ORNL/TM-11335

OAK RIDGE NATIONAL LABORATORY

MARTIN MARIETTA

Job/Task Analysis for I&C Instrument Technicians at the High Flux Isotope Reactor

Lisa L. Duke

OAK RIDGE NATIONAL LABORATORY
CENTRAL RESEARCH LIBRARY
CIRCULATION SECTION
4500N ROOM 175
LIBRARY LOAN COPY
DO NOT TRANSFER TO ANOTHER PERSON
If you wish someone else to see this report, send in name with report and the library will arrange a loan.

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831
operated by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under Control No. DE-AC05-84OR21400

OPERATED BY
MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE UNITED STATES
DEPARTMENT OF ENERGY

This report has been reproduced directly from the best available copy.

Available to DOE and DOE contractors from the Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831; prices available from (615) 576-8401, FTS 626-8401.

Available to the public from the National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Rd., Springfield, VA 22161.
NTIS price codes—Printed Copy: A04 Microfiche: A01

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

ORNL/TM-11335

Instrumentation and Controls Division

JOB/TASK ANALYSIS FOR I&C INSTRUMENT TECHNICIANS AT THE HIGH FLUX ISOTOPE REACTOR

Lisa L. Duke

Published: September 1989

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831
operated by
MARTIN MARIETTA ENERGY SYSTEMS, INC.
for the
U.S. DEPARTMENT OF ENERGY
under Control No. DE-AC05-84OR21400

MARTIN MARIETTA ENERGY SYSTEMS LIBRARIES

3 4456 0327588 1

TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS	iv
ABSTRACT	v
1. INTRODUCTION	1
2. OBJECTIVES	2
3. APPLICATIONS	3
4. PROCESS	4
5. COMMENTS	6
6. CONCLUSIONS	7
SELECTED BIBLIOGRAPHY	8
APPENDIX A: DIRECTIONS	9
APPENDIX B: RATING SHEET	15
APPENDIX C: BIOGRAPHICAL QUESTIONNAIRE	19
APPENDIX D: SURVEY AND RESULTS	23

ACKNOWLEDGMENTS

This document has been assembled through the combined efforts of an experienced technical staff. My thanks to C. G. Allen, J. L. Anderson, D. S. Asquith, J. H. Hutson, D. R. Miller, C. T. Stansberry, and all the survey respondents.

ABSTRACT

To comply with Department of Energy Order 5480.XX (Draft), a job/task analysis was initiated by the Maintenance Management Department at Oak Ridge National Laboratory (ORNL). The analysis was applicable to instrument technicians working at the ORNL High Flux Isotope Reactor (HFIR). This document presents the procedures and results of that analysis.

1. INTRODUCTION

The Instrumentation and Controls (I&C) Division's Maintenance Management Department (MMD) initiated a job/task analysis as the first step toward a performance-based training program as required for accreditation by Department of Energy (DOE) Order 5480.XX (Draft). The order applies to "...all contractors performing work for the Department of Energy (DOE) as provided by law and/or contract and as implemented by the appropriate contracting officer." This order is applicable to training programs for operations, maintenance, and technical support positions at the High Flux Isotope Reactor (HFIR) operated by the Research Reactors Division (RRD) at the Oak Ridge National Laboratory (ORNL).

Although the importance of training for each reactor worker is obvious, the immediate training needs as outlined by RRD exist in five categories which bear the greatest responsibility for maintenance of critical systems. These categories are electricians, instrument technicians, millwrights, pipefitters, and welders.

With the DOE's relevant mandate, the I&C MMD set forth an aggressive program for achieving viable training objectives. The process was guided by DOE/EP-0095, *Guidelines for Job and Task Analysis for DOE Nuclear Facilities.*

2. OBJECTIVES

The objective of the job/task analysis was to identify and describe the tasks that compose the job and to systematically define the knowledge, skills, and attitudes required of a successful job incumbent. The product of this analysis should be a valid task list that will form the foundation for the development of a performance-based training program. Although the analysis process can be expensive and time consuming, the operational history and availability of personnel with many years of facility-specific experience permitted an abbreviated, yet thorough investigation of each job area. The steps used in achieving this objective are outlined as follows.

1. Develop the basic task list. Such lists are traditionally compiled by studying existing documentation, by interviewing experts, and by analyzing similar existing jobs.

2. Verify the list. The list is authenticated by going to actual job incumbents and having them verify the performance of the task.

3. Validate the list. The list is submitted to another group of supervisors and incumbents for confirmation of accuracy. Generally, at the same time the task list is being validated, task-specific data will be collected to guide the selection of tasks for detailed analysis. This is normally done with a questionnaire survey.

4. Identify tasks for detailed analysis. It is usually neither necessary nor cost effective to analyze all tasks identified. After the more crucial tasks are identified, the next step is to determine the skill and knowledge requirements necessary for satisfactory performance of each selected task. The results are then consolidated and organized in a manner to effectively support the subsequent training development.

3. APPLICATIONS

As indicated earlier, the job/task analysis described was designed for training-program development and evaluation. However, a job/task analysis can also be used to:

- Design systems that give attention to human performance,
- Identify staffing requirements,
- Select personnel who operate and maintain the system,
- Develop operating procedures and other job performance aids,
- Identify human communication needs to operate the system, and
- Predict human performance to aid in risk assessments of the system.

4. PROCESS

An inventory of instruments associated with tasks routinely performed by MMD instrument technicians assigned to the HFIR was retrieved from the Maintenance Accountability and Job Inventory Control System (MAJIC). Each instrument was assigned an appropriate task, and this task list was compared for accuracy with the Job and Task Analysis PWR Task Listing for I&C Technicians produced by the Institute of Nuclear Plant Operations (INPO 84-007). An I&C reactor maintenance systems specialist provided an outline of applicable systems. The tasks were sorted by system, reviewed, and edited by the MMD maintenance supervisor assigned to the HFIR.

A questionnaire was prepared with 626 tasks to be rated. A rating scale from DOE/EP-0095 was modified to meet the needs of the MMD survey. A four-point scale was chosen to eliminate an obvious middle range. Each task was rated on frequency, criticality, and difficulty. The questionnaire was distributed to the I&C maintenance supervisor for RRD and four instrument technicians with varying degrees of experience. An I&C engineer responsible for the design of most of the nuclear instruments in HFIR also was asked to respond. Each respondent received a set of detailed instructions, a rating sheet, and a biographical questionnaire (Appendixes A-C), as well as the task questionnaire. To ensure that careful consideration would be given to the rating of each task, the respondents were given approximately one month for the rating process.

Once the surveys were returned, all the results were carefully entered into a computer data base. The input was verified by an independent reviewer. The data was averaged and applied to a decision tree (Fig. 1).

All tasks in the completed questionnaire were sorted into 1 of 18 groups according to similar combinations of average difficulty, importance, and frequency ratings. The decisions in the procedure result in a grouping of tasks along a scale so that one end of the scale contains difficult, important, and frequently performed tasks, while the other end contains the easy, unimportant, and infrequently performed tasks. Each group of tasks, in turn, is associated with a recommendation to train, not to train, or to overtrain.

"Training" as used here is not necessarily classroom lecture. Formal training programs can take a number of forms such as correspondence study, training manuals, individualized learning packages, on-the-job training, simulator team and individual training, and plant drills and exercises, as well as classroom lecture. "No Training" provides for no formal training; the task can be learned on the job. "Overtrain" (or "Retrain") provides a combination of initial formal training plus periodic practice of the task.

Within the decision tree, data points that appeared at a logical break point were systematically moved toward the most intensive training objectives.

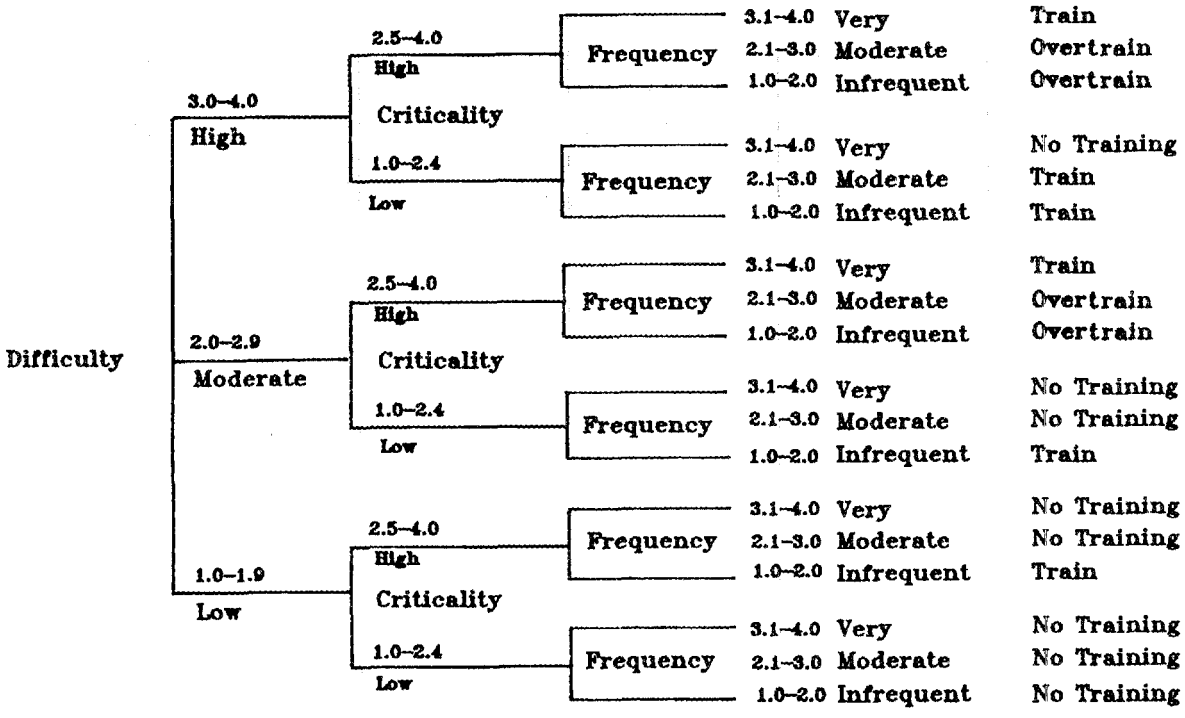


Fig. 1. I&C Maintenance Management Department decision tree (adapted from DOE/EP-0095).

5. COMMENTS

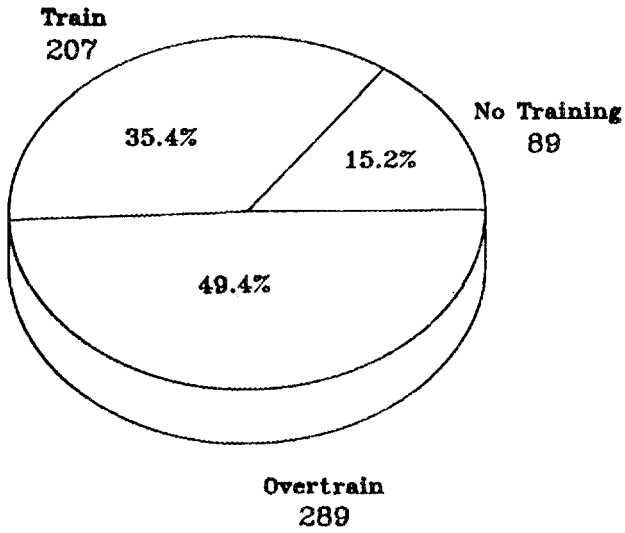
The results were reviewed by a group leader in the Reactor Systems Section of the I&C Division and an engineer in the Maintenance Section of the RRD. All comments will be reviewed and considered in the final training applications.

The percentages were adjusted and calculated only on those tasks that were rated (Fig. 2). Forty-one tasks or 6.5% of the total tasks were not rated by any of the respondents. These tasks were categorized as not required for reactor operation and will be evaluated. Any results identified as "questionable" by the subject matter experts or any tasks with a low number of responses will be reevaluated also.

6. CONCLUSIONS

Data collected and analyzed through this process are valid and useful in determining training for instrument technicians in the HFIR facility. Because of a limited number of responses to some items, other resources such as self-evaluations and technical reviews by supervisors and engineers will be needed to ensure an effective selection of training subjects.

The training categories that resulted from the job/task analysis are illustrated in Fig. 2.



Total Tasks – 585

Fig. 2. I&C Maintenance Management Department job/task analysis.

SELECTED BIBLIOGRAPHY

1. *Guidelines for Job and Task Analysis for DOE Nuclear Facilities, June 1983*, DOE/EP-0095, U.S. DOE, Div. Nuclear Safety, June 1983.

2. *Instrument Mechanic Task Analysis*, EG&G Idaho, Inc., Idaho National Engineering Laboratory, 1985.

APPENDIX A

DIRECTIONS

DIRECTIONS

1. Before beginning the questionnaire, look through the survey and become familiar with the contents and all instructions. It is important to review the task inventory and become familiar with it in order to make a valid assessment of each task statement. Please detach the Criteria Scale so that it will always be available for reference.

2. Please complete the job experience page carefully.

3. The task list was developed by HFIR Subject Matter Experts (SME's). If a particular task is not familiar to you, please refer to applicable HFIR documents to refresh your memory, or discuss the task with other instrument technicians. If you have no knowledge of a specific task, draw a line through the rating columns. If a pertinent task has not been listed, please add it to your survey.

   The tasks will be rated on:

   a. FREQUENCY b. CRITICALITY c. DIFFICULTY

   Frequency
   The first column requires you to rate how often you (an instrument technician) perform each task in your job. From an overall point of view, several of the tasks occur on a regular, periodic basis. The average frequency of the group for each task will be used in any analysis of the data. Rate the frequency of performing each task using the following guidelines:

   Use a rating of "1" if you perform the task less than once per year.

   Use a rating of "2" if you perform the task one to twelve times per year.

