leave Task Unassigned
Have All Tasks Been Examined ?
No
Go to Block 20
Yes
50
Are There Any Unassigned Tasks ?
No
Go to Block 67
Yes
51
Locate First Unassigned Task
34
Were Yes Recorded for Questions 5 8
Yes
No
35
Assign Task Initially to INSTITUTIONAL Instructional Setting
Have All Tasks Been Examined ?
Yes
Go to Block 52
No
37
Examine Next Task
Go to Block 20
38
Ask Questions 9 ISR Sheet Record Y or N for Each as Appropriate


52
Is There More Than One "N" Response Recorded for Questions 9-11 ?
No
Yes
53
Re-evaluate "N" Judgment and Change to "Y" If Feasible
54
Are Questions 9-11 Now ALL Answered "Y" ?
Yes
No
55
Assign Task Initially to SDJT Instructional Setting
56
Have All Unassigned Tasks Been Examined ?
Yes
Go to Block 67
No
57
Examine Next Unassigned Task
Go to Block 52
58
Is There More Than One "N" Response Recorded for Questions 12-14 ?
No
Yes
59
Re-evaluate "N" Judgment and Change to "Y" If Feasible
60
Are Questions 12-14 Now ALL Answered "Y" ?
Yes
No
61
Assign Task Initially to a Self-Study Instructional Setting
62
Have All Unassigned Tasks Been Examined ?
Yes
Go to Block 67
No
63
Examine Next Unassigned Task
Go to Block 52
64
Assign Task Initially to INSTITUTIONAL Instructional Setting
65
Have All Unassigned Tasks Been Examined ?
No
Yes
66
Examine Next Unassigned Task
Go to Block 52
67
Review ALL Tasks Initially Assigned for Training in the Institutional Setting
68
Is There a Need to Change This Assignment for Any Task ?
Yes
No
69
Record "new" Instructional Setting Assignment on ISR Sheet
70
Document Reason for Change of Instructional Setting on Back of ISR Sheet
71
Review ALL Tasks Initially Assigned for Training in a SDJT Instructional Setting
72
Is There a Need to Change This Assignment for Any Task ?
Yes
No
73
Record "new" Instructional Setting Assignment on ISR Sheet
74
Document Reason for Change of Instructional Setting on Back of ISR Sheet
75
Review ALL Tasks Initially Assigned for Training in a SELF-STUDY Instructional Setting
76
Is There a Need to Change This Assignment for Any Task ?
Yes
No
77
Record "new" Instructional Setting Assignment on ISR Sheet
78
Document Reason for Change of Instructional Setting on Back of ISR Sheet


79
Any Additional Comments Pertaining to Instructional Setting ?
Yes
No
80
Record Comment on Back of ISR Sheet
81
Submit ISR Sheet(s) to Supervisor for Review
82
Revise/Record Instructional Setting Assignment as Necessary
83
Record Instructional Setting Assignment for Each Task on CRITICAL TASK LIST
84
Any Information for Individuals Working on Other ISD Blocks ?
Yes
No
85
Record Comments on ISD COORDINATION SHEET
STOP