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ABSTRACT

Research by the Occupational and Manpower Research Division of the Air Force Human Resources Laboratory has established that task training priority is a function of task factors and that, within a specialty, training priority ratings can be duplicated mathematically from task factor ratings. Because these ratings are measured on a different scale for each specialty, this methodology cannot be generally established and applied. To overcome this limitation, a series of benchmark scales is being developed for the measurement of task factors against common frames of reference. This report establishes the concept of the scales and describes the method to be used in their development and validation. It then reports on the development phase of the scales for specialties with either an administrative or general aptitude requirement. The completed scales would have various applications. They could be used for the initial design of a training program, the validation of an existing program, or for the redesign of an existing one given new constraints such as change in course length. At all times it must be remembered that this methodology is an advanced aid to course design, always subject to human override where such can be justified. (Author/BW)

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TASK FACTOR BENCHMARK SCALES FOR TRAINING PRIORITY ANALYSIS: OVERVIEW AND DEVELOPMENTAL PHASE FOR ADMINISTRATIVE/GENERAL APTITUDE AREA

By

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Personnel Research Division

Approved for publication.

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Research by the Occupational and Manpower Research Division of the Air Force Human Resources Laboratory has established that task training priority is a function of task factors and that, within a specialty, training priority ratings can be duplicated mathematically from task factor ratings. Because these ratings are measured on a different scale for each specialty, this methodology cannot be generally established and applied. To overcome this limitation, a series of benchmark scales are being developed for the measurement of task factors against common frames of reference. This report, the first in a series, establishes the concept of the scales and describes the method to be used in their development and validation. It then reports on the development phase of the scales for specialties with either an administrative or general aptitude requirement. Subsequent reports will deal

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with the validation phase of this series of scales, and the development and validation phases of scales for specialties with an electronic aptitude requirement and for those with a mechanical aptitude requirement.

PREFACE

This research was accomplished under Project 7734, Development of Methods for Describing, Evaluating, and Structuring Air Force Occupations; Task 773407, Development and Assessment of Methods for Determining the Requirements of Air Force Jobs. It was initiated under Work Unit 77340702, Methods for Analysis and Use of Job Task Data in Instructional System Development; and it will continue to completion under Work Unit 77340705, Development of Task Factor Benchmark Scales for Use in Determining Task Training Priority.

This report discusses the general concept of the benchmark scales and their role in the determination of task training priority, and it then reports on the results of the first phase in the development of the first set of scales. As such, it is the first of a series of reports; subsequent reports will be produced as the research develops.

The author, an officer of the Royal Australian Air Force, is serving with the United States Air Force under the Exchange Program.

Particular appreciation is expressed to Dr. Raymond E. Christal for his guidance and advice; and to Squadron Leader William J. Watson, USAF/RAAF, the previous exchange officer, who drew up the initial research plan, selected the tasks for inclusion in the inventories, and administered the initial survey. Appreciation is also expressed to A1C Terry D. Lewis for accomplishment of the data reduction, and to Mrs. Maria M. Courtney and Mrs. M. Joyce Giorgia for typing and proofing the manuscript.

The views expressed in this report are not necessarily the official views of the United States Air Force or the Department of Defense.

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TASK FACTOR BENCHMARK SCALES FOR TRAINING PRIORITY ANALYSIS: OVERVIEW AND DEVELOPMENTAL PHASE FOR ADMINISTRATIVE/GENERAL APTITUDE AREA

I. INTRODUCTION

The Occupational and Manpower Research Division of the Air Force Human Resources Laboratory (AFHRL) is engaged in ongoing research into an advanced methodology for determining task training priorities. One element of this research is the development of benchmark scales for measuring task factors that contribute to training priority decisions. To put the benchmark scales project into context, this report will comment briefly on the overall training priority research effort before detailing the procedure adopted to develop the scales. Finally, it will report the results of the initial data gathering and tentative scale drafting phase for the scales for those specialties with administrative or general aptitude requirements.

