

Project Operations
TRAINING AND DEVELOPMENT PROGRAM FOR
LOCK AND DAM OPERATORS

1. Purpose. The purpose of this regulation is to outline the Little Rock District's policy regarding the training for lock and dam operators.
2. Applicability. This program is applicable to all employees assigned to locks and dams in the Little Rock District. Use of the masculine gender of the third person singular pronoun is intended to include both the masculine and feminine genders.
3. References.
 - a. SWDR 690-1-335, Merit Promotion and Placement Plan, 1 March 2000.
 - b. SWLR 690-1-410, Training and Development, 29 October 1990.
4. Objectives.
 - a. Provide adequate trained personnel to operate lock and dams in the Little Rock District.
 - b. Insure uniformity in training and development of operator personnel.
 - c. Train operator personnel to a high degree of proficiency in their primary occupation, while also developing a basic capability in the skills required of a lock and dam equipment mechanic and lockmaster.
5. Intake - Staffing Procedures. Provisions of SWDR 690-1-335, Merit Promotion and Placement Plan and appropriate collective bargaining unit agreements will be observed in all staffing actions relative to this function. Employees selected for operator trainee positions who successfully complete the training program will be advanced to journeyman level (US Army Corps of Engineers, Lock and Dam Non-Supervisor) WY-09. Trainee graduates will be placed in the first vacancy operator position within the project office's area of responsibility where they are assigned.

6. Employment and Mobility Agreement. An employment and mobility agreement (Appendix A) for placement within each project office is required of all trainees entering this program. This agreement must be completed by the trainee during in-processing and is a prerequisite for entry into the program.

7. Qualification Requirements. For selection into the program as a Lock and Dam Operator, WY-05, applicants must have sufficient aptitude or ability in the following elements to perform the work of the position.

- a. Reliability and dependability as a worker.
- b. Aptitude for and interest in operation of locks and dams.
- c. Ability to follow oral and written instructions.
- d. Dexterity and safety.
- e. Ability to work as a member of a team.

8. Length of Training Program. The program is designed for completion in 12 months and is divided into three (3) phases. If at the end of Phase I or Phase II the trainee fails to successfully demonstrate competence in any of the training areas, the trainee may request 30 days to improve and be re-tested. The Examining Board will determine if the request is granted. A second failure will result in dismissal from the training program and employment with the US Army Corps of Engineers. Extended use of sick or annual leave may extend the training period if, in the opinion of the Lockmaster, the trainee has not attained the desired level of competence at the end of either phase.

a. Phase I - Length (three months). After an initial orientation period as contained in the training plan, the trainee will be assigned to work with a designated shift operator and will be under the general direction of the training operator. Emphasis will be placed on learning operating procedures and the regulations governing the navigation industry. The trainee's tour of duty will match the designated training operator's 12-hour duty cycle and will include day, night, and weekend shifts. The trainee's shift schedule may be adjusted depending upon the lock's work schedule and as contained in the training plan. Upon completion of Phase I, trainees will be expected to be able to lock tows and use the tow haulage equipment with minimum supervision. To advance to Phase II, trainees must successfully demonstrate an actual lockage as witnessed by the Examining Board and pass a written exam with a score of 80%. With the recommendation of the Lockmaster and the concurrence of the Examining Board, successful trainees will be promoted to WY-07.

b. Phase II - Length (three months). Phase II concentrates on pool regulation and routine maintenance and repair of various lock and dam systems but will include locking of tows as a continuation of Phase I training. In addition to learning operation of dam tainter gates and pool regulation procedures, trainees will be assigned daily maintenance duties designed to familiarize the trainee with system components and operation. At the end of Phase II, the trainee will be expected to demonstrate knowledge of hydraulic and electrical systems including but not limited to operation of emergency electrical generators as witnessed by the Examining Board and pass a written exam with a score of 80%. With the recommendation of the Lockmaster and the concurrence of the Examining Board, successful trainees will be promoted to WY-09 and are qualified for shift rotation.