   Use a rating of "3" if you perform the task two to four times per month.

   Use a rating of "4" if you perform the task more than once per week.

   Criticality
   The second column requires you to rate the importance, or criticality, of each task in terms of the consequences created by inadequate task performance. Consider the overall impact with regard to possible damage to equipment and systems, injury to personnel, etc. Rate the task consequences using the following guidelines:

   Use a rating of "1" if the consequences of improper task performance are "negligible".

   Use a rating of "2" if the consequences of improper task performance are "serious" (improper task performance leads to serious consequences that require

Criticality (continued)

considerable corrective action; for example, the function of a safety system may be impaired).

Use a rating of "3" if the consequences of improper performance are "severe" (improper task performance leads to severe consequences requiring extensive corrective action; for example, damage to or failure of a major component or potential for personnel injury).

Use a rating of "4" if the consequences of improper task performance are "extremely severe" (improper task performance leads to extremely severe consequences that may be enormously time consuming or costly to correct).

Difficulty

Column C requires you to rate the difficulty of performing a task. In judging task difficulty, consider the two major factors that affect the task complexity: mental skills and physical skills. Mental skills include such areas as:

- Recognition, evaluation, comprehension, and understanding (for example, understanding the effect on a system or systems of shutting a specific valve).
- Retention and recall (for example, remembering the correct sequence of procedures for completing a task).
- Problem solving (for example, determining the cause of an equipment malfunction).

Physical skills include gross motor coordination (for example, aligning a motor as it is being placed into its housing) and fine manual dexterity (for example, manipulating a voltmeter probe where precision is required in placement). Rate the task performance difficulty using the following guidelines:

- First, determine the degree of mental skill required for performing the task, either low or high.
- Second, using the following list, find the level of mental skill determined above, and then determine the degree of physical skill needed. This will yield the difficulty rating to be entered.

  If the mental skill required is low and the degree of physical skill is low, rate the task performance difficulty using a "1".

  If the mental skill required is low and the degree of physical skill is high, rate the task performance difficulty using a "2".

  If the mental skill required is high and the degree of physical skill is low, rate the task performance difficulty using a "3".

If the mental skill required is high and the degree of physical skill is high, rate the task performance difficulty using a "4".

4. Enter your response for each task, using either a pen or pencil, in the column adjacent to the appropriate task statement as shown below:

Task	Frequency	Criticality	Difficulty
Assist in performing alarm and control circuit checks	4	4	2

You determined:
Performed more than once per week (4)

Identified as "extremely severe" consequences (4)

Requires low mental activity and high motor-coordination (2)

APPENDIX B

RATING SHEET

IF YOU DO NOT PERFORM A TASK, DRAW A LINE THROUGH THE RATING COLUMNS PROVIDED FOR THAT TASK.

CRITERIA SCALES

FREQUENCY (A) (1-4)

Min. 1. Performed less than once per year.

2. Performed one to twelve times per year.

3. Performed two to four times per month.

Max. 4. Performed more often than once per week.

TASK CRITICALITY (B) (1-4)

Min. 1. Consequences of improper performance are "negligible" (for example, improper performance makes almost no difference in plant operation).

2. Consequences of improper performance are "serious" (for example, improper performance of a system function that causes a power reduction).

3. Consequences of improper performance are "severe" (for example, damage to or failure of a major component or potential for personnel injury).

Max. 4. Consequences of improper performance are "extremely severe" (for example, the impairment of a system function causing an uncontrolled power increase).

DIFFICULTY OF PERFORMANCE (C) (1-4)

First decide how difficult the task is to learn, then what the chance of committing an error is while performing the task without training and practice.

Min. 1. If the task is very easy to learn, the chance of error is very low without training and practice.

2. If the task is fairly easy to learn, the chance of error is low without training and practice.

3. If the task is fairly difficult to learn, the chance of error is high without training and practice.

Max. 4. If the task is very difficult to learn, the chance of error is very high without training and practice.

APPENDIX C

BIOGRAPHICAL QUESTIONNAIRE

PERSONNEL PROFILE
(please print or type)

PERSONAL

NAME:

BIRTHDATE:

JOB TITLE:

EDUCATION

HIGH SCHOOL:

TECHNICAL SCHOOL:

APPRENTICESHIP:

COLLEGE:

OTHER (INCLUDE MILITARY/SPECIAL COURSES):

EXPERIENCE

TOTAL YEARS CRAFT/PROFESSIONAL EXPERIENCE:

EMPLOYMENT (INCLUDE MILITARY):

NUCLEAR EXPERIENCE:

ORNL REACTOR EXPERIENCE (YRS.):

HFIR:
BSR:
HPRR:
TSF:
ORR:
OTHER:

APPENDIX D

SURVEY AND RESULTS

* Indicates a limited number of respondents (1-2).
** Indicates no respondents.

HFR 1201 SAFETY MONITORING SYSTEM

Task No.	Description		Model	Survey Input (F C D F C D F C D F C D F C D F C D)	Freq.	Crit.	Diff.	RESULTS
HFR-1201-100	Assist	Conducting Surveillance Test		2 4 2 2 4 3 2 4 3 2 4 3 2 4 2 2 3 2	2.0	3.8	2.5	OVER TRAIN
HFR-1201-101	Calibrate	Amp Magnet Control	Q-2613	2 4 2 1 4 3 2 4 3 2 4 3 2 4 2 2 2 2	1.8	3.7	2.5	OVER TRAIN
HFR-1201-102	Repair	Amp Magnet Control	Q-2613	1 4 2 1 4 3 1 4 3 2 4 3 1 4 2 1 2 2	1.2	3.7	2.5	OVER TRAIN
HFR-1201-103	Calibrate	Regulator Voltage	Q-2620	2 4 1 1 4 3 2 4 3 2 4 3 2 4 1 2 2 2	1.8	3.7	2.2	OVER TRAIN
HFR-1201-104	Repair	Regulator Voltage	Q-2620	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1201-105	Calibrate	Regulator Voltage	Q-2619	2 4 1 1 4 3 2 4 3 2 4 3 2 4 1 2 2 2	1.8	3.7	2.2	OVER TRAIN
HFR-1201-106	Repair	Regulator Voltage	Q-2619	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1201-107	Calibrate	Regulator Voltage	Q-2621	2 4 1 1 4 3 2 4 3 2 4 3 2 4 1 2 2 2	1.8	3.7	2.2	OVER TRAIN
HFR-1201-108	Repair	Regulator Voltage	Q-2621	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1201-109	Calibrate	Module OR Gate	Q-2612	2 4 2 1 4 3 2 4 3 2 4 3 2 4 2 2 2 2	1.8	3.7	2.5	OVER TRAIN
HFR-1201-110	Repair	Module OR Gate	Q-2612	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN

HFR 1202 NUCLEAR SERVO SYSTEM

Task No.	Description		Model	Survey Input (F C D F C D F C D F C D F C D F C D)	Freq.	Crit.	Diff.	RESULTS
HFR-1202-100	Assist	Conducting Surveillance Test		2 4 2 1 4 3 2 4 3 2 4 3 2 4 2 2 3 2	1.8	3.8	2.5	OVER TRAIN
HFR-1202-101	Calibrate	AMP .7HP Servo Power	RC11-12-11A	2 4 1 2 4 3 2 4 3 2 4 3 2 4 1 2 2 2	2.0	3.7	2.2	OVER TRAIN
HFR-1202-102	Repair	AMP .7HP Servo Power	RC11-12-11A	1 4 2 2 4 3 1 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1202-103	Calibrate	AMP .7HP Servo Power	RC11-12-7A	2 4 1 1 4 3 2 4 3 2 4 3 2 4 1 2 2 2	1.8	3.7	2.2	OVER TRAIN
HFR-1202-104	Repair	AMP .7HP Servo Power	RC11-12-7A	1 4 2 1 4 3 1 4 3 2 4 3 1 4 2 1 2 2	1.2	3.7	2.5	OVER TRAIN
HFR-1202-105	Calibrate	Comparitor Trip	Q-2609	2 4 2 2 4 3 2 4 3 2 4 3 2 4 2 2 2 2	2.0	3.7	2.5	OVER TRAIN
HFR-1202-106	Repair	Comparitor Trip	Q-2609	1 4 3 2 4 3 2 4 3 2 4 3 1 4 3 1 2 2	1.5	3.7	2.8	OVER TRAIN
HFR-1202-107	Calibrate	Conditioner Signal	R11-20-1	2 4 3 2 4 3 2 4 3 2 4 3 2 4 3 2 2 2	2.0	3.7	2.8	OVER TRAIN
HFR-1202-108	Repair	Conditioner Signal	R11-20-1	1 4 4 1 4 3 1 4 3 2 4 3 1 4 4 1 2 2	1.2	3.7	3.2	OVER TRAIN
HFR-1202-109	Calibrate	Conditioner Signal	RC11-20-1	2 4 3 2 4 3 2 4 3 2 4 3 2 4 3 2 2 2	2.0	3.7	2.8	OVER TRAIN
HFR-1202-110	Repair	Conditioner Signal	RC11-20-1	1 4 4 1 4 3 1 4 3 2 4 3 1 4 4 1 2 2	1.2	3.7	3.2	OVER TRAIN
HFR-1202-111	Calibrate	Converter Dual Sig	Q-2606	2 4 2 2 4 3 2 4 3 2 4 3 2 4 2 2 2 2	2.0	3.7	2.5	OVER TRAIN
HFR-1202-112A	Repair	Converter Dual Sig	Q-2606	1 4 2 1 4 3 1 4 3 2 4 3 1 4 2 1 2 2	1.2	3.7	2.5	OVER TRAIN
HFR-1202-112	Calibrate	Drive U Ser Demand	Q-2607	2 4 2 2 4 3 2 4 3 2 4 3 2 4 2 2 2 2	2.0	3.7	2.5	OVER TRAIN
HFR-1202-113	Repair	Drive U Ser Demand	Q-2607	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1202-114	Calibrate	Module Chamber HV	Q-2602	2 4 1 2 4 3 2 4 3 2 4 3 2 4 1 2 2 2	2.0	3.7	2.2	OVER TRAIN
HFR-1202-115	Repair	Module Chamber HV	Q-2602	1 4 2 1 4 3 2 4 3 2 4 3 1 4 2 1 2 2	1.3	3.7	2.5	OVER TRAIN
HFR-1202-117	Calibrate	Module HT PWR Meter	Q-2632	2 2 1 2 4 3 2 4 3 2 4 2 2 2 1 1 1 2	1.8	2.8	2.0	OVER TRAIN
HFR-1202-118	Repair	Module HT PWR Meter	Q-2632	1 2 1 1 4 3 1 4 3 2 4 2 1 2 1 1 1 2	1.2	2.8	2.0	OVER TRAIN
HFR-1202-119	Calibrate	Module Meter	Q-2629	2 2 1 2 4 3 2 4 3 2 4 2 2 2 1 1 1 2	1.8	2.8	2.0	OVER TRAIN
HFR-1202-120	Repair	Module Meter	Q-2629	1 2 1 1 4 3 1 4 3 2 4 2 1 2 1 1 1 2	1.2	2.8	2.0	OVER TRAIN
HFR-1202-121	Calibrate	Monitor Emit Current	RC11-12-8A	2 4 1 1 4 3 2 4 3 2 4 3 2 4 1 2 1 2	1.8	3.5	2.2	OVER TRAIN
HFR-1202-122	Repair	Monitor Emit Current	RC11-12-8A	1 4 1 1 4 3 1 4 3 2 4 3 1 4 1 1 1 2	1.2	3.5	2.2	OVER TRAIN
HFR-1202-123	Calibrate	Multiplier Analog	Q-2608	2 4 3 1 4 3 2 4 3 2 4 2 2 4 3 2 2 2	1.8	3.7	2.7	OVER TRAIN
HFR-1202-124	Repair	Multiplier Analog	Q-2608	1 4 2 1 4 3 1 4 3 2 4 2 1 4 2 1 2 2	1.2	3.7	2.3	OVER TRAIN
HFR-1202-125	Calibrate	OP AMP Dual	Q-2605	2 4 2 2 4 3 2 4 3 2 4 2 2 4 2 2 2 2	2.0	3.7	2.3	OVER TRAIN
HFR-1202-126	Repair	OP AMP Dual	Q-2605	1 4 2 1 4 3 2 4 3 2 4 2 1 4 2 1 2 2	1.3	3.7	2.3	OVER TRAIN

EFR 1202 NUCLEAR SERVO SYSTEM (Continued) Page 2

EFR-1202-127	Calibrate	Regulator Voltage	Q-2619	2	4	1	2	4	3	2	4	3	2	4	2	2	4	1	2	2	2	2.0	3.7	2.0	OVER TRAIN
EFR-1202-128	Repair	Regulator Voltage	Q-2619	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1202-129	Calibrate	Regulator Voltage	Q-2620	2	4	1	1	4	3	2	4	3	2	4	2	2	4	1	2	2	2	1.8	3.7	2.0	OVER TRAIN
EFR-1202-130	Repair	Regulator Voltage	Q-2620	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1202-131	Calibrate	Regulator Voltage	Q-2621	2	4	1	1	4	3	2	4	3	2	4	2	2	4	1	2	2	2	1.8	3.7	2.0	OVER TRAIN
EFR-1202-132	Repair	Regulator Voltage	Q-2621	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1202-133	Calibrate	Selector Emitter	RC11-12-10A	2	4	1	1	4	3	2	4	3	2	4	3	2	4	1	2	2	2	1.8	3.7	2.2	OVER TRAIN
EFR-1202-134	Repair	Selector Emitter	RC11-12-10A	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
EFR-1202-135	Calibrate	Selector Emitter	RC11-12-9A	2	4	1	1	4	3	2	4	3	2	4	3	2	4	1	2	2	2	1.8	3.7	2.2	OVER TRAIN
EFR-1202-136	Repair	Selector Emitter	RC11-12-9A	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN

EFR 1203 NUCLEAR WRCC SYSTEM

EFR-1203-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	4	2	2	4	2	2	2	2	1.8	3.7	2.3	OVER TRAIN
EFR-1203-101	Calibrate	Recorder 1PEN Scan E	6410	2	2	2	2	4	3	2	4	3	2	4	3	2	2	2	2	2	2	2.0	3.0	2.5	OVER TRAIN
EFR-1203-102	Repair	Recorder 1PEN Scan E	6410	1	2	2	2	4	3	2	4	3	2	4	2	1	2	2	1	2	2	1.5	3.0	2.3	OVER TRAIN
EFR-1203-103	Calibrate	Scaler Decade	2029																2	2	2	2.0	2.0	2.0	TRAIN
EFR-1203-104	Repair	Scaler Decade	2029																1	2	2	1.0	2.0	2.0 *	TRAIN
EFR-1203-105	Calibrate	Regulator Voltage	Q-2620	2	4	1	1	4	3	2	4	3	2	4	2	2	4	1	2	2	2	1.8	3.7	2.0	OVER TRAIN
EFR-1203-106	Repair	Regulator Voltage	Q-2620	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1203-107	Calibrate	Regulator Voltage	Q-2619	2	4	1	1	4	3	2	4	3	2	4	2	2	4	1	2	2	2	1.8	3.7	2.0	OVER TRAIN
EFR-1203-108	Repair	Regulator Voltage	Q-2619	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1203-109	Calibrate	Regulator Voltage	Q-2621	2	4	1	1	4	3	2	4	3	2	4	2	2	4	1	2	2	2	1.8	3.7	2.0	OVER TRAIN
EFR-1203-110	Repair	Regulator Voltage	Q-2621	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1203-111	Calibrate	PWR SPY Fiss Chamber	Q-2617	2	4	1	1	4	3	2	4	3	2	4	3	2	4	1	2	2	2	1.8	3.7	2.2	OVER TRAIN
EFR-1203-112	Repair	PWR SPY Fiss Chamber	Q-2617	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
EFR-1203-113	Calibrate	AMP Pulse + CRM	Q-2614	2	4	3	2	4	3	2	4	3	2	4	3	2	4	3	2	2	2	2.0	3.7	2.8	OVER TRAIN
EFR-1203-114	Repair	AMP Pulse + CRM	Q-2614	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1	2	2	1.2	3.7	2.8	OVER TRAIN
EFR-1203-115	Calibrate	OP AMP Dual	Q-2605	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
EFR-1203-116	Repair	OP AMP Dual	Q-2605	1	4	2	2	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.5	3.7	2.3	OVER TRAIN
EFR-1203-117	Calibrate	AMP Servo .1EP	Q-2615	2	4	1	2	4	3	2	4	3	2	4	3	2	4	1	2	2	2	2.0	3.7	2.2	OVER TRAIN
EFR-1203-118	Repair	AMP Servo .1HP	Q-2615	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
EFR-1203-119	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5	OVER TRAIN
EFR-1203-120	Repair	Comparitor Trip	Q-2609	1	4	3	1	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.3	3.7	2.8	OVER TRAIN
EFR-1203-121	Calibrate	Converter Dual Sig	Q-2606	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5	OVER TRAIN
EFR-1203-122	Repair	Converter Dual Sig	Q-2606	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
EFR-1203-123	Calibrate	Pre-AMP FIS Chamber	Q-2641-1	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5	OVER TRAIN
EFR-1203-124	Repair	Pre-AMP FIS Chamber	Q-2641-1	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1	2	2	1.2	3.7	2.8	OVER TRAIN
EFR-1203-125	Calibrate	Scaler Decade	2029																2	2	2	2.0	2.0	2.0 *	TRAIN
EFR-1203-126	Repair	Scaler Decade	2029																1	2	2	1.0	2.0	2.0 *	TRAIN

EFR 1204 SAFETY NEUTRON FLUX SYSTEM

HFR-1204-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	4	2	2	4	2	2	3	2	1.8	3.8	2.3 OVER TRAIN
EFR-1204-101	Calibrate	Recorder 2PEN Scan E	6420	2	2	2	2	4	3	2	4	3	2	4	3	2	2	2	2	2	2.0	3.0	2.5	OVER TRAIN
EFR-1204-102	Repair	Recorder 2PEN Scan E	6420	1	2	2	2	4	3	2	4	3	2	4	2	1	2	2	1	2	2	1.5	3.0	2.3 OVER TRAIN
HFR-1204-103	Calibrate	Module Chamber EV	Q-2602	2	4	1	2	4	3	2	4	3	2	4	3	2	4	1	2	2	2	2.0	3.7	2.2 OVER TRAIN
HFR-1204-104	Repair	Module Chamber EV	Q-2602	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3 OVER TRAIN
HFR-1204-105	Calibrate	Conditioner Signal	RC11-19-1	2	4	3	2	4	3	2	4	3	2	4	3	2	4	3	2	2	2	2.0	3.7	2.8 OVER TRAIN
HFR-1204-106	Repair	Conditioner Signal	RC11-19-1	1	4	4	2	4	3	2	4	3	2	4	3	1	4	4	1	2	2	1.5	3.7	3.2 OVER TRAIN
EFR-1204-107	Calibrate	Module Test	Q-2630	2	4	3	2	4	3	2	4	3	2	4	3	2	4	3	2	2	2	2.0	3.7	2.8 OVER TRAIN
HFR-1204-108	Repair	Module Test	Q-2630	1	4	4	1	4	3	2	4	3	2	4	3	1	4	4	1	2	2	1.3	3.7	3.2 OVER TRAIN
EFR-1204-109	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5 OVER TRAIN
HFR-1204-110	Repair	Comparitor Trip	Q-2609	1	4	3	2	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.5	3.7	2.8 OVER TRAIN
HFR-1204-111	Calibrate	Converter Dual Sig	Q-2606	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5 OVER TRAIN
EFR-1204-112	Repair	Converter Dual Sig	Q-2606	1	4	2	2	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.3	3.7	2.5 OVER TRAIN
EFR-1204-113	Calibrate	Chamber Ion	PCP-II	2	4	2									2	4	2	2	2	2	2.0	3.3	2.0 OVER TRAIN
EFR-1204-114	Repair	Chamber Ion	PCP-II															1	2	4	1.0	2.0	4.0 * TRAIN
EFR-1204-115	Calibrate	Chamber Ion	PCP-III	2	4	2									2	4	2	2	2	2	2.0	3.3	2.0 OVER TRAIN
HFR-1204-116	Repair	Chamber Ion	PCP-III															1	2	4	1.0	2.0	4.0 * TRAIN

EFR 1206 ROD ASYMMETRY SYSTEM

EFR-1206-100	Assist	Conducting Surveillance Test		2	2	2	1	2	3	2	2	3	2	3	2	2	2	2	2	3	2	1.8	2.3	2.3 TRAIN
EFR-1206-101	Calibrate	Amplifier Buffer	RC11-18-6	2	2	2	1	2	3	2	2	3	2	3	2	2	2	2	2	2	2	1.8	2.2	2.3 TRAIN
EFR-1206-102	Repair	Amplifier Buffer	RC11-18-6	1	2	3	1	2	3	1	2	3	2	3	2	1	2	3	1	2	2	1.2	2.2	2.7 TRAIN
EFR-1206-103	Calibrate	Auctioneer Hi Lo	RC11-18-84	2	2	2	1	2	3	2	2	3	2	3	3	2	2	2	2	2	2	1.8	2.2	2.5 TRAIN
EFR-1206-104	Repair	Auctioneer Hi Lo	RC11-18-84	1	2	3	1	2	3	1	2	3	2	3	3	1	2	3	1	2	2	1.2	2.2	2.8 TRAIN
EFR-1206-105	Calibrate	Comparitor Dual Volt	RC11-18-5	2	2	2	1	2	3	2	2	3	2	3	3	2	2	2	2	2	2	1.8	2.2	2.5 TRAIN
EFR-1206-106	Repair	Comparitor Dual Volt	RC11-18-5	1	2	3	1	2	3	1	2	3	2	3	3	1	2	3	1	2	2	1.2	2.2	2.8 TRAIN

EFR 1207 SAFETY FFED SYSTEM

EFR-1207-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	4	2	2	4	2	2	3	2	1.8	3.8	2.3 OVER TRAIN
HFR-1207-101	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5 OVER TRAIN
EFR-1207-102	Repair	Comparitor Trip	Q-2609	1	4	3	2	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.5	3.7	2.8 OVER TRAIN
HFR-1207-103	Calibrate	AMP FFE + Supply EV	Q-2637	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5 OVER TRAIN
HFR-1207-104	Repair	AMP FFE + Supply EV	Q-2637	1	4	3	1	4	3	1	4	3	2	4	2	1	4	3	1	2	2	1.2	3.7	2.7 OVER TRAIN
HFR-1207-105	Calibrate	Chamber Ion	RSG-49A	2	4	2	2	4	3	2	4	3			2	4	2	2	2	2	2.0	3.6	2.4 OVER TRAIN
HFR-1207-106	Repair	Chamber Ion	RSG-49A				2	4	3	1	4	3						1	2	4	1.3	3.3	3.3 OVER TRAIN

EFR 1208 SAFETY POWER RATE OF RISE SYSTEM

HFR-1208-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	1	4	2	2	4	2	2	3	2	1.7	3.8	2.3 OVER TRAIN

EFR 1501 SCANNER VALVE TESTING AND CALIBRATION Page 4

EFR-1501-100	Assist	Conducting Surveillance Test		2	2	2	1	2	3	2	2	3	1	2	2	2	2	2	2	2	2	1.7	2.0	2.3	TRAIN
EFR-1501-101	Calibrate	Scanner Eyd Data	64CBM	2	2	2	2	2	3	2	2	3	1	2	2	2	2	2	2	2	2	1.8	2.0	2.3	TRAIN
EFR-1501-102	Repair	Scanner Eyd Data	64CBM	1	2	3	1	2	3	1	2	3	1	2	2	1	2	3	1	2	2	1.0	2.0	2.7	TRAIN

EFR 1502 SAFETY HEAT POWER SYSTEM

EFR-1502-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	4	2	2	4	2	2	3	2	1.8	3.8	2.3	OVER TRAIN
EFR-1502-101	Calibrate	Modifier I to I	66-0	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
EFR-1502-102	Repair	Modifier I to I	66-0	1	4	3	2	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.5	3.7	2.8	OVER TRAIN
EFR-1502-103	Calibrate	Multiplier/Divider	66DP	2	4	3	1	4	3	2	4	3	2	4	2	2	4	3	2	2	2	1.8	3.7	2.7	OVER TRAIN
EFR-1502-104	Repair	Multiplier/Divider	66DP	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1	2	2	1.2	3.7	2.8	OVER TRAIN
EFR-1502-105	Calibrate	Inverter Static	SIS-6250	2	4	1	2	4	3	2	4	3	2	4	2	2	4	1	2	2	2	2.0	3.7	2.0	OVER TRAIN
EFR-1502-106	Repair	Inverter Static	SIS-6250	1	4	2	2	4	3	2	4	3	2	4	3	1	4	2	1	2	3	1.5	3.7	2.7	OVER TRAIN
EFR-1502-107	Calibrate	Module HT PWR Meter	Q-2632	2	2	1	1	4	3	2	4	3	2	4	2	2	2	1	2	2	2	1.8	3.0	2.0	OVER TRAIN
EFR-1502-108	Repair	Module HT PWR Meter	Q-2632	1	2	1	1	4	3	2	4	3	2	4	2	1	2	1	1	2	2	1.3	3.0	2.0	OVER TRAIN
EFR-1502-109	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.7	2.5	OVER TRAIN
EFR-1502-110	Repair	Comparitor Trip	Q-2609	1	4	3	1	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.3	3.7	2.8	OVER TRAIN
EFR-1502-111	Calibrate	Multiplier/Divider	66DF	2	4	3	2	4	3	2	4	3	2	4	2	2	4	3	2	2	2	2.0	3.7	2.7	OVER TRAIN
EFR-1502-112	Repair	Multiplier/Divider	66DF	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1	2	2	1.2	3.7	2.8	OVER TRAIN
EFR-1502-113	Calibrate	Repeater Current	66BR	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
EFR-1502-114	Repair	Repeater Current	66BR	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1	2	2	1.2	3.7	2.8	OVER TRAIN

EFR 1503 SERVO HEAT POWER SYSTEM

EFR-1503-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	4	2	2	4	2	2	3	2	1.8	3.8	2.3	OVER TRAIN
EFR-1503-101	Calibrate	Converter P to I	66FR-2	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
EFR-1503-102	Repair	Converter P to I	66FR-2	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
EFR-1503-103	Calibrate	Relay Computing Pneu	56-3-3	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
EFR-1503-104	Repair	Relay Computing Pneu	56-3-3	1	4	2	1	4	3	2	4	3	2	4	3	1	4	2	1	2	2	1.3	3.7	2.5	OVER TRAIN
EFR-1503-105	Calibrate	Transmitter Temp	12A-Spec	2	4	2	2	4	4	2	4	4	2	4	3	2	4	2	2	2	2	2.0	3.7	2.8	OVER TRAIN
EFR-1503-106	Repair	Transmitter Temp	12A-Spec	1	4	2	1	4	4	2	4	4	2	4	3	1	4	2	1	2	2	1.3	3.7	2.8	OVER TRAIN

EFR 1504 SEISMIC TRIP SYSTEM

EFR-1504-100	Assist	Conducting Surveillance Test		2	4	2	1	4	3	2	4	3	2	2	2	2	4	2	2	2	2	1.8	3.3	2.3	OVER TRAIN
EFR-1504-101	Calibrate	Trigger Seismic	EST-2	2	4	2	2	4	3	2	4	3	2	2	2	2	4	2	2	2	2	2.0	3.3	2.3	OVER TRAIN
EFR-1504-102	Repair	Trigger Seismic	EST-2	1	4	4	1	4	3	1	4	3	2	2	2	1	4	4	1	2	3	1.2	3.3	3.2	OVER TRAIN