II. BACKGROUND

The basic concept of the present task training priority research was conceived and reported by Christal (1970). Three papers read to the 17th Annual Conference of the Military Testing Association (MTA) document achievements since then. The first of these papers (Christal & Weissmuller, 1975), now also available as a technical report (Christal & Weissmuller, 1976), describes eight new programs recently introduced into the Comprehensive Occupational Data Analysis Programs (CODAP) system which enable investigators to manipulate and analyze task factor data. It includes an example which demonstrates how the programs can be used in developing and applying an equation to determine task training priorities. The second MTA paper (Mead, 1975) reports the results of a training priority study; and the third (Goody & Watson, 1975) introduces the benchmark scales and is encompassed in this report. Mead's paper points out how AFHRL has identified four task factors which appear to be the best determinants of a task's priority for formal training. They are:

1. Percentage of first-term airmen performing the task.
2. Probable consequences of inadequate performance of the task.
3. The delay that can be tolerated between the time the need for a task becomes evident and the time when actual performance must begin.
4. The amount of time required to learn to perform the task adequately—the task difficulty.

Mead also indicates how the CODAP programs described in the first of these three papers (Christal & Weissmuller, 1975), can be used to arrange task factor data in a format most suitable for use by training managers in making better training decisions. The feasibility of using regression equations to compute a training priority index from task factor data, postulated by Christal, has been confirmed. The new CODAP programs can then list all the tasks in a specialty ordered from high to low on this index, presenting pertinent task factor data beside each task. The tasks near the top of this list are those on which training is essential, and those near the bottom are the ones with low priority for training. In between these two extremes are all the "could be trained" tasks listed in order of their priority for universal training.

This methodology would have various applications. It could be used for the initial design of a training program, the validation of an existing program, or for the redesign of an existing one given new constraints such as change in course length. At all times it must be remembered that this methodology is an advanced aid to course design, always subject to human override where such can be justified. Perhaps the biggest danger to this project is the potential for blind application of the mathematical model without due consideration for the exceptional case. However, provided training management is aware of this, the model offers vast potential as an aid to optimum training decisions.

The major limitation in the methodology at present is the method used for measuring the task factors, apart from the percent-performing factor which is an absolute value. The factors are measured by

rating tasks relative to other tasks in a specialty. Specialists consider each task in turn, and then allocate it a rating relative to all other tasks in the specialty. The arithmetic mean of all ratings for a task is used as the measure of that factor for that task. The problem is that the numerical value so ascribed to a task depends on the nature of the other tasks in the specialty. To illustrate, consider two tasks with equal degrees of "Consequences of Inadequate Performance," one a Recruiter task and the other an Operating Room Specialist task. Operating Room Specialist tasks, on the whole, tend to be more consequential than Recruiter tasks. In our example, therefore, although the consequences of failing to adequately perform the two tasks are equal, the Recruiter task will be ascribed a higher numerical value because it is being compared to relatively less consequential tasks. Such ratings can be used to determine an optimum regression equation within a specialty. However, a new regression equation must be computed for each specialty. The possibility exists that, provided the task factors can be measured on common scales, a limited number of regression equations can be computed, each applying across a number of specialties.

In order to examine this possibility a series of "benchmark scales" are being developed which should permit measurement of task factors against common frames of reference for various specialties. To illustrate the concept of a benchmark scale, Appendix A contains the tentative benchmark scales for the three factors for those specialties with an Administrative or General aptitude requirement. Each comprises 27 tasks, divided into nine subgroups of three tasks, each subgroup representing a level on the relevant factor. In operational use, specialist raters will rate each of the tasks in their specialty against the 27 tasks of the benchmark scale rather than against the other tasks of their own specialty. For each task the rater will decide which group of three tasks in the scale has about the same degree of the factor under consideration, the level associated with that group of three being his rating for the task under consideration.

In all, nine scales are being developed, one for each of three factors for each of three aptitude areas. The three factors are Consequences of Inadequate Performance, Task Delay Tolerance, and Task Difficulty, definitions of each being included in Appendix A. The three groups of specialties are defined on the basis of aptitude requirements: the first contains specialties with an Administrative or General requirement, and the other two groups are those with an Electronic or Mechanical aptitude requirement, respectively.

III. PROCEDURE USED IN THE DEVELOPMENT OF TRAINING FACTOR BENCHMARK SCALES

The development of a benchmark scale is a two-phase process. Initially, data is gathered and analyzed for a reasonably large inventory of tasks; this data is then used to select the 27 tasks for the tentative benchmark scale. In the second phase the tentative scales are validated.

The initial inventory contains tasks typically performed in a variety of specialties, but each must be of such a nature as to be understood by experienced airmen from other specialties. As the present concern is for initial technical training, only journeyman-level tasks are used. The inventory must contain tasks representing the full range of values on each of the factors for which it is used, and multi-facet tasks consisting of several divergent components are avoided. To aid identification of each task in the inventory, the task statement includes an Air Force specialty (AFS) that normally performs the task. (The benchmark scales in Appendix A illustrate typical task statements.)