c. Phase III, Concentrated Individual Development – Length (six months). Phase III is a continuation of the skills learned during Phases I and II. The successful trainee may be placed into the lock's 12-hour shift rotation and will perform the basic duties of a lock operator. The trainee's performance will be monitored by the lockmaster and repairman/leader. One or both will be available either by phone or in person to assist the trainee when the need arises. If required by the training plan and/or the trainee's Individual Development Plan (IDP), the trainee may be required to participate in developmental assignments. The developmental assignments will be designed to improve the trainee's knowledge of equipment, systems, and operating procedures and may include work with the marine terminal maintenance crews, floating plant crews, and off-site or correspondence courses.

9. Outline of Training Program. The training program basically consists of the three parts: performance of lockages, pool regulation, and routine systems maintenance.

a. Performance of Lockages: Safe and expeditious lockage of traffic through the lock requires the operator to be knowledgeable of all governing navigation regulations and mandatory US Army Corps of Engineers safety procedures. Trainees will be afforded time during each duty shift to study available materials listed in Appendix C. Additional study materials including correspondence courses may be required, if recommended by the Lockmaster. Any correspondence course ordered will be at the government's expense. The majority of the trainee's duty time will be spent working directly with the shift operator learning the mechanics of locking traffic. Upon completion of this segment trainees will be able to demonstrate the use of tow haulage equipment and safely lock traffic with minimal supervision by the duty operator.

b. Pool Regulation: Trainees will be instructed on the basics of pool regulation and the safe operation of spillway gates. Upon completion of this segment the successful trainee will be able to make inflow and outflow computations, recognize and calculate changes in pool storage, and make gate changes.

c. Routine Lock Maintenance: Phase II trainees will spend approximately 75% of their duty time assisting the lock repairman with routine maintenance. At the end of Phase II, trainees will

be able to identify location of valves; explain basic hydraulic components; demonstrate and explain the operation of electrical switchgear; and safety start and operate emergency generating systems.

10. Individual Development Plans: During the course of the training program the Lockmaster will evaluate the educational needs of the trainee. An IDP will be developed with the trainee and submitted to the Chief, Navigation Branch, for approval. The plan will include any formal training required to improve the performance of the successful trainee. This additional training may include off-site as well as on-site and correspondence courses. Off-site training will generally be scheduled after the trainee has attained the WY-09 level.

11. Career Patterns. The normal path of advancement within the lock and dam operation is shown in Appendix B. Individuals will enter the program at grade WY-05. After successful completion of Phase I, the trainee will advance to the WY-07 level. After successful completion of Phase II, the trainee will be promoted to the journeyman level, WY-09.

12. Responsibilities:

a. Examining Board.

(1) Members. The Examining Board shall consist of the following members:

(a) Chairman - a representative from the Maintenance Engineering Section of Operations Division

(b) Member - Chief, Navigation Branch at the Project Office responsible for the lock where the trainee is assigned.

(c) Member - Lockmaster responsible for the lock where the trainee is assigned

(d) Member (Non-rating crafts representative) - Lock Repairman/Leader at the lock where the trainee is assigned

(e) Member (Non-rating crafts representative) – One Operator at the lock where the trainee is assigned

The union will provide the names of three candidates to serve as the Operator representative. If none of three candidates are acceptable to management the union may provide two additional names for consideration. If none of the names are acceptable to management, the matter will be presented to a special ad hoc meeting of the Labor Management Committee for resolution within two weeks of the identification of the issue.

(2) Board Responsibilities. The Board will:

- (a) Administer a written examination at the end of each phase of training.
- (b) Complete the Training Examination Report (Appendix D) at the completion of the examination.
- (c) Approve or disapprove requests for extension of time to complete the required training.
- (d) Evaluate the trainee's overall performance at the end of the 12 month period.