HFR 1507 SAFETY PRIMARY FLOW SYSTEM

HFR-1507-100	Assist	Conducting Surveillance Test		2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	3	2	2.0	3.8	2.3	OVER TRAIN
HFR-1507-101	Calibrate	Repeater Current	66BR	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1507-102	Repair	Repeater Current	66BR	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
HFR-1507-103	Calibrate	Power Supply	N121CB	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1507-104	Repair	Power Supply	N121CB	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN
HFR-1507-105	Calibrate	Converter SQ RT	66AP-0	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1507-106	Repair	Converter SQ RT	66AP-0	1	4	3	2	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.5	3.7	2.8	OVER TRAIN
HFR-1507-107	Calibrate	Transmitter DP	613	2	4	2	2	4	1	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.0	OVER TRAIN
HFR-1507-108	Repair	Transmitter DP	613	1	4	2	2	4	1	2	4	3	2	4	3	1	4	2	1	2	2	1.5	3.7	2.2	OVER TRAIN
HFR-1507-109	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1507-110	Repair	Comparitor Trip	Q-2609	1	4	3	2	4	3	2	4	3	2	4	3	1	4	3	1	2	2	1.5	3.7	2.8	OVER TRAIN
HFR-1507-112	Calibrate	Indicator Flow	65FS-3BG	2	4	1	2	4	3	2	4	3	2	4	3	2	2	1	2	2	2	2.0	3.3	2.2	OVER TRAIN
HFR-1507-113	Repair	Indicator Flow	65FS-3BG	1	4	2	1	4	3	1	4	3	2	4	3	1	2	2	1	2	2	1.2	3.3	2.5	OVER TRAIN
HFR-1507-114	Calibrate	Power Supply	610	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1507-115	Repair	Power Supply	610	1	4	2	1	4	3	2	4	3	2	4	2	1	4	2	1	2	2	1.3	3.7	2.3	OVER TRAIN

HFR 1508 SAFETY PRIMARY TEMPERATURE SYSTEM

HFR-1508-100	Assist	Conducting Surveillance Test		2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	3	2	2.0	3.8	2.3	OVER TRAIN
HFR-1508-101	Calibrate	Converter Resistance	694	2	4	2	1	4	4	2	4	3	2	4	3	2	4	2	2	2	2	1.8	3.7	2.7	OVER TRAIN
HFR-1508-102	Repair	Converter Resistance	694	1	4	3	1	4	4	2	4	4	2	4	3	1	4	3	1	2	2	1.3	3.7	3.2	OVER TRAIN
HFR-1508-103	Calibrate	Recorder 1PEN Scan E	6410	2	2	2	2	4	3	2	4	3	2	4	3	2	2	2	2	2	2	2.0	3.0	2.5	OVER TRAIN
HFR-1508-104	Repair	Recorder 1PEN Scan E	6410	1	2	2	1	4	3	2	4	3	2	4	2	1	2	2	1	2	2	1.3	3.0	2.3	OVER TRAIN
HFR-1508-105	Calibrate	Repeater Current	66BR	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1508-106	Repair	Repeater Current	66BR	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1	2	2	1.2	3.7	2.5	OVER TRAIN
HFR-1508-107	Calibrate	Bulb Resistance	DB-1	2	4	3							2	4	3	2	4	3	2	2	2	2.0	3.5	2.8	OVER TRAIN
HFR-1508-108	Repair	Bulb Resistance	DB-1																1	2	2	1.0	2.0	2.0	* TRAIN
HFR-1508-109	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3				2	4	2	2	2	2	2.0	3.6	2.4	OVER TRAIN
HFR-1508-110	Repair	Comparitor Trip	Q-2609	1	4	3	1	4	3	2	4	3				1	4	3	1	2	2	1.2	3.6	2.8	OVER TRAIN

HFR 1509 SAFETY PRIMARY PRESSURE SYSTEM

HFR-1509-100	Assist	Conducting Surveillance Test		2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	3	2	2.0	3.8	2.3	OVER TRAIN
HFR-1509-101	Calibrate	Switch Pressure	B2TA12SS	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2	2	2	2.0	3.7	2.3	OVER TRAIN
HFR-1509-102	Repair	Switch Pressure	B2TA12SS	1	4	2							2	4	3	1	4	2	1	2	2	1.3	3.5	2.3	OVER TRAIN
HFR-1509-103	Calibrate	Comparitor Trip	Q-2609	2	4	2	2	4	3	2	4	3				2	4	2	2	2	2	2.0	3.6	2.4	OVER TRAIN
HFR-1509-104	Repair	Comparitor Trip	Q-2609	1	4	3	1	4	3	2	4	3				1	4	3	1	2	2	1.2	3.6	2.6	OVER TRAIN

EFR 1510 REACTOR BAY CONTAINMENT FLOW SYSTEM

EFR-1510-100	Assist	Conducting Surveillance Test		2	3	2	2	3	3	2	3	3	2	3	2	2	3	2	2.0	3.0	2.4	OVER TRAIN
EFR-1510-101	Calibrate	Gauge Pressure	511-S	2	2	2	2	3	3	2	3	3	2	2	1	2	2	2	2.0	2.4	2.2	TRAIN
EFR-1510-102	Repair	Gauge Pressure	511-S	1	2	2							2	2	2	1	2	2	1.3	2.0	2.0	TRAIN
EFR-1510-103	Calibrate	Transmitter DP	15A	2	3	2	2	3	4	2	3	4	2	3	2	2	3	2	2.0	3.0	2.8	OVER TRAIN
EFR-1510-104	Repair	Transmitter DP	15A	1	3	2	1	3	4	2	3	4	2	3	3	1	3	2	1.4	3.0	3.0	OVER TRAIN
EFR-1510-105	Calibrate	Switch Pressure	D2H-H1B	2	3	2	2	3	3	2	3	3	2	3	2	2	3	2	2.0	3.0	2.4	OVER TRAIN
EFR-1510-106	Repair	Switch Pressure	D2H-H1B	1	3	2							2	3	3	1	3	2	1.3	3.0	2.3	OVER TRAIN

EFR 1511 CLOSED OFF-GAS SYSTEM

EFR-1511-100	Assist	Conducting Surveillance Test		2	3	2	2	3	3	2	3	3	2	3	2	2	3	2	2.0	3.0	2.4	OVER TRAIN
EFR-1511-101	Calibrate	Switch Pressure	D2H-H1B	2	3	2	2	3	3	2	3	3	2	3	2	2	3	2	2.0	3.0	2.4	OVER TRAIN
EFR-1511-102	Repair	Switch Pressure	D2H-H1B	1	3	2							2	3	3	1	3	2	1.3	3.0	2.3	OVER TRAIN
EFR-1511-103	Calibrate	Gauge Pressure	511-S	2	2	2	2	3	3	2	3	3	2	2	2	2	2	2	2.0	2.4	2.4	TRAIN
EFR-1511-104	Repair	Gauge Pressure	511-S	1	2	2							2	2	3	1	2	2	1.3	2.0	2.3	TRAIN
EFR-1511-105	Calibrate	Transmitter DP	13A	2	3	2	2	3	3	2	3	3	2	3	2	2	3	2	2.0	3.0	2.4	OVER TRAIN
EFR-1511-106	Repair	Transmitter DP	13A	1	3	2	1	3	3	2	3	3	2	3	3	1	3	2	1.4	3.0	2.6	OVER TRAIN

EFR 1512 INSTRUMENT AIR PRESSURE SYSTEM

EFR-1512-100	Assist	Conducting Surveillance Test		2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-1512-101	Calibrate	Gauge Pressure	AH1	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-1512-102	Repair	Gauge Pressure	AH1	1	2	2							2	2	3	1	2	2	1.3	2.0	2.3	TRAIN
EFR-1512-103	Calibrate	Switch Temperature	100	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-1512-104	Repair	Switch Temperature	100	1	2	2							2	2	3	1	2	2	1.3	2.0	2.3	TRAIN
EFR-1512-105	Calibrate	Switch Pressure	D2H-A150	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-1512-106	Repair	Switch Pressure	D2H-A150	1	2	2							2	2	3	1	2	2	1.3	2.0	2.3	TRAIN
EFR-1512-107	Calibrate	Switch Pressure	D2H-A80SS	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-1512-108	Repair	Switch Pressure	D2H-A80SS	1	2	2							2	2	3	1	2	2	1.3	2.0	2.3	TRAIN

HFR-2000-100	Assist	Conducting Surveillance Test		2	2	2				2	4	3	2	2	2	2	2	2	2.0	2.5	2.3	OVER TRAIN
HFR-2000-101	Calibrate	Actuator Valve	35-35212	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-102	Repair	Actuator Valve	35-35212	1	2	2				1	2	3	2	1	2	1	2	2	1.3	1.8	2.3	TRAIN
HFR-2000-103	Calibrate	Switch Electronic	ET-1208	2	2	2	2	3	3	2	3	3	2	1	2	2	2	2	2.0	2.2	2.4	TRAIN
HFR-2000-104	Repair	Switch Electronic	ET-1208	1	2	2	1	3	4	1	3	3	2	1	2	1	2	2	1.2	2.2	2.6	TRAIN
HFR-2000-105	Calibrate	Analyzer PH	J	2	2	2	2	2	3	2	3	2	2	1	2	2	2	2	2.0	2.0	2.2	TRAIN
HFR-2000-106	Repair	Analyzer PH	J	1	2	3	1	2	3	1	3	3	2	1	2	1	2	3	1.2	2.0	2.8	TRAIN
HFR-2000-107	Calibrate	Analyzer PH	7082-11	2	2	2	2	3	3	2	3	2	2	1	2	2	2	2	2.0	2.2	2.2	TRAIN
HFR-2000-108	Repair	Analyzer PH	7082-11	1	2	4	1	3	3	1	3	3	2	1	2	1	2	4	1.2	2.2	3.2	TRAIN
HFR-2000-109	Calibrate	Analyzer PH	7082-30	2	2	2				2	3	2	2	1	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-110	Repair	Analyzer PH	7082-30	1	2	4				1	3	3	2	1	2	1	2	4	1.3	2.0	3.3	TRAIN
HFR-2000-111	Calibrate	Analyzer PH	7082-32	2	2	2				2	3	2	2	1	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-112	Repair	Analyzer PH	7082-32	1	2	4				1	3	3	2	1	2	1	2	4	1.3	2.0	3.3	TRAIN
HFR-2000-113	Calibrate	Analyzer Cond.	7075	2	2	2	2	3	3				2	1	2	2	2	2	2.0	2.0	2.3	TRAIN
HFR-2000-114	Repair	Analyzer Cond.	7075	1	2	3	1	3	3	1	3	3	2	1	2	1	2	3	1.2	2.2	2.8	TRAIN
HFR-2000-115	Calibrate	Analyzer Cond.	7082-19	2	2	2				2	3	2	2	1	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-116	Repair	Analyzer Cond.	7082-19	1	2	3				1	3	3	2	1	2	1	2	3	1.3	2.0	2.8	TRAIN
HFR-2000-117	Calibrate	Analyzer Moisture	2150-0				2	4	3										2.0	4.0	3.0 *	OVER TRAIN
HFR-2000-118	Repair	Analyzer Moisture	2150-0	1	2	4	1	4	3	1	4	3	2	1	2	1	2	4	1.2	2.6	3.2	OVER TRAIN
HFR-2000-119	Calibrate	Booster Pneu. Relay	61F7200S	2	2	2	2	4	3	2	4	3	2	1	2	2	2	2	2.0	2.6	2.4	OVER TRAIN
HFR-2000-120	Repair	Booster Pneu. Relay	61F7200S	1	2	2	1	4	3	1	4	3	2	1	2	1	2	2	1.2	2.6	2.4	OVER TRAIN
HFR-2000-121	Calibrate	Bulb Resistance	DB21B226	2	2	3	2	3	3	2	3	3	2	2	2	2	2	3	2.0	2.4	2.8	TRAIN
HFR-2000-122	Repair	Bulb Resistance	DB21B226																			**
HFR-2000-123	Calibrate	Bulb Resistance	DB22P26W	2	2	3				2	3	3	2	2	2	2	2	3	2.0	2.3	2.8	TRAIN
HFR-2000-124	Repair	Bulb Resistance	DB22P26W																			**
HFR-2000-125	Calibrate	Carrier Demodulator	CD10	2	2	2	2	3	3	2	3	3	2	1	2	2	2	2	2.0	2.2	2.4	TRAIN
HFR-2000-126	Repair	Carrier Demodulator	CD10	1	2	2	1	3	3	1	3	3	2	1	2	1	2	2	1.2	2.2	2.4	TRAIN
HFR-2000-127	Calibrate	Computer Flow	RC11-1-1E	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-128	Repair	Computer Flow	RC11-1-1E	1	2	3	1	3	3	1	3	3	2	2	3	1	2	3	1.2	2.4	3.0	TRAIN
HFR-2000-129	Calibrate	Computer Pneu	46S-10	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2.0	4.0	2.4	OVER TRAIN
HFR-2000-130	Repair	Computer Pneu	46S-10	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1.2	4.0	2.6	OVER TRAIN
HFR-2000-131	Calibrate	Computer Pneu	46S-8-32										2	2	2				2.0	2.0	2.0 *	TRAIN
HFR-2000-132	Repair	Computer Pneu	46S-8-32										2	2	3				2.0	2.0	3.0 *	TRAIN
HFR-2000-133	Calibrate	Computer Pneu	46S-8-43										2	2	2				2.0	2.0	2.0 *	TRAIN
HFR-2000-134	Repair	Computer Pneu	46S-8-43										2	2	3				2.0	2.0	3.0 *	TRAIN
HFR-2000-135	Calibrate	Computer Pneu	556-8-50	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2.0	4.0	2.4	OVER TRAIN
HFR-2000-136	Repair	Computer Pneu	556-8-50	1	4	2	1	4	3	1	4	3	2	4	3	1	4	2	1.2	4.0	2.6	OVER TRAIN
HFR-2000-137	Calibrate	Computer Pneu	B	2	2	2	2	4	3				2	2	2	2	2	2	2.0	2.5	2.3	OVER TRAIN
HFR-2000-138	Repair	Computer Pneu	B	1	2	2	1	4	3	1	3	3	2	2	3	1	2	2	1.2	2.6	2.6	OVER TRAIN
HFR-2000-139	Calibrate	Controller	M-5B	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2.0	4.0	2.4	OVER TRAIN
HFR-2000-140	Repair	Controller	M-5B	1	4	3	1	4	3	1	4	3	2	4	3	1	4	3	1.2	4.0	3.0	OVER TRAIN
HFR-2000-141	Calibrate	Controller ECI	M62	2	2	2	2	3	3	2	3	3	2	2	2	2	2	2	2.0	2.4	2.4	TRAIN
HFR-2000-142	Repair	Controller ECI	M62	1	2	3	1	3	3	1	3	3	2	2	3	1	2	3	1.2	2.4	3.0	TRAIN
HFR-2000-143	Calibrate	Controller PH	7081-33	2	2	2	2	3	3	2	3	3	2	2	2	2	2	2	2.0	2.4	2.4	TRAIN
HFR-2000-144	Repair	Controller PH	7081-33	1	2	3	1	3	3	1	3	3	2	2	3	1	2	3	1.2	2.4	3.0	TRAIN
HFR-2000-145	Calibrate	Controller Sequence		2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-146	Repair	Controller Sequence		1	2	4	1	3	3	1	3	3	2	2	3	1	2	4	1.2	2.4	3.4	TRAIN
HFR-2000-147	Calibrate	Controller Temp	121L	2	2	2	2	3	3	2	3	3	2	2	2	2	2	2	2.0	2.4	2.4	TRAIN