For each factor, raters rate each inventory task relative to the other tasks in the inventory, using a 9-point relative scale. The raters are selected randomly from the first-line supervision level (7-skill level) from specialties within the appropriate aptitude area, different raters being used for each factor. This is necessary to avoid spurious inter-action between factors; particularly as Task Delay Tolerance, with Level 1 the most demanding situation, is effectively an inverted scale relative to the other two. About 120 ratings are sought on each factor. Such large numbers are necessary to provide confidence in the stability of the means obtained by having raters rate tasks from other specialties. First-line supervisors were selected as raters in order to obtain the optimum blend of general experience and first-hand knowledge of journeyman-level activities.

The raw ratings are then refined and arranged into a format suitable for selecting the tasks for each benchmark scale. A standard computer program (Stacey, Weissmuller, Barton, & Rogers, 1974) identifies the occasional rater who has not taken his task seriously, and he is eliminated from further processing. Some raters rate harshly, others are more lenient. To compensate, all the ratings for each rater are

standardized to a common mean of 5.0 and standard deviation of 1.0. The mean and standard deviation of these adjusted ratings for a task are then taken respectively as the most appropriate measures of the relevant factor for that task and of rater agreement on that measure. For most of the tasks in the inventory, task difficulty ratings (relative within specialties) have been collected during previous, routine occupational analysis. These ratings are extracted from the various occupational survey reports for comparison with the task difficulty ratings collected in this study.

For each factor, the tasks are then ordered on the mean rating, this listing being used to select the nine groups of three tasks for the benchmark scale. All three tasks representing one level must lie near each other on this listing, but be relatively distant from the groups chosen to represent the levels on either side. The magnitude of the difference in mean rating between successive groups must be uniform, and preference is given to tasks with the lowest standard deviations—this indicating the best rater agreement. Tasks selected must provide maximum coverage of the various specialties, and they must be those most likely to be meaningful to airmen from other specialties. Similarities within groups and differences between groups must be apparent, as well as measured. In constructing the task difficulty scales, within specialty comparisons of these ratings with task difficulty ratings extracted from previous occupational analyses are included as a further consideration. Tasks for which there is a significant lack of agreement between these two measures are avoided in the selection of tasks for inclusion in the benchmark scales.

The results of this initial phase of the developmental process is a list of 27 task statements for each factor. They are presented in sets of three, each set purporting to define one of nine graduated levels of that factor (see Appendix A). The validation phase tests whether raters can use these definitions of the levels to rate tasks on that factor. As already noted, each task statement in the initial inventory includes the title of an Air Force specialty that is normally associated with the task. About ten of these specialties are selected, and all the tasks associated with them in the initial inventory are extracted to form the validation phase inventory. This is a list of about a hundred task statements, the number associated with each of the represented specialties varying from as low as four to as high as twenty. For each factor, a set of raters is selected using the same criteria used for selection of raters in the initial phase. They are asked to give a task factor rating for each task listed in the validation phase inventory, using the nine levels as defined by the nine sets of three task statements in the benchmark scale. These may be thought of as "general" ratings to distinguish them from a second set of ratings also gathered during the validation phase. This second set, the "specialist" ratings, are obtained using the same rating technique as used for the "general" ratings; but the raters are selected only from the specialties associated with task statements included in the validation phase inventory, and these raters rate only the tasks associated with their own specialty. For the tasks in the validation phase inventory there are now three sets of ratings for each factor: the "general" ratings, the "specialist" ratings and, of course, the ratings on the corresponding tasks in the original inventory used in the initial phase. Statistical comparisons between these sets of ratings will permit conclusions to be drawn about the effectiveness of the benchmark scale.

IV. DEVELOPMENT OF TENTATIVE SCALES FOR SPECIALTIES WITH ADMINISTRATIVE/GENERAL APTITUDE REQUIREMENTS

For those specialties with Administrative or General aptitude requirements, the initial inventory has been administered and the data analyzed. The inventory comprised 438 tasks representing over 50 specialties. Concern has been expressed as to whether supervisors can rate tasks from other specialties. As can be seen from the inter-rater agreement coefficients in Table 1, this is no longer a concern; such raters can rate tasks from other specialties with a high degree of agreement.