(3) Board Meetings. The Chairman and any two members, one of which shall be a crafts representative shall constitute a quorum for official board action.

b. Chief, Navigation Branch. The Chief of Navigation Branch at each project office will:

- (1) Administer the program and in cooperation with the Lockmaster develop a trainee specific training plan using the guidance contained in Appendix D.
- (2) Maintain oversight of the trainee's progress and participate in the examination of the trainee at the completion of each phase.
- (3) Assure that all correspondence course materials and services are received.

c. Lockmaster. The Lockmaster for each lock and dam will:

- (1) Implement the training program.
- (2) Assign a training duty operator for Phase I.
- (3) Monitor trainee progress and participate in the training activities. Formally counsel and advise the trainee throughout the training period. Critical areas evaluated are responsibility, dependability, and ability to work unsupervised and sound judgment.
- (4) Complete the Trainee Evaluation Statement (Appendix F), at the end of each phase.
- (5) Schedule and coordinate examination dates.

13. Trainee Progress, Evaluation and Testing.

a. The Lockmaster will continually evaluate the progress of the trainee and counsel them during the training period.

b. The Examining Board will administer an exam at the end of Phases I and II. The exam will consist of a combination of written questions and tasks, listed in Questions/Tasks (Appendix G), to demonstrate acquired skills in completing a lockage including but not limited to filing a Lock Performance Measuring System (LPMS) report; operation of dam tainter gates; and operation of emergency generating systems. A score of 80% on the written exam and successful demonstration of assigned tasks is required.

c. Failure of the trainee to either pass the written exam or successfully demonstrate all assigned tasks may result in a 30 day extension of the training period and a re-examination. Failure to pass the re-examination may result in dismissal from the program.

d. In addition to the formal examination by the Board, the Lockmaster will evaluate the trainee in areas of timely performance of assignments, ability to work as member of a team and work well with others, dependability, and projection of a positive public image. The Lockmaster will submit his written evaluation to the examination board upon completion of Phase II of the training program and will include his recommendation to either promote or dismiss the trainee from the program.

e. Satisfactory completion of the training program requires that each trainee receive a grade of "70" or better for all required correspondence courses in the Applied Learning Record (Appendix E).

f. At the end of Phase III the Examining Board will evaluate the overall performance of the trainee. The evaluation will consider all aspects of the training program. If the trainee is not performing satisfactorily they will be removed from federal service if they are still in the probationary period of their federal career or they will be given an interim unsatisfactory rating and placed in a Performance Improvement Program (PIP) if they have completed the probationary period of their federal career.

14. Records and Reports. A file containing the records of progress for each trainee will be maintained by the Lockmaster and will, as a minimum, consist of the following:

a. Training Plan. The lockmaster will establish a trainee specific training plan. The training plan will include specific dates, assignments, and course materials corresponding the needs of the trainee. The plan will be submitted to the Board chairman and Chief, Navigation Branch, within 10 workdays after starting Phase I of the training program.

b. Examination Record.

c. Individual Development Plan. A copy of the trainee's IDP, ENG 5055-R, shall be placed in the training file along with a copy of the trainee's performance objectives.

d. Correspondence Courses. If additional correspondence courses are required by the Lockmaster, records of test scores, etc. shall be included in the training file.

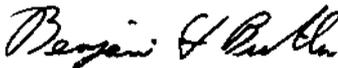
e. Trainee Evaluation Statement. The Lockmaster will complete a Trainee Evaluation Statement, as each trainee completes a phase in the program. The purpose of the evaluation is to inform the trainee of his/her progress and motivate the employee for increased competence and improvement, if needed. Any areas in the trainee's performance that need improvement will be documented. The original will be placed in the employee's training file and a copy furnished to the trainee.

f. Training Examination Report. The Examining Board will complete a Training Examination Report (Appendix D) at conclusion of each phase. The original will be placed in the training file and a copy furnished to the trainee.

15. Promotions. Successful trainees will be promoted within 30 days following successful completion of Phase I and Phase II.