EFR-2000-148	Repair	Controller Temp	121L	1	2	3	1	3	3	1	3	3	2	2	3	1	2	3	1.2	2.4	3.0	TRAIN
EFR-2000-149	Calibrate	Controller Temp	1451TF11	1	1	2	2	4	3	2	4	3	2	2	2	1	1	2	1.6	2.4	2.4	TRAIN
EFR-2000-150	Repair	Controller Temp	1451TF11	1	1	2	1	4	3	1	4	3	2	2	3	1	1	2	1.2	2.4	2.6	TRAIN
EFR-2000-151	Calibrate	Controller Temp Ind	DT160B20	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-152	Repair	Controller Temp Ind	DT160B20	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
EFR-2000-153	Calibrate	Converter E to E	SC-5302-V	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
EFR-2000-154	Repair	Converter E to E	SC-5302-V	1	2	3	1	1	3	1	1	3	1	2	3	1	2	3	1.0	1.6	3.0	TRAIN
EFR-2000-155	Calibrate	Converter E to I	693	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-2000-156	Repair	Converter E to I	693	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
EFR-2000-157	Calibrate	Converter E to I	SC-1302	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-2000-158	Repair	Converter E to I	SC-1302	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
EFR-2000-159	Calibrate	Converter E to I	SC-1326	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-2000-160	Repair	Converter E to I	SC-1326	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
EFR-2000-161	Calibrate	Converter I to E	607A-E	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-2000-162	Repair	Converter I to E	607A-E	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
EFR-2000-163	Calibrate	Converter I to E	SC-1302	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
EFR-2000-164	Repair	Converter I to E	SC-1302	1	2	3							1	2	3	1	2	3	1.0	2.0	3.0	TRAIN
EFR-2000-165	Calibrate	Converter I to E	SC-5302-I	2	2	2				1	1	3	2	2	2	2	2	2	1.8	1.8	2.3	TRAIN
EFR-2000-166	Repair	Converter I to E	SC-5302-I	1	2	3	1	1	3	1	1	3	1	2	3	1	2	3	1.0	1.6	3.0	TRAIN
EFR-2000-167	Calibrate	Converter I to P	10970-1	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-168	Repair	Converter I to P	10970-1	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
EFR-2000-169	Calibrate	Converter I to P	69TA-1																			**
EFR-2000-170	Repair	Converter I to P	69TA-1																			**
EFR-2000-171	Calibrate	Converter I to V	SC-1302	2	2	2				1	1	3	2	2	2	2	2	2	1.8	1.8	2.3	TRAIN
EFR-2000-172	Repair	Converter I to V	SC-1302	1	2	3				1	1	3	1	2	3	1	2	3	1.0	1.8	3.0	TRAIN
EFR-2000-173	Calibrate	Converter I to V	SC-5302-I	2	2	2				1	1	3	2	2	2	2	2	2	1.8	1.8	2.3	TRAIN
EFR-2000-174	Repair	Converter I to V	SC-5302-I	1	2	3				1	1	3	1	2	3	1	2	3	1.0	1.8	3.0	TRAIN
EFR-2000-175	Calibrate	Converter P to I	T5600	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
EFR-2000-176	Repair	Converter P to I	T5600	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
EFR-2000-177	Calibrate	Counter Digital	361-R	2	1	3	2	4	3	2	4	3	2	1	3	2	1	3	2.0	2.2	3.0	TRAIN
EFR-2000-178	Repair	Counter Digital	361-R	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
EFR-2000-179	Calibrate	Flowrator	12-3621	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
EFR-2000-180	Repair	Flowrator	12-3621	1	1	1	1	3	3	1	3	1	1	1	1	1	1	1	1.0	1.8	1.4	NO TRAINING
EFR-2000-181	Calibrate	Flowrator	6303	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
EFR-2000-182	Repair	Flowrator	6303	1	1	1	1	3	1	1	3	1	1	1	1	1	1	1	1.0	1.8	1.0	NO TRAINING
EFR-2000-183	Calibrate	Gauge Pressure	2001	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-184	Repair	Gauge Pressure	2001	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-185	Calibrate	Gauge Pressure	2004	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-186	Repair	Gauge Pressure	2004	1	1	2							2	1	2	1	1	2	1.3	1.0	2.0	TRAIN
EFR-2000-187	Calibrate	Gauge Pressure	2008	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-188	Repair	Gauge Pressure	2008	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-189	Calibrate	Gauge Pressure	2015	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-190	Repair	Gauge Pressure	2015	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-191	Calibrate	Gauge Pressure	212.20	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-192	Repair	Gauge Pressure	212.20	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-193	Calibrate	Gauge Pressure	511-S																			**
EFR-2000-194	Repair	Gauge Pressure	511-S																			**
EFR-2000-195	Calibrate	Gauge Pressure	713	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
EFR-2000-196	Repair	Gauge Pressure	713	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
EFR-2000-198	Calibrate	Gauge Pressure	713-D	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
EFR-2000-199	Repair	Gauge Pressure	713-D	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
EFR-2000-200	Calibrate	Gauge Pressure	Acragage	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
EFR-2000-201	Repair	Gauge Pressure	Acragage	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN

HFR-2000-202	Calibrate	Gauge Pressure	AH1							2	3	3							2.0	3.0	3.0	* OVER TRAIN
HFR-2000-203	Repair	Gauge Pressure	AH1																			**
HFR-2000-204	Calibrate	Gauge Pressure	Duragauge	2	1	2				2	4	3	2	1	2	2	1	2	2.0	1.8	2.3	TRAIN
HFR-2000-205	Repair	Gauge Pressure	Duragauge	1	1	2				1	4	3	1	1	2	1	1	2	1.0	1.8	2.3	TRAIN
HFR-2000-206	Calibrate	Hand Load Sta Pneu	57	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
HFR-2000-207	Repair	Hand Load Sta Pneu	57	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-2000-208	Calibrate	Hand Load Sta Pneu	57RG	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
HFR-2000-209	Repair	Hand Load Sta Pneu	57RG	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-2000-210	Calibrate	Hand Load Sta Pneu	57SRG2	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
HFR-2000-211	Repair	Hand Load Sta Pneu	57SRG2	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-2000-212	Calibrate	Hygrometer Electro	17901																			**
HFR-2000-213	Repair	Hygrometer Electro	17901	1	1	3							1	1	3	1	1	3	1.0	1.0	3.0	TRAIN
HFR-2000-214	Calibrate	Indicator Conductiv.	LAMB-EM																			**
HFR-2000-215	Repair	Indicator Conductiv.	LAMB-EM	1	1	2	1	2	3	1	2	3	1	1	2	1	1	2	1.0	1.4	2.4	TRAIN
HFR-2000-216	Calibrate	Indicator Digital	Q9000A																			**
HFR-2000-217	Repair	Indicator Digital	Q9000A																			**
HFR-2000-218	Calibrate	Indicator DP	200	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-219	Repair	Indicator DP	200	1	2	2	1	1	3	1	1	3	1	2	2	1	2	2	1.0	1.6	2.4	TRAIN
HFR-2000-220	Calibrate	Indicator DP	227	2	2	2	1	1	3				2	2	2	2	2	2	1.8	1.8	2.3	TRAIN
HFR-2000-221	Repair	Indicator DP	227	1	2	2	1	1	3	1	1	3	1	2	2	1	2	2	1.0	1.6	2.4	TRAIN
HFR-2000-222	Calibrate	Indicator Electric	65PX-OHW	2	2	2	2	3	3	2	3	3	2	2	2	2	2	2	2.0	2.4	2.4	TRAIN
HFR-2000-223	Repair	Indicator Electric	65PX-OHW	1	2	2	1	3	3	1	3	3	1	2	2	1	2	2	1.0	2.4	2.4	TRAIN
HFR-2000-224	Calibrate	Indicator Flow	524FA6T2	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-2000-225	Repair	Indicator Flow	524FA6T2	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
HFR-2000-226	Calibrate	Indicator Flow	65PS-OHT	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-227	Repair	Indicator Flow	65PS-OHT	1	2	2	1	3	3	1	3	3	1	2	2	1	2	2	1.0	2.4	2.4	TRAIN
HFR-2000-228	Calibrate	Indicator Flow	LN-NSB300G1	1	1	1	4	3	1	4	3	1	1	1	1	1	1		1.0	2.2	1.8	NO TRAINING
HFR-2000-229	Repair	Indicator Flow	LN-NSB300G1	1	1	1	4	3	1	4	3	1	1	1	1	1	1		1.0	2.2	1.8	NO TRAINING
HFR-2000-230	Calibrate	Indicator Flow	5001-V	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-231	Repair	Indicator Flow	5001-V	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-232A	Calibrate	Indicator Level	5001-V	2	1	1							2	1	1	2	1	1	2.0	1.0	1.0	NO TRAINING
HFR-2000-232	Repair	Indicator Level	5001-V	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
HFR-2000-233	Calibrate	Indicator Long Scale	RC11-2-3	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
HFR-2000-234	Repair	Indicator Long Scale	RC11-2-3	2	1	2	1	3	3	1	3	3	2	1	2	2	1	2	1.6	1.8	2.4	TRAIN
HFR-2000-235	Calibrate	Indicator Electric	AD2016V	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-2000-236	Repair	Indicator Electric	AD2016V	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-2000-237	Calibrate	Indicator Temp	2170AX	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-2000-238	Repair	Indicator Temp	2170AX	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-2000-239	Calibrate	Indicator Temp	65PS-OHT	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-240	Repair	Indicator Temp	65PS-OHT	1	2	2							1	2	2	1	2	2	1.0	2.0	2.0	TRAIN
HFR-2000-241	Calibrate	Integrator Linear	SC-1356	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-2000-242	Repair	Integrator Linear	SC-1356	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-2000-243	Calibrate	Integrator Pneu	14A	2	1	2	1	2	3	1	2	3	2	1	2	2	1	2	1.6	1.4	2.4	TRAIN
HFR-2000-244	Repair	Integrator Pneu	14A	1	1	3	1	2	3	2	3	3	1	1	3	1	1	3	1.2	1.6	3.0	TRAIN
HFR-2000-245	Calibrate	Meter Conductivity	4988	1	1	2	2	4	3	2	4	3	1	1	2	1	1	2	1.4	2.2	2.4	TRAIN
HFR-2000-246	Repair	Meter Conductivity	4988	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
HFR-2000-247	Calibrate	Meter Current	X-351	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-248	Repair	Meter Current	X-351	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
HFR-2000-249	Calibrate	Meter Indicator Side	1136	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-250	Repair	Meter Indicator Side	1136	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING

HFR-2000-251	Calibrate	Meter Panel	5P960075	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-252	Repair	Meter Panel	5P960075	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-253	Calibrate	Meter Picoampere	410	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
HFR-2000-254	Repair	Meter Picoampere	410	1	1	3	1	3	3	1	3	3	1	1	3	1	1	3	1.0	1.8	3.0	TRAIN
HFR-2000-255	Calibrate	Module Temp Avg.	66 Spec	2	2	2				2	4	3	2	2	2	2	2	2	2.0	2.5	2.3	OVER TRAIN
HFR-2000-256	Repair	Module Temp Avg.	66 Spec	1	2	1				1	4	3	1	2	1	1	2	1	1.0	2.5	1.5	TRAIN
HFR-2000-257	Calibrate	Operator Ct Val Pneu	486U										2	1	1				2.0	1.0	1.0 *	NO TRAINING
HFR-2000-258	Repair	Operator Ct Val Pneu	486U	1	1	1	1	3	3	1	3	3	1	1	2	1	1	1	1.0	1.8	2.0	TRAIN
HFR-2000-259	Calibrate	Operator PH	Q-2753-5	2	1	1							2	1	1	2	1	1	2.0	1.0	1.0	NO TRAINING
HFR-2000-260	Repair	Operator PH	Q-2753-5	1	1	1	1	4	3	1	4	3	1	2	1	1	1	1	1.0	2.4	1.8	NO TRAINING
HFR-2000-261	Calibrate	Operator Valve	Ed	2	1	1				2	4	3	1	1	1	2	1	1	1.8	1.8	1.5	NO TRAINING
HFR-2000-262	Repair	Operator Valve	Ed	1	1	1	1	4	3	1	4	3	2	1	1	1	1	1	1.2	2.2	1.8	NO TRAINING
HFR-2000-263	Calibrate	Positioner Cont Val	C	2	1	1							1	1	1	2	1	1	1.7	1.0	1.0	NO TRAINING
HFR-2000-264	Repair	Positioner Cont Val	C	1	1	1	1	4	3	1	4	3	2	1	1	1	1	1	1.2	2.2	1.8	NO TRAINING
HFR-2000-265	Calibrate	Positioner Valve	2039S	2	1	1	2	4	3	2	4	3	1	1	1	2	1	1	1.8	2.2	1.8	NO TRAINING
HFR-2000-266	Repair	Positioner Valve	2039S	1	1	1	1	4	3	1	4	3	2	1	1	1	1	1	1.2	2.2	1.8	NO TRAINING
HFR-2000-267	Calibrate	Positioner Valve	33	2	1	1	2	4	3	2	4	3	1	1	1	2	1	1	1.8	2.2	1.8	NO TRAINING
HFR-2000-268	Repair	Positioner Valve	33	1	1	1	1	4	3	1	4	3	2	1	1	1	1	1	1.2	2.2	1.8	NO TRAINING
HFR-2000-269	Calibrate	Positioner Valve	380	2	1	1				2	4	3	2	1		2	1	1	2.0	1.8	1.7	NO TRAINING
HFR-2000-270	Repair	Positioner Valve	380	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-271	Calibrate	Positioner Valve	502	2	3	2	2	4	3	2	4	3	2	1	1	2	3	2	2.0	3.0	2.2	OVER TRAIN
HFR-2000-272	Repair	Positioner Valve	502	1	3	2	1	4	3	1	4	3	1	1	1	1	3	2	1.0	3.0	2.2	OVER TRAIN
HFR-2000-273	Calibrate	Positioner Valve	7401-702	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-274	Repair	Positioner Valve	7401-702	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-275	Calibrate	Positioner Valve	A34	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-276	Repair	Positioner Valve	A34	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-277	Calibrate	Positioner Valve	C										2	1	1				2.0	1.0	1.0 *	NO TRAINING
HFR-2000-278	Repair	Positioner Valve	C										1	1	1				1.0	1.0	1.0 *	NO TRAINING
HFR-2000-279	Calibrate	Power Supply	610																			**
HFR-2000-280	Repair	Power Supply	610																			**
HFR-2000-281	Calibrate	Power Supply	N121AY																			**
HFR-2000-282	Repair	Power Supply	N121AY																			**
HFR-2000-283	Calibrate	Power Supply	Q-2057-1	2	2	1	2	4	3	2	4	3	2	2	1	2	2	1	2.0	2.8	1.8	TRAIN
HFR-2000-284	Repair	Power Supply	Q-2057-1	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-285	Calibrate	Power Supply	RC11-4-2E	2	2	1	2	4	3	2	4	3	2	2	1	2	2	1	2.0	2.8	1.8	TRAIN
HFR-2000-286	Repair	Power Supply	RC11-4-2E	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-287	Calibrate	Power Supply	T/613	2	2	1				2	4	3	2	2	1	2	2	1	2.0	2.5	1.5	TRAIN
HFR-2000-288	Repair	Power Supply	T/613	1	2	2				2	4	3	1	2	2	1	2	2	1.3	2.5	2.3	OVER TRAIN
HFR-2000-289	Calibrate	Power Supply Dual	5000-27	2	2	1				1	1	3	2	2	1	2	2	1	1.8	1.8	1.5	NO TRAINING
HFR-2000-290	Repair	Power Supply Dual	5000-27	1	2	2				1	1	3	1	2	2	1	2	2	1.0	1.8	2.3	TRAIN
HFR-2000-291	Calibrate	Recorder 1Pen Roll P	5410	2	1	1	2	3	3	2	4	3	2	1	1	2	1	1	2.0	2.0	1.8	NO TRAINING
HFR-2000-292	Repair	Recorder 1Pen Roll P	5410	1	1	2	1	3	3	1	4	3	1		2	1	1	2	1.0	2.3	2.4	TRAIN
HFR-2000-293	Calibrate	Recorder 1Pen Roll P	5422	2	1	1				2	4	3	2	1	1	2	1	1	2.0	1.8	1.5	NO TRAINING
HFR-2000-294	Repair	Recorder 1Pen Roll P	5422	1	1	2				1	4	3	1	1	2	1	1	2	1.0	1.8	2.3	TRAIN
HFR-2000-295	Calibrate	Recorder 1Pen Roll E	6410																			**
HFR-2000-296	Repair	Recorder 1Pen Roll E	6410																			**
HFR-2000-297	Calibrate	Recorder 1Pen Scan P	5410	2	1	1							2	1	1	2	1	1	2.0	1.0	1.0	NO TRAINING

HFR-2000-298	Repair	Recorder 1Pen Scan P	5410	1	1	2							1	1	2	1	1	2	1.0	1.0	2.0	TRAIN
HFR-2000-299	Calibrate	Recorder 2Pen Roll P	5310	2	1	1	2	3	3	2	4	3	2	1	1	2	1	1	2.0	2.0	1.8	NO TRAINING
HFR-2000-300	Repair	Recorder 2Pen Roll P	5310	1	1	2	1	3	3	1	4	3	1	1	2	1	1	2	1.0	2.0	2.4	TRAIN
HFR-2000-301	Calibrate	Recorder 2Pen Roll P	5320	2	1	1	2	3	3	2	4	3	2	1	1	2	1	1	2.0	2.0	1.8	NO TRAINING
HFR-2000-302	Repair	Recorder 2Pen Roll P	5320	1	1	2	1	3	3	1	4	3	1	1	2	1	1	2	1.0	2.0	2.4	TRAIN
HFR-2000-303	Calibrate	Recorder 2Pen Roll E	6420																			**
HFR-2000-304	Repair	Recorder 2Pen Roll E	6420																			**
HFR-2000-305	Calibrate	Recorder 2Pen Scan P	5412	2	1	1				2	4	3	2	1	1	2	1	1	2.0	1.8	1.5	NO TRAINING
HFR-2000-306	Repair	Recorder 2Pen Scan P	5412	1	1	2				1	4	3	1	1	2	1	1	2	1.0	1.8	2.3	TRAIN
HFR-2000-307	Calibrate	Recorder 2Pen Scan P	5420	2	1	1				2	4	3	2	1	1	2	1	1	2.0	1.8	1.5	NO TRAINING
HFR-2000-308	Repair	Recorder 2Pen Scan P	5420	1	1	2				1	4	3	1	1	2	1	1	2	1.0	1.8	2.3	TRAIN
HFR-2000-309	Calibrate	Recorder Seismic	DSA-1	1	2	2				2	4	3	1	2	2	1	2	2	1.3	2.5	2.3	OVER TRAIN
HFR-2000-310	Repair	Recorder Seismic	DSA-1	1	2	3				1	4	3	1	2	3	1	2	3	1.0	2.5	3.0	OVER TRAIN
HFR-2000-311	Calibrate	Recorder Strip Chart	2500	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-2000-312	Repair	Recorder Strip Chart	2500	2	1	3	1	4	3	1	4	3	2	1	3	2	1	3	1.6	2.2	3.0	TRAIN
HFR-2000-313	Calibrate	Recorder Strip Chart	4152	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-2000-314	Repair	Recorder Strip Chart	4152	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-2000-315	Calibrate	Recorder Strip Chart	W	2	1	2	2	3	3	2	4	3	2	1	2	2	1	2	2.0	2.0	2.4	TRAIN
HFR-2000-316	Repair	Recorder Strip Chart	W	2	1	2	1	3	3	1	4	3	2	1	2	2	1	2	1.6	2.0	2.4	TRAIN
HFR-2000-317	Calibrate	Regulator Pneu Load	473K15	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-318	Repair	Regulator Pneu Load	473K15	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-319	Calibrate	Relay Hi Press Sel	58S	2	4	2	2	4	3	2	4	3	2	4	2	2	4	2	2.0	4.0	2.4	OVER TRAIN
HFR-2000-320	Repair	Relay Hi Press Sel	58S	1	4	2	1	4	3	1	4	3	1	4	2	1	4	2	1.0	4.0	2.4	OVER TRAIN
HFR-2000-321	Calibrate	Relay Computing Pneu	68-1	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-322	Repair	Relay Computing Pneu	68-1	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-323	Calibrate	Relay Computing Pneu	M56	2	2	2				2	4	3	2	2	2	2	2	2	2.0	2.5	2.3	OVER TRAIN
HFR-2000-324	Repair	Relay Computing Pneu	M56	1	2	2				1	4	3	1	2	2	1	2	2	1.0	2.5	2.3	OVER TRAIN
HFR-2000-325	Calibrate	Relay Proportioning	M/57ZSR	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-2000-326	Repair	Relay Proportioning	M/57ZSR	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-327	Calibrate	Solu-Meter	RACA-S15	1	1	2	2	4	3	2	4	3	1	1	2	1	1	2	1.4	2.2	2.4	TRAIN
HFR-2000-328	Repair	Solu-Meter	RACA-S15	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
HFR-2000-329	Calibrate	Sta Hand Load Pneu	M-57	2	1	2							2	1	2	2	1	2	2.0	1.0	2.0	TRAIN
HFR-2000-330	Repair	Sta Hand Load Pneu	M-57	1	1	1	1	4	3	1	3	3	1	1	1	1	1	1	1.0	2.0	1.8	NO TRAINING
HFR-2000-331	Calibrate	Supply Pwr Dual DC	MMV8-16	1	1	1	2	4	3	2	4	3	1	1	1	1	1	1	1.4	2.2	1.8	NO TRAINING
HFR-2000-332	Repair	Supply Pwr Dual DC	MMV8-16	1	1	2	1	4	3	1	4	4	1	1	2	1	1	2	1.0	2.2	2.6	TRAIN
HFR-2000-333	Calibrate	Switch Dual Alarm	M63	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-2000-334	Repair	Switch Dual Alarm	M63	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-2000-335	Calibrate	Switch Electric	ET-204T2	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-2000-336	Repair	Switch Electric	ET-204T2	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-2000-337	Calibrate	Switch Electric	ET20-T-2	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-338	Repair	Switch Electric	ET20-T-2	1	2	3							1	2	3	1	2	3	1.0	2.0	3.0	TRAIN
HFR-2000-339	Calibrate	Switch Level	SL-106-A2	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-340	Repair	Switch Level	SL-106-A2	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-341	Calibrate	Switch Level	SL-102-B3	1	1	1	2	4	3	2	4	3	1	1	1	1	1	1	1.4	2.2	1.8	NO TRAINING
HFR-2000-342	Repair	Switch Level	SL-102-B3	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-343	Calibrate	Switch Level	SL-502-B4	1	1	1				2	4	3	1	1	1	1	1	1	1.3	1.8	1.5	NO TRAINING
HFR-2000-344	Repair	Switch Level	SL-502-B4	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
HFR-2000-345	Calibrate	Switch Pressure	532	1	1	2	1	4	3	1	4	3	1	1	2	1	1	2	1.0	2.2	2.4	TRAIN
HFR-2000-346	Repair	Switch Pressure	532	1	1	1							1	1	1	1	1	1	1.0	1.0	1.0	NO TRAINING
HFR-2000-347	Calibrate	Switch Pressure	D1H-H18	2	2	2	2	3	3	2	4	3	2	2	2	2	2	2	2.0	2.6	2.4	OVER TRAIN
HFR-2000-348	Repair	Switch Pressure	D1H-H18	1	2	1	1	3	3				1	2	1	1	2	1	1.0	2.3	1.5	NO TRAINING