A series of correlation coefficients were computed to examine the relationships between rating means and standard deviations. These correlation coefficients are presented in Tables 2, 3, and 4. Correlations were computed between the adjusted task means and standard deviations for each factor (Table 2). The existence of a significant correlation would indicate a relationship betwen rater agreement and mean rating. There is evidence that the mean and standard deviation for Task Delay Tolerance are positively related, suggesting that the raters showed more agreement on those tasks with low task delay tolerance. Table 3 contains the correlations between the means for the three factors, and Table 4 between standard deviations. Significant between-factor correlations exist in all cases. The same tasks tend to be rated towards the more demanding end of each scale, and rater agreement depends to some extent on the task and/or its statement

Table 1. Inter-rater Agreement Coefficients

Factor	N	R_{11}	R_{kk}
Consequences of Inadequate Performance	116	.51	.99
Task Delay Tolerance	120	.44	.99
Task Difficulty	117	.48	.99

Table 2. Correlation Between Task Means and Standard Deviations

Consequences of Inadequate Performance	.01
Task Delay Tolerance	.22
Task Difficulty	.13

Table 3. Correlation Between Task Means

Factor	A	B	C
Consequences of Inadequate Performance	1.00		
Task Delay Tolerance	−.84	1.00	
Task Difficulty	.58	−.38	1.00

Table 4. Correlation Between Task Standard Deviations

Factor	A	B	C
Consequences of Inadequate Performance	1.00		
Task Delay Tolerance	.53	1.00	
Task Difficulty	.58	.27	1.00

regardless of the factor being rated. The high correlation between the mean ratings on the first two factors is understandable as delayed performance is one form of inadequate performance, and the delay that can be tolerated is to some extent a function of the consequences of such delay. However, despite the strong relationship between these two factors, it is believed each has a sufficiently high unique component to contribute significantly to the training priority index model.

As a first step in selecting the 27 tasks for the benchmark scale for each factor, the inventory tasks were divided into nine hierarchical groups on the basis of mean adjusted ratings for the factor under consideration. The difference between the highest and lowest mean rating in each of groups 2 through 8 was half a standard deviation, the middle group straddling the mean and groups 1 and 9 being the lower and upper "tails." The set of three tasks representing each level was then selected from the corresponding group, observing the previously prescribed principles. To maximize the differences between adjacent sets while keeping them relatively uniform, the three tasks for level 5 were selected from as near the mean as possible (the middle of group 5), and those for the other levels were selected from the part of the corresponding group that is farthest from the mean. The tentative scales, developed and currently in the validation phase, appear in Appendix A.

V. DISCUSSION AND CONCLUSION

The research on which this is the first of a series of reports seeks to develop a means for measuring three task factors against common frames of reference. This is required to permit further research into methods for determining task training priorities. The method will be used to develop and validate a series of benchmark scales, the concept of which is discussed in this report. It has been established that supervisors can agree on the relative values of task factors for tasks in an inventory drawn from many different specialties, and that these ratings can be used to develop the benchmark scales which define graduated levels for each of the task factors. The first set of scales have been drafted, and the broad method that will be used for their validation has been discussed. Results of this phase of the project will be the subject of a subsequent report, as will be the development of two further sets of benchmark scales.

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APPENDIX A: BENCHMARK SCALES, DEFINITIONS AND EXPLANATIONS

CONSEQUENCES OF INADEQUATE PERFORMANCE

DEFINITION

Consequences of inadequate performance is a measure of the seriousness of the probable consequences of inadequate performance of a task. It is measured in terms of possible injury or death, wasted supplies, damaged equipment, wasted man-hours of work, etc.

BENCHMARK SCALE

Level 1 — Least Serious Consequences of Inadequate Performance

Deliver newspaper to local distribution points (Information Specialist AFSC 79150)
Clean flight planning room (Command and Control Specialist AFSC 27450)
Fold or count hospital linen (Medical Service Specialist AFSC 90250)

Level 2

Tatto identification on Air Force working dogs (Veterinary Specialist AFSC 90850)
Arrange, mark and display property for best sales results (Materiel Facilities Specialist AFSC 64750)
Enter daily work assignments on time cards (Administration Specialist AFSC 70250)

Level 3

Draw up work rosters for taxi operators or drivers on large AF base (Programs and Work Control Specialist AFSC 55530)
Compute selling price for processed meat and meat produce (Meatcutter AFSC 61250)
Compute quantity of earth to be removed or used for fill (Geodetic Surveyor AFSC 22250)

Level 4

Finish and polish gold alloy inlays, crowns or fixed partial dentures (Dental Laboratory Specialist AFSC 98250)
Operate keypunch machine to keypunch data cards (Personnel Specialist AFSC 73250)
Perform normal satellite photography sequence (Aerospace Control & Warning Systems Operator AFSC 27650)