7 Appendixes

- App A - Employment and Mobility Agreement
- App B - Career Patterns
- App C - Training Schedule
- App D - Training Examination Report
- App E - Applied Learning Record
- App F - Evaluation Statement
- App G - Questions/Tasks


BENJAMIN H. BUTLER
Colonel, US Army
Commanding

DISTRIBUTION:

Operations Division
Operations Manager, Pine Bluff
Operations Manager, Russellville
Maintenance Engineering Section



DEPARTMENT OF THE ARMY
LITTLE ROCK DISTRICT CORPS OF ENGINEERS
POST OFFICE BOX 867
LITTLE ROCK, ARKANSAS 72203-0867

MEMORANDUM OF AGREEMENT
BETWEEN
US ARMY CORPS OF ENGINEERS, LITTLE ROCK DISTRICT
AND _____

SUBJECT: Employment and Mobility Agreement

1. Upon selection for entry into the Department of the Army Lock and Dam Operator Trainee Program, I _____ agree to accept temporary development assignments at various installations in the US Army Corps of Engineers, Little Rock District, during my training. It is understood that I will be reimbursed to the extent provided by regulations for expenses resulting from such temporary developmental assignments or transfers. I understand that I am not being trained for a specific lock and dam operator position at a specific location and upon completion of the training program I agree to accept assignment to any lock and dam facility within the area of responsibility of the project office to which I am assigned.

2. I recognize that the Department of the Army may terminate this agreement at any time by issuing a notice to that effect for such reasons as changes in program requirements, inadequate performance, or misconduct on my part. I also may terminate this agreement by providing reasons, which would be considered satisfactory to the Department of the Army.