HFR-2000-349	Calibrate	Switch Pressure	D1T-A150	2	2	2	2	3	3	2	4	3	2	2	2	2	2	2	2.0	2.6	2.4	OVER TRAIN
HFR-2000-350	Repair	Switch Pressure	D1T-A150	1	2	1	1	3	3				1	2	2	1	2	1	1.0	2.3	1.8	NO TRAINING
HFR-2000-351	Calibrate	Switch Pressure	D1T-H18	2	2	2				2	4	3	2	2	1	2	2	2	2.0	2.5	2.0	OVER TRAIN
HFR-2000-352	Repair	Switch Pressure	D1T-H18	1	2	1							1	2	2	1	2	1	1.0	2.0	1.3	NO TRAINING
HFR-2000-353	Calibrate	Switch Pressure	D2H-H18																			**
HFR-2000-354	Repair	Switch Pressure	D2H-H18																			**
HFR-2000-356	Calibrate	Switch Pressure	GFW-1	2	2	2	2	4	3	2	4	3	2	4	2	2	2	2	2.0	3.2	2.4	OVER TRAIN
HFR-2000-357	Repair	Switch Pressure	GFW-1	1	2	1							1	4	3	1	2	1	1.0	2.7	1.7	TRAIN
HFR-2000-358	Calibrate	Switch Temperature	620D22	2	1	2	2	4	3	2	4	3	2	3	2	2	1	2	2.0	2.6	2.4	OVER TRAIN
HFR-2000-359	Repair	Switch Temperature	620D22	1	1	1	1	4	3	1	4	3	1	3	3	1	1	1	1.0	2.6	2.2	OVER TRAIN
HFR-2000-360	Calibrate	Switch Timer	RC11-9-62A																			**
HFR-2000-361	Repair	Switch Timer	RC11-9-62A1	2	2	1	4	3	1	4	3	1	2	3	1	2	2		1.0	2.8	2.6	OVER TRAIN
HFR-2000-362	Calibrate	Thermometer Digital	DSS01199	2	1	2	2	3	3	2	3	3	1	2	2	2	1	2	1.8	2.0	2.4	TRAIN
HFR-2000-363	Repair	Thermometer Digital	DSS01199	1	1	3	1	3	3	1	3	3	1	2	3	1	1	3	1.0	2.0	3.0	TRAIN
HFR-2000-364	Calibrate	Timer Rod Release	RC11-9-61A																			**
HFR-2000-365	Repair	Timer Rod Release	RC11-9-61A1	2	3	1	4	3	1	4	3	1	2	3	1	2	3		1.0	2.8	3.0	OVER TRAIN
HFR-2000-366	Calibrate	Totalizer Counter	120	2	1	2	2	4	3	2	4	3	1	2	2	2	1	2	1.8	2.4	2.4	TRAIN
HFR-2000-367	Repair	Totalizer Counter	120	1	1	3	1	4	3	1	4	3	1	2	2	1	1	3	1.0	2.4	2.8	TRAIN
HFR-2000-368	Calibrate	Transducer DP	DP15-46	2	1	2	2	4	3	2	4	3	1	3	2	2	1	2	1.8	2.6	2.4	OVER TRAIN
HFR-2000-369	Repair	Transducer DP	DP15-46				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-2000-370	Calibrate	Transducer DP	DP215-46	2	1	2	2	4	3	2	4	3	1	2	2	2	1	2	1.8	2.4	2.4	TRAIN
HFR-2000-371	Repair	Transducer DP	DP215-46				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-2000-372	Calibrate	Transducer DP	DP215-48	2	1	2							1	2	2	2	1	2	1.7	1.3	2.0	TRAIN
HFR-2000-373	Repair	Transducer DP	DP215-48																			**
HFR-2000-374	Calibrate	Transducer DP	DP215-60	2	1	2							1	2	2	2	1	2	1.7	1.3	2.0	TRAIN
HFR-2000-375	Repair	Transducer DP	DP215-60																			**
HFR-2000-376	Calibrate	Transducer DP	PID-75	2	1	2	2	4	3	2	4	3	1	2	2	2	1	2	1.8	2.4	2.4	TRAIN
HFR-2000-377	Repair	Transducer DP	PID-75				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-2000-378	Calibrate	Transducer Pressure	PID-1000	2	1	2	2	4	3	2	4	3	1	2	2	2	1	2	1.8	2.4	2.4	TRAIN
HFR-2000-379	Repair	Transducer Pressure	PID-1000				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-2000-380	Calibrate	Transducer Pressure	SC-5422							1	1	3							1.0	1.0	3.0	TRAIN
HFR-2000-381	Repair	Transducer Pressure	SC-5422	1	1	2				1	1	3	1	2	2	1	1	2	1.0	1.3	2.3	TRAIN
HFR-2000-382	Calibrate	Transmitter Conduct.	RA-4																			**
HFR-2000-383	Repair	Transmitter Conduct.	RA-4	1	1	2	1	4	3	1	4	3	1	2	2	1	1	2	1.0	2.4	2.4	TRAIN
HFR-2000-384	Calibrate	Transmitter DP	13A																			**
HFR-2000-385	Repair	Transmitter DP	13A																			**
HFR-2000-386	Calibrate	Transmitter DP	15A																			**
HFR-2000-387	Repair	Transmitter DP	15A																			**
HFR-2000-388	Calibrate	Transmitter DP	200	2	2	2							1	3	2	2	2	2	1.7	2.3	2.0	TRAIN
HFR-2000-389	Repair	Transmitter DP	200	1	2	2							1	3	3	1	2	2	1.0	2.3	2.3	TRAIN
HFR-2000-390	Calibrate	Transmitter DP	227	2	2	2							1	3	2	2	2	2	1.7	2.3	2.0	TRAIN
HFR-2000-391	Repair	Transmitter DP	227	1	2	2							1	3	3	1	2	2	1.0	2.3	2.3	TRAIN
HFR-2000-392	Calibrate	Transmitter DP	611	2	2	2	2	4	3	2	4	3	1	3	2	2	2	2	1.8	3.0	2.4	OVER TRAIN
HFR-2000-393	Repair	Transmitter DP	611	1	2	2	1	4	3	1	4	3	1	3	3	1	2	2	1.0	3.0	2.6	OVER TRAIN
HFR-2000-394	Calibrate	Transmitter DP	613																0.0	0.0	0.0	NO TRAINING
HFR-2000-395	Repair	Transmitter DP	613																0.0	0.0	0.0	NO TRAINING
HFR-2000-396	Calibrate	Transmitter DP	M/11DM	2	2	2	2	4	3	2	4	3	1	4	2	2	2	2	1.8	3.2	2.4	OVER TRAIN
HFR-2000-397	Repair	Transmitter DP	M/11DM	1	2	2	1	4	3	1	4	3	1	4	3	1	2	2	1.0	3.2	2.6	OVER TRAIN
HFR-2000-398	Calibrate	Transmitter Flow	58	2	2	2	2	4	3	2	4	3	1	4	3	2	2	2	1.8	3.2	2.6	OVER TRAIN
HFR-2000-399	Repair	Transmitter Flow	58	1	2	1	1	4	3	1	4	3	1	4	2	1	2	1	1.0	3.2	2.0	OVER TRAIN

HFR-2000-400	Calibrate	Transmitter Level	12B01-20	2	2	2	2	4	3	2	4	3	1	3	2	2	2	2	1.8	3.0	2.4	OVER TRAIN
HFR-2000-401	Repair	Transmitter Level	12B01-20	1	2	3	1	4	3	1	4	3	1	3	3	1	2	3	1.0	3.0	3.0	OVER TRAIN
HFR-2000-402	Calibrate	Transmitter Level	12B03-20	2	2	2	2	4	3	2	4	3	1	3	2	2	2	2	1.8	3.0	2.4	OVER TRAIN
HFR-2000-403	Repair	Transmitter Level	12B03-20	1	2	3	1	4	3	1	4	3	1	3	3	1	2	3	1.0	3.0	3.0	OVER TRAIN
HFR-2000-404	Calibrate	Transmitter Level	12B03-30	2	2	2	2	4	3	2	4	3	1	2	2	2	2	2	1.8	2.8	2.4	OVER TRAIN
HFR-2000-405	Repair	Transmitter Level	12B03-30	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-2000-406	Calibrate	Transmitter Level	12B23	2	2	2	2	4	3	2	4	3	1	3	2	2	2	2	1.8	3.0	2.4	OVER TRAIN
HFR-2000-407	Repair	Transmitter Level	12B23	1	2	3	1	4	3	1	4	3	1	3	2	1	2	3	1.0	3.0	2.8	OVER TRAIN
HFR-2000-408	Calibrate	Transmitter Pressure	173S	2	1	2	2	3	3	2	3	3	1	2	2	2	1	2	1.8	2.0	2.4	TRAIN
HFR-2000-409	Repair	Transmitter Pressure	173S	1	1	2	1	3	3	1	3	3	1	2	3	1	1	2	1.0	2.0	2.6	TRAIN
HFR-2000-410	Calibrate	Transmitter Pressure	44	2	1	2	2	4	3	2	4	3	1	3	2	2	1	2	1.8	2.6	2.4	OVER TRAIN
HFR-2000-411	Repair	Transmitter Pressure	44	1	1	2	1	4	3	1	4	3	1	3	3	1	1	2	1.0	2.6	2.6	OVER TRAIN
HFR-2000-412	Calibrate	Transmitter Pressure	45	2	1	2	2	4	3	2	4	3	1	3	2	2	1	2	1.8	2.6	2.4	OVER TRAIN
HFR-2000-413	Repair	Transmitter Pressure	45	1	1	2	1	4	3	1	4	3	1	3	3	1	1	2	1.0	2.6	2.6	OVER TRAIN
HFR-2000-414	Calibrate	Transmitter Pressure	634-2AS	2	4	3	2	4	3	2	4	3	1	4	2	2	4	3	1.8	4.0	2.8	OVER TRAIN
HFR-2000-415	Repair	Transmitter Pressure	634-2AS	1	4	2	1	4	3	1	4	3	1	4	3	1	4	2	1.0	4.0	2.6	OVER TRAIN
HFR-2000-416	Calibrate	Transmitter Pressure	E11GM	2	2	2	2	4	3	2	4	3	1	4	3	2	2	2	1.8	3.2	2.6	OVER TRAIN
HFR-2000-417	Repair	Transmitter Pressure	E11GM	1	2	2	1	4	3	1	4	3	1	4	2	1	2	2	1.0	3.2	2.4	OVER TRAIN
HFR-2000-418	Calibrate	Transmitter Pressure	M11GM	2	2	2	2	4	3	2	4	3	1	4	3	2	2	2	1.8	3.2	2.6	OVER TRAIN
HFR-2000-419	Repair	Transmitter Pressure	M11GM	1	2	2	1	4	3	1	4	3	1	4	2	1	2	2	1.0	3.2	2.4	OVER TRAIN
HFR-2000-420	Calibrate	Transmitter PSIA	11AM	2	2	2	2	4	3	2	4	3	1	3	2	2	2	2	1.8	3.0	2.4	OVER TRAIN
HFR-2000-421	Repair	Transmitter PSIA	11AM	1	2	2	1	4	3	1	4	3	1	3	3	1	2	2	1.0	3.0	2.6	OVER TRAIN
HFR-2000-422	Calibrate	Transmitter Temp	12A	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-2000-423	Repair	Transmitter Temp	12A	1	2	2				1	2	3	1	2	2	1	2	2	1.0	2.0	2.3	TRAIN
HFR-2000-424	Calibrate	Valvactor Vernier P	Type C	2	1	1							2	1	1	2	1	1	2.0	1.0	1.0	NO TRAINING
HFR-2000-425	Repair	Valvactor Vernier P	Type C	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-426	Calibrate	Valve Control	10000																			**
HFR-2000-427	Repair	Valve Control	10000	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-428	Calibrate	Valve Control	138-2	2	1	1	2	4	3	2	4	3				2	1	1	2.0	2.5	2.0	OVER TRAIN
HFR-2000-429	Repair	Valve Control	138-2	1	1	1	1	4	3	1	4	3	1	4	1	1	1	1	1.0	2.8	1.8	TRAIN
HFR-2000-430	Calibrate	Valve Control	15SV9071																			**
HFR-2000-431	Repair	Valve Control	15SV9071	1	4	1	1	4	3	1	4	3	1	2	1	1	4	1	1.0	3.6	1.8	TRAIN
HFR-2000-432	Calibrate	Valve Control	36"-78-3212																			**
HFR-2000-433	Repair	Valve Control	36"-78-3211	2	1	1	4	3	1	4	3	1	2	1	1	2	1		1.0	2.8	1.8	TRAIN
HFR-2000-434	Calibrate	Valve Control	3B205X1																			**
HFR-2000-435	Repair	Valve Control	3B205X1	1	4	1	1	4	3	1	4	3	1	4	1	1	4	1	1.0	4.0	1.8	TRAIN
HFR-2000-436	Calibrate	Valve Control	7400	2	1	1	2	4	3	2	4	3	2	1	1	2	1	1	2.0	2.2	1.8	NO TRAINING
HFR-2000-437	Repair	Valve Control	7400	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-438	Calibrate	Valve Control	V4																			**
HFR-2000-439	Repair	Valve Control	V4	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-2000-440	Calibrate	Valve Control Pneu	1450R	2	1	1	2	3	3	2	3	3	2	1		2	1	1	2.0	1.8	2.0	TRAIN
HFR-2000-441	Repair	Valve Control Pneu	1450R	1	1	1	1	3	3	1	3	3	1	1	1	1	1	1	1.0	1.8	1.8	NO TRAINING
HFR-2000-442	Calibrate	Valve Control Pneu	15SV9071																			**
HFR-2000-443	Repair	Valve Control Pneu	15SV9071																			**
HFR-2000-444	Calibrate	Valve Solenoid	8300ARF	1	1	1	2	3	3	2	3	3	1	1	1	1	1	1	1.4	1.8	1.8	NO TRAINING
HFR-2000-445	Repair	Valve Solenoid	8300ARF	1	1	1	1	3	3	1	3	3	1	1	1	1	1	1	1.0	1.8	1.8	NO TRAINING
HFR-2000-446	Calibrate	Valve Temp Control	1003-E1																			**
HFR-2000-447	Repair	Valve Temp Control	1003-E1	1	1	1	1	3	3	1	3	3	1	1	1	1	1	1	1.0	1.8	1.8	NO TRAINING