Level 5

Reload computer after power failures or fluctuations (Communications Center Specialist AFSC 29150)
Detect theft of money or stock from commissaries or supply service outlets (Supply Services Specialist AFSC 61150)
Measure and record auditory acuity or hearing sensitivity (Aeromedical Specialist AFSC 90150)

Level 6

Quell disturbances involving military personnel (Security Specialist AFSC 81150)
Prepare aircrew navigation kits (Air Operations Specialist AFSC 27150)
Take and record pulses, temperatures and respirations (Medical Service Specialist AFSC 90250)

Level 7

Fit cargo parachutes to airdrop cargo (Aircrew Life Support Specialist AFSC 92250)
Analyse radarscope photographs to identify targets or evaluate target condition (Imagery Interpreter AFSC 20650)
Sterilize surgical instruments or supplies (Operating Room Specialist AFSC 90252)

Level 8

Apply first aid at scene of accident or incident (Security Specialist AFSC 81150)
Render missile safe for maintenance or verify missile safing (Missile Safety Specialist AFSC 24150B)
Alert direction finding (DF) stations when aircraft emergencies occur (Radio Operator AFSC 29353)

Level 9 — Most Serious Consequences of Inadequate Performance

Defend AF installations against attack by hostile forces or sabateurs (Security Specialist (Military Dog Qualified) AFSC 81150A)
Assist patient to maintain proper airway during surgery (Operating Room Specialist AFSC 90252)
Rescue personnel from aircraft or aerospace vehicle (Fire Protection Specialist AFSC 57150)

USE OF THE SCALE

1. For each task in turn, think of the probable consequences of inadequate performance. Think in terms of possible injury or death, wasted supplies, damaged equipment, wasted man-hours or work, etc.
2. Decide which set of three tasks in the above scale have about the same consequences of inadequate performance.
3. The level indicated for this set of three tasks is your measure of the consequences of inadequate performance for the task under consideration.

APPENDIX A: (Continued)

TASK DELAY TOLERANCE

DEFINITION AND EXPLANATION

The Task Delay Tolerance of a task is a measure of how much delay can be tolerated between the time the airman becomes aware the task is to be performed and the time he must commence doing it. Must he commence immediately, or does he have time to consult a manual, seek guidance, or even be taught how to do it?

BENCHMARK SCALE

Level 1 — Least Tolerance of Delay

Use artificial respiration to restore breathing of accident or fire victims (Fire Protection Specialist AFSC 57150)
Issue scramble orders to fighter aircraft (Command and Control Specialist AFSC 27450)
Assist during treatment of cardio-respiratory failure in operating room (Operating Room Specialist AFSC 90252)

Level 2

Quell disturbances involving military personnel (Security Specialist AFSC 81150)
Identify tablets, capsules or liquids involved in poisoning cases (Pharmacy Specialist AFSC 90550)
Operate safety console at missile control center during hazardous operations (Missile Safety Specialist AFSC 24150B)

Level 3

Inspect runway for foreign objects (Air Operations Specialist AFSC 27150)
Administer anaesthesia in dental surgery (Dental Specialist AFSC 98150)
Adjust airborne radio receivers to obtain readable signals (Radio Operator AFSC 29353)

Level 4

Question suspects or witnesses (Security Specialist AFSC 81150)
Perform colony counts on bacteria to estimate type and level of infection (Medical Laboratory Specialist AFSC 90450)
Maintain proper temperature of food storage areas (Cook AFSC 62250)

Level 5

Identify military vehicles, installations or activities in visual photographs (Intelligence Operations Specialist AFSC 20450)
Proofread or correct teletype tape or page copies (Communications Center Specialist AFSC 29150)
Prepare daily weather maps (Weather Forecaster Specialist AFSC 25330)

Level 6

Operate computer remote inquiry terminals (Computer Operator AFSC 51150)
Purge or clear chemical lines in film developing machines (Still Photographic Laboratory Specialist AFSC 23354)
Service and maintain dental high-speed drilling equipment (Dental Laboratory Specialist AFSC 98250)

Level 7

Monitor workload reporting systems (Manpower Specialist AFSC 73330)
Brief personnel on state or local motor traffic laws (Safety Specialist AFSC 24150)
Draw up work rosters for taxi operators or drivers on large Air Force base (Programs and Work Control Specialist AFSC 55530)