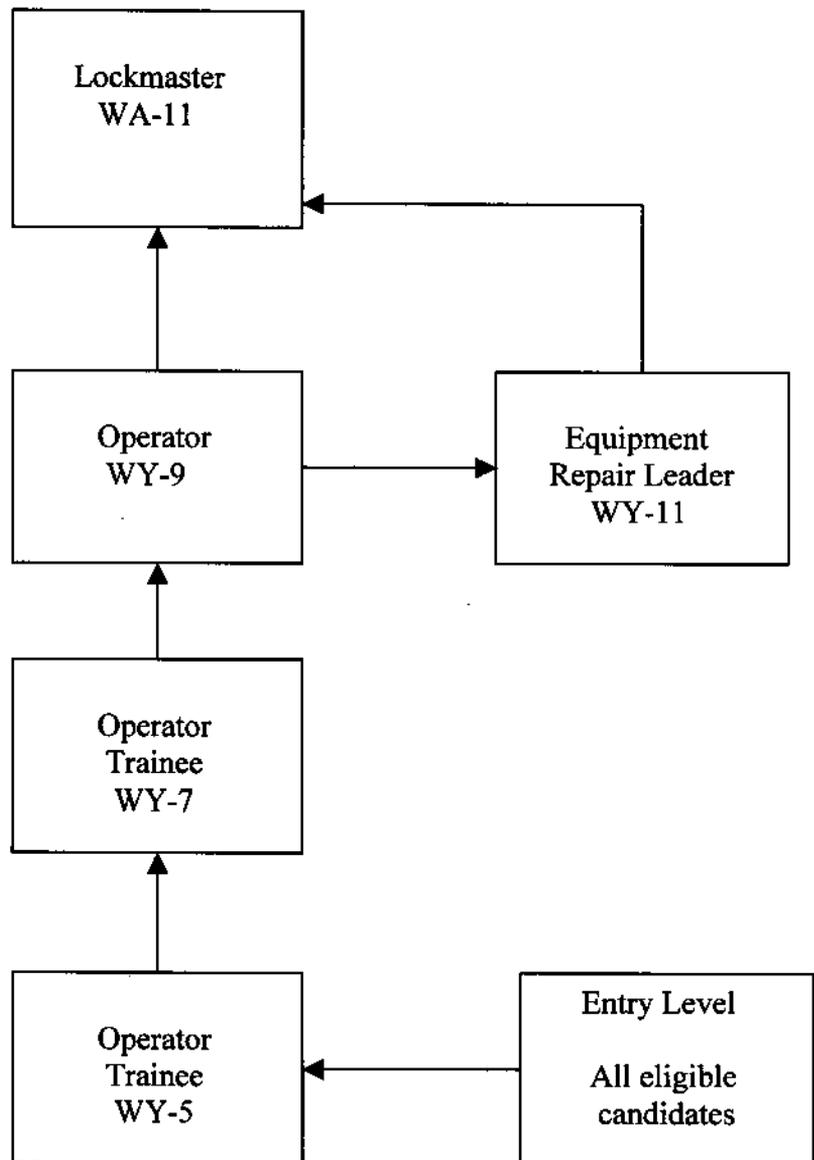
Signature of Trainee

Date

Chief, Navigation Branch

Date

APPENDIX B
Career Patterns



APPENDIX C

Training Schedule

Week 1

1. Orientation and Responsibilities
2. History of the Corps of Engineers and the Little Rock District, History of the Arkansas River
3. Public Relations
OJT
Video 7055

Week 2

4. Locking Procedures
5. Lock Performance Monitoring System
6. Navigation Notices
7. Operations of Telephone and Radio Equipment
OJT
Video 7053

Week 3

8. Operation and Maintenance Manual
OJT
Video 7066

Week 4

9. Standard Operating Procedures
10. Safety During Lockage
OJT
Videos 8827 & 8825

Week 5

11. Navigation Charts
12. Channel Reports
13. Navigation Regulations
OJT

Week 6

- 14. Hydraulic System
- 15. One Pump Operation
OJT
Videos 9707 & 7005

Week 7

- 16. Electrical System
Standby Generator
Switch-over Operations
OJT
Video 9802 & 8909

Week 8

- 17. Motor Boat Operation
- 18. Tow Haulage
OJT
Video 9000

Week 9

- 19. Computer Training
OJT

Week 10

- 20. Housekeeping and Care of Tools and Equipment
OJT
Videos 8811, 9806 & 7063

Week 11

1st Quarter Board Review

Week 12

- 21. Preventive Maintenance and Repairs
- 22. Language of Western Rivers
OJT
Videos 9713 & 9832

Week 13

- 23. Regulation of Pools
OJT
Video 8913

Week 14

- 24. Physical Security
- 25. Personal Safety and First Aid
- 26. Wrecks at Locks
- 27. Grounding
- 28. Fire Protection and Prevention
OJT
Videos 7014, 9727 & 8907

Week 15

- 29. Water Level Measuring Devices
OJT
Video 9705

Weeks 16-24

Review of SOPs, LRDRs and previous assignments
Work with Marine Terminal and District Office orientation
OJT
Videos 8855, 9838, 7067, 8919, 8845, 8843, 8806 & 8903

Week 25

- 30. Shift Schedules, Leave Schedules/Policies
OJT
Videos 9741 & 8921

Week 26

2nd Quarter Board Review, End of Training Program

Week 27

START SHIFT WORK ALONE AS A JOURNEYMAN

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Videos Title/Number/Minutes in Length

River of Return/7055/20	The Safety Secret/7014/24
Not by a Damsite/7053/12	Battery Safety/9727/5
Hydro Safety/7066/18	Vehicle Safety/8907/12
Accident Reporting/8827/5	Working Safely w/ Comp Gas/9705/12
Know Your ABC's/8825/5	The Signal/8855/5
Back Care/9707/12	Confined Space Entry/9838/10
How to Handle Flammables/7005/5	Lockout/Tagout Safety Training/7067/15
Basic Electrical Safety/9802/6	Fire Extinguisher Training & Use/8919/15
Electrical Safety/8909/7	Heimlich Manuever/8845/5
Personal Work Space/8811/5	Hard Hats-Hard Heads/8843/5
Stop the Bleeding/8806/5	Hearing Conservation Safety/8903/14
Hand Tools/7063/18	Housekeeping Responsibilities/9806/5
Boating the Starboard Way/9000/29	Welding Hazards/9741/5
Slips, Trips & Falls/9713/14	Ladder Safety/8921/5
MSDS/8913/14	Eye Protection a New Approach/9832/14