HFR 3000 RADIOACTIVITY MONITORING INSTRUMENTATION Page 14

HFR-3000-100	Assist	Conducting Surveillance Test		2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-101	Calibrate	Switch Electronic	ET-1219	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-3000-102	Repair	Switch Electronic	ET-1219	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-3000-103	Calibrate	Switch Electronic	ET-1215	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-3000-104	Repair	Switch Electronic	ET-1215	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-3000-105	Calibrate	Amplifier DD2 Lin	Q-1593A																			**
HFR-3000-106	Repair	Amplifier DD2 Lin	Q-1593A	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-3000-107	Calibrate	Bin Nim	TB-3																			**
HFR-3000-108	Repair	Bin Nim	TB-3	1	1	1	1	4	3	1	4	3	1	1	1	1	1	1	1.0	2.2	1.8	NO TRAINING
HFR-3000-109	Calibrate	Chamber BF3	RSN-42A	2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-110	Repair	Chamber BF3	RSN-42A				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-3000-111	Calibrate	Chamber Ion	RC-2720	2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-112	Repair	Chamber Ion	RC-2720				1	4	3	1	4	3							1.0	4.0	3.0	OVER TRAIN
HFR-3000-113	Calibrate	CRM Linear	Q-2622	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-3000-114	Repair	CRM Linear	Q-2622	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-3000-115	Calibrate	Meter Count Rate	TC526	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-3000-116	Repair	Meter Count Rate	TC526	1	2	3	1	4	3	1	4	3	1	2	3	1	2	3	1.0	2.8	3.0	OVER TRAIN
HFR-3000-117	Calibrate	Monitor Count Rate	Q-1511A	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-3000-118	Repair	Monitor Count Rate	Q-1511A	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-3000-119	Calibrate	Monitor Hi Bay Rad	20103	2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-120	Repair	Monitor Hi Bay Rad	20103	1	3	3	1	4	3	1	4	3	1	3	3	1	3	3	1.0	3.4	3.0	OVER TRAIN
HFR-3000-121	Calibrate	Monitor Lin Log Rad	Q-2353	2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-122	Repair	Monitor Lin Log Rad	Q-2353	2	3	3	1	4	3	1	4	3	2	3	3	2	3	3	1.6	3.4	3.0	OVER TRAIN
HFR-3000-123	Calibrate	Power Supply HV	2.5/10UC	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-3000-124	Repair	Power Supply HV	2.5/10UC	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-3000-125	Calibrate	Power Supply HV	Q-2057-1	2	2	2	2	4	3	2	4	3	2	2	2	2	2	2	2.0	2.8	2.4	OVER TRAIN
HFR-3000-126	Repair	Power Supply HV	Q-2057-1	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-3000-127	Calibrate	Power Supply Nim	TC-911	2	2	2							2	2	2	2	2	2	2.0	2.0	2.0	TRAIN
HFR-3000-128	Repair	Power Supply Nim	TC-911	1	2	2	1	4	3	1	4	3	1	2	2	1	2	2	1.0	2.8	2.4	OVER TRAIN
HFR-3000-129	Calibrate	Preamp BF3 Counter	RC11-4-2	2	3	2	2	4	3	2	4	3	2	3	2	2	3	2	2.0	3.4	2.4	OVER TRAIN
HFR-3000-130	Repair	Preamp BF3 Counter	RC11-4-2	1	3	3	1	4	3	1	4	3	1	3	3	1	3	3	1.0	3.4	3.0	OVER TRAIN
HFR-3000-131	Calibrate	Recorder Strip Chart	4153	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-3000-132	Repair	Recorder Strip Chart	4153	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-3000-133	Calibrate	Recorder Strip Chart	4156	2	1	2	2	4	3	2	4	3	2	1	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-3000-134	Repair	Recorder Strip Chart	4156	1	1	3	1	4	3	1	4	3	1	1	3	1	1	3	1.0	2.2	3.0	TRAIN
HFR-3000-135	Calibrate	Recorder Strip Chart	H	2	1	2	2	2	4	2	4	3	2	1	2	2	1	2	2.0	1.8	2.6	TRAIN
HFR-3000-136	Repair	Recorder Strip Chart	H	1	1	2	2	2	4	1	4	3	1	1	2	1	1	2	1.2	1.8	2.6	TRAIN

HFR 4000 TESTING AND MEASUREMENT EQUIPMENT

HFR-4000-101	Use	Calibrator Press	DPG-600	4	4	1	4	4	3	4	4	3	4	4	1	4	4	1	4.0	4.0	1.8	NO TRAINING
HFR-4000-102	Use	Manometer Digital	265522	2	4	2	4	4	3	4	4	3	2	4	2	2	4	2	2.8	4.0	2.4	OVER TRAIN
HFR-4000-103	Use	Source Tripl Current	Q6221-1	2	4	1	3	4	3	3	4	3	2	4	1	2	4	1	2.4	4.0	1.8	NO TRAINING
HFR-4000-104	Use	Calibrator Pneumatic	730B-04	2	4	2	2	4	3	3	4	3	2	4	2	2	4	2	2.2	4.0	2.4	OVER TRAIN
HFR-4000-105	Use	Calibrator Pressure	1090	4	4	1	3	4	3	4	4	3	4	4	1	4	4	1	3.8	4.0	1.8	NO TRAINING
HFR-4000-106	Use	Calibrator Digital	1045	4	4	1	3	4	3	4	4	3	4	4	2	4	4	1	3.8	4.0	2.0	TRAIN
HFR-4000-107	Use	Multimeter Digital	8600A	1	1	2	4	2	3	2	2	3	1	1	2	1	1	2	1.8	1.4	2.4	TRAIN
HFR-4000-108	Use	Dual DC Pwr Supply	6205 C	4	4	1	3	2	3	4	2	3	4	4	1	4	4	1	3.8	3.2	1.8	NO TRAINING
HFR-4000-109	Use	Generator Function	FG502	2	1	2	3	4	3	3	4	3	2	1	2	2	1	2	2.4	2.2	2.4	NO TRAINING

HFR-4000-110	Use	Counter Universal	DC503A	2	2	3	2	3	3	3	4	3	2	2	3	2	2	3	2.2	2.6	3.0	OVER TRAIN
HFR-4000-111	Use	Multimeter Digital	DM502A	2	2	2	2	2	3	3	2	3	2	2	2	2	2	2	2.2	2.0	2.4	NO TRAINING
HFR-4000-112	Use	Oscilloscope	SC502	2	1	3	2	2	3	3	3	3	2	1	3	2	1	3	2.2	1.6	3.0	TRAIN
HFR-4000-113	Use	Multimeter Digital	175	4	4	2	3	4	3	4	4	3	4	4	2	4	4	2	3.8	4.0	2.4	TRAIN
HFR-4000-114	Use	Test Set Digital	720350-2	2	2	2	3	4	4	3	4	3	2	2	2	2	2	2	2.4	2.8	2.6	OVER TRAIN
HFR-4000-115	Use	Calibrator Temp	31180	2	2	2	3	4	3	3	4	3	2	2	2	2	2	2	2.4	2.8	2.4	OVER TRAIN
HFR-4000-116	Use	Calibrator Super	CL-6000	2	3	3	3	4	3	3	4	3	2	3	3	2	3	3	2.4	3.4	3.0	OVER TRAIN
HFR-4000-117	Use	Res. Decade	1432-N	2	4	1	2	4	3	2	4	2	2	4	1	2	4	1	2.0	4.0	1.6	TRAIN
HFR-4000-118	Use	Res. Decade	1432-U	2	4	1	2	4	3	2	4	2	2	4	1	2	4	1	2.0	4.0	1.6	TRAIN
HFR-4000-119	Use	Microvoltmeter DC	1362	2	2	2	1	4	3	1	4	3	2	2	2	2	2	2	1.6	2.8	2.4	OVER TRAIN
HFR-4000-120	Use	Megohmmeter	1862-C	1	1	1	2	3	3	2	3	3	1	1	1	1	1	1	1.4	1.8	1.8	NO TRAINING
HFR-4000-121	Use	Bridge Impedance	1650A	1	1	1	1	3	4	1	3	2	1	1	1	1	1	1	1.0	1.8	1.8	NO TRAINING
HFR-4000-122	Use	Power Supply DC	CR36-20	1	1	1	1	3	3	1	3	2	1	1	1	1	1	1	1.0	1.8	1.6	NO TRAINING
HFR-4000-123	Use	Megohmmeter	500	1	1	1	1	3	3	1	3	3	1	1	1	1	1	1	1.0	1.8	1.8	NO TRAINING
HFR-4000-124	Use	Power Supply	RVC-36-15	2	1	1	3	3	3	3	3	3	2	1	1	2	1	1	2.4	1.8	1.8	NO TRAINING
HFR-4000-125	Use	Calibrator Digital	1045	4	4	1	4	4	3	4	3	3	4	4	1	4	4	1	4.0	3.8	1.8	NO TRAINING
HFR-4000-126	Use	Test Unit Servo		2	4	1	1	3	3	1	3	3	2	4	1	2	4	1	1.6	3.6	1.8	TRAIN
HFR-4000-127	Use	Test Chassis Op Amp	RC11-9-10F2	4	1	1	4	3	2	4	3	2	4	1	2	4	1		1.8	4.0	1.8	TRAIN
HFR-4000-128	Use	Source Current		1	1	1	2	4	3	2	4	3	1	1	1	1	1	1	1.4	2.2	1.8	NO TRAINING
HFR-4000-129	Use	Res. Decade	1432-P	1	4	1	3	4	3	2	4	2	1	4	1	1	4	1	1.6	4.0	1.6	TRAIN
HFR-4000-130	Use	Res. Decade	1432-U				3	4	3	2	4	2							2.5	4.0	2.5	OVER TRAIN
HFR-4000-131	Use	Power Supply	6205																			**
HFR-4000-132	Use	Test Unit Trip Comp	Q-2609-T	2	4	2	3	4	3	2	4	3	2	4	2	2	4	2	2.2	4.0	2.4	OVER TRAIN
HFR-4000-133	Use	Power Module	TM504	4	1	1	3	4	3	3	4	2	4	1	1	4	1	1	3.6	2.2	1.6	NO TRAINING
HFR-4000-134	Use	Counter Digital	361R	1	4	2	1	3	3	1	3	3	1	4	2	1	4	2	1.0	3.6	2.4	OVER TRAIN
HFR-4000-135	Use	Tester Dead Weight	1305B30	1	1	1	1	4	4	1	4	4	1	1	1	1	1	1	1.0	2.2	2.2	TRAIN
HFR-4000-136	Use	Source Picoampere	261	2	4	1	2	4	3	2	4	3	2	4	1	2	4	1	2.0	4.0	1.8	TRAIN
HFR-4000-137	Use	Calibrator Pressure	DPG-600G-14	4	1	4	4	3	4	4	3	4	4	1	4	4	1		4.0	4.0	1.8	NO TRAINING
HFR-4000-138	Use	Calibrator Pressure	DPG-600G-14	4	1	4	4	3	4	4	3	4	4	1	4	4	1		4.0	4.0	1.8	NO TRAINING
HFR-4000-139	Use	Calibrator Seismic	FC-1	1	4	1							1	4	1	1	4	1	1.0	4.0	1.0	TRAIN
HFR-4000-140	Use	Flowmeter Tri-Flat	10A1017A	2	1	1	2	2	3	1	2	3	2	1	1	2	1	1	1.8	1.4	1.8	NO TRAINING
HFR-4000-141	Use	Bath Temperature	TE-8D	2	1	1	2	2	3	1	2	3	2	1	1	2	1	1	1.8	1.4	1.8	NO TRAINING
HFR-4000-142	Use	Electrometer	617	2	1	2	2	4	4	1	4	4	2	1	2	2	1	2	1.8	2.2	2.8	TRAIN
HFR-4000-143	Use	Calibrator Micromite	31157040012	1	2	2	4	3	2	4	3	2	1	2	2	2	1	2	2.0	2.2	2.4	TRAIN
HFR-4000-144	Use	Calibrator Digital	1040	2	4	1	4	4	3	4	4	3	2	4	1	2	4	1	2.8	4.0	1.8	NO TRAINING
HFR-4000-145	Use	Meter PH Portable	PHE-61	2	1	1	2	2	2	2	2	2	2	1	1	2	1	1	2.0	1.4	1.4	NO TRAINING
HFR-4000-146	Use	Standard Pressure	BCV-1-10	3	4	1	2	4	4	3	4	4	2	4	1	3	4	1	2.6	4.0	2.2	OVER TRAIN
HFR-4000-147	Use	Power Supply HV	240A	1	1	1	2	2	3	2	4	3	1	1	1	1	1	1	1.4	1.8	1.8	NO TRAINING
HFR-4000-148	Use	Calibrator Pneu.	730B	2	2	1					4		2	2	1	2	2	1	2.0	2.5	1.0	TRAIN
HFR-4000-149	Use	Recorder 18 Ch	1858-T79	2	4	3	2	4	4	2	4	4	2	4	3	2	4	3	2.0	4.0	3.4	OVER TRAIN
HFR-4000-150	Use	Picoammeter	410-A	2	1	1	2	4	4	2	4	4	2	1	1	2	1	1	2.0	2.2	2.2	TRAIN
HFR-4000-151	Use	Multimeter Digital	173A	4	4	2	4	4	3	4	4	3	4	4	2	4	4	2	4.0	4.0	2.4	TRAIN
HFR-4000-152	Use	Oscilloscope	2236	2	1	3	2	2	3	2	2	3	2	1	3	2	1	3	2.0	1.4	3.0	TRAIN
HFR-4000-153	Use	Multimeter Digital	3457A	3	2	3	3	4	4	3	4	4	3	2	3	3	2	3	3.0	2.8	3.4	OVER TRAIN

INTERNAL DISTRIBUTION

1. C. G. Allen
2. J. D. Blanton
3. H. R. Brashear
4. B. G. Eads
5. J. L. Eggers
6. D. N. Fry
7. H. A. Glovier
8. W. R. Hamel
9. J. M. Hutson
10. H. D. Hymer
11. E. H. Krieg, Jr.
12. C. W. Kunselman
13. F. C. Maienschein
14. D. W. McDonald
15. P. E. Melroy
16-20. D. R. Miller
21. K. D. Miller
22. A. J. Millet
23. W. L. Mooney, III
24. O. B. Morgan
25. D. L. Nickel
26. A. D. Officer
27. D. G. Prater
28. T. H. Row
29-40. C. T. Stansberry
41. K. W. West
42. K. M. White
43. M. C. Willard
44. J. B. Ball (Advisor)
45. P. F. McCrea (Advisor)
46. T. B. Sheridan (Advisor)
47. Central Research Library
48. Y-12 Document Reference Section
49. I&C Division Publications
50. Laboratory Records
51. ORNL Patent Section

EXTERNAL DISTRIBUTION

52. Assistant Manager for Energy Research and Development, DOE-ORO Oak Ridge, TN 37831.
53-72. Office of Scientific and Technical Information, P.O. Box 62, Oak Ridge, TN 37831.
73. R. E. Williams, DOE-ORO, Federal Bldg., Oak Ridge, TN 37831.