Level 8

Write item identification descriptions and specifications for catalogues (Procurement Specialist AFSC 65150)
Interview or hire civilian personnel (Supply Services Specialist AFSC 61150)
Prepare and analyse work flow process charts (Management Engineering Specialist AFSC 73331)

Level 9 — Most Tolerant of Delay

Review or select books or publications for unit library (Administration Specialist AFSC 70250)
Research and write feature stories in Air Force publications (Information Specialist AFSC 79150)
Clean teeth of animals (Veterinary Specialist AFSC 90850)

USE OF THE SCALE

1. For each task in turn, think of the amount of time that could normally be allowed to elapse from the time the airman who has to do the task first becomes aware of the need to perform it and the time he must actually commence doing it. Think in terms of time he could spend reading up on the task or seeking advice on how to do it, or just thinking about how to do it.
2. Decide which set of three tasks in the above scale have about the same amount of task delay tolerance.
3. The level indicated for this set of three tasks is your measure of the task delay tolerance of the task under consideration.

APPENDIX A: (Continued)

TASK DIFFICULTY

DEFINITION

Task Difficulty is a measure of the need for lengthy, systematic training before a new member of the appropriate Air Force specialty could perform the task adequately. It may be thought of as the difficulty involved in "picking up" the task on the job without any systematic training.

BENCHMARK SCALE

Level 1 — Least Difficult to Learn

Collect food trays or serving units from patients in hospital wards (Medical Service Specialist AFSC 90250)
Clean display cases, furniture or fixtures in commissary (Supply Services Specialist AFSC 61150)
Stamp time of receipt on incoming messages (Communications Center Specialist AFSC 29150)

Level 2

Distribute administrative orders within unit (Administration Specialist AFSC 70250)
Schedule health examinations for meat cutting personnel (Meatcutter AFSC 61250)
Count property in warehouse bins or shelves (Inventory Management Specialist AFSC 64550)

Level 3

Challange or identify unknown persons in vicinity of correctional facility (Corrections Specialist AFSC 81251)
Deliver passenger manifests and allied documents to international border clearance authorities (Air Passenger Specialist AFSC 60550)
Act as armed escort for personnel transferring funds (Security Specialist AFSC 81550)

Level 4

Complete and submit Radiation Exposure Registration Form (AF Form 1520) (Environmental Health Specialist AFSC 90750)
Assemble shelter manager kits (Disaster Preparedness Specialist AFSC 24250)
Maintain imprest or petty cash account (Procurement Specialist AFSC 65150)

Level 5

Verify labels or instructions for handling radioactive substances (Materiel Facilities Specialist AFSC 64750)
Inspect buildings for termites or other wood destroyers (Entomology Specialist AFSC 56650)
Prepare comparative productivity charts for work centers (Management Engineering Specialist AFSC 73331)

Level 6

Control or extinguish structural fires (Fire Protection Specialist AFSC 57150)
Calculate number or amount of each food item to be prepared for therapeutic diet (Diet Therapy Specialist AFSC 62251)
Prepare injured personnel for evacuation by litter or ambulance (Aeromedical Specialist AFSC 90150)

Level 7

Administer Intermittent Positive Pressure Breathing (IPPB) therapy (Medical Service Specialist AFSC 90250)
Analyse computer stops for possible hardware malfunction (Supply Systems Specialist AFSC 64B50)
Determine position of aircraft by analysis of radarscope photographs after mission (Imagery Interpreter Specialist AFSC 20650)

Level 8

Operate safety console at missile control center during hazardous operations (Missile Safety Specialist AFSC 24150B)
Differentiate between actual targets and electronic countermeasures or decoys (Electronic Warfare Countermeasures AFSC 27631)
Determine axis of attack for air-to-ground attack missions (Intelligence Operations Specialist AFSC 20450)

Level 9 — Most Difficult to Learn

Determine chemical composition of foreign made drugs (Pharmacy Specialist AFSC 90550)
Perform deep roentgen therapy on tumor or cancer patients (Radiology Specialist AFSC 90350)
Assist during treatment of cardio-respiratory failure in operating room (Operating Room Specialist AFSC 90252)

USE OF THE SCALE

1. For each task in turn, think of its learning difficulty; think in terms of the need for lengthy, systematic training, or alternatively in terms of the difficulty in "picking up" the task on the job without systematic training.
2. Decide which of the three tasks in the above scale have about the same difficulty.
3. The level indicated for this set of three tasks is your measure of the difficulty of the task under consideration.

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