Correspondence Courses Title/Course Number

Practical Arithmetic/2750A-F
 Parts 1
 2
 3

Bench Work/5004A-C
 Parts 1
 2

Elements of Print Reading/6719A-B
 Parts 1
 2

Computer Training (Technical School or Computer Training Center)
Hydraulics (Technical School)
Electricity (work w/ electrician)
 Intro
 Safety

Public Relations (PAO Office)

TRAINING EXAMINATION REPORT

Trainee's Name		Quarter of Training	
Location		Quarter Rating	

Training Item	Unsatisfactory	Satisfactory	Outstanding
On-The-Job Training			
Training Manual			
Correspondence Courses			
Overall Evaluation			

Recommend retention in program		
Recommend removal from program		(attach explanation)

Signatures, Examining Committee Date

TRAINING RECORD

Location:

Applied Learning Record:

Name of Employee:

	Instruction Text Title	Date	Grade Recorded	Grade
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				

REMARKS:

Large empty rectangular area for recording remarks.

Navigation Branch Chief Signature

TRAINEE EVALUATION STATEMENT

Career Development Program		Date	
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TO:	FROM:

Name of Employee	Designation	Grade	Occupational Area

Organization (To which assigned)	Period Covered

PROJECT AND LOCATION _____

DESCRIPTION OF DUTIES PERFORMED ON WHICH THIS EVALUATION IS BASED

ELEMENT	TRAINING EVALUATION (Check one for each element)					
1. Attitude toward others	<input type="checkbox"/>	Excellent	<input type="checkbox"/>	Good	<input type="checkbox"/>	Unsatisfactory
2. Interest in Work	<input type="checkbox"/>	Enthusiastic	<input type="checkbox"/>	Interested	<input type="checkbox"/>	Disinterested
3. Application	<input type="checkbox"/>	Very Industrious	<input type="checkbox"/>	Steady	<input type="checkbox"/>	Lacks Drive
4. Ability to Learn	<input type="checkbox"/>	Very Quick to Learn	<input type="checkbox"/>	Average	<input type="checkbox"/>	Has Difficulty
5. Self Reliance	<input type="checkbox"/>	Confident	<input type="checkbox"/>	Average	<input type="checkbox"/>	Timid
6. Accuracy	<input type="checkbox"/>	Exceptionally	<input type="checkbox"/>	Average	<input type="checkbox"/>	Inaccurate
7. Rate of Progress	<input type="checkbox"/>	Rapid	<input type="checkbox"/>	Average	<input type="checkbox"/>	Slow
8. Reliability	<input type="checkbox"/>	Always Reliable	<input type="checkbox"/>	Usually Reliable	<input type="checkbox"/>	Unreliable
9. Initiative	<input type="checkbox"/>	Excellent	<input type="checkbox"/>	Average	<input type="checkbox"/>	Lacks Initiative
10. Judgement	<input type="checkbox"/>	Excellent	<input type="checkbox"/>	Good	<input type="checkbox"/>	Poor
11. Ability	<input type="checkbox"/>	Exceptional	<input type="checkbox"/>	Average	<input type="checkbox"/>	Lacking
12.	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	
13.	<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>	

Appears Best Suited For: _____

Other Comments (Personal habits, health, other factors effecting job performance, etc. Use reverse side if additional space is required)

Signature (Supervising Official)	Signature (Civilian Personnel Officer)

APPENDIX G

Questions/Tasks Questions

Lesson #1

1. What is the chain of command for an operator in the Little Rock District?
2. What are the two major duties of a Lock & Dam Operator?
3. What is the uniform of the duty operator?
4. What entries should be made in the logbook?

Lesson #2

1. What act in 1824 charged the Corps with responsibility for maintaining water routes?
2. What was the 1st steamboat to navigate the Arkansas River?
3. When was the first construction work performed on the Arkansas River?
4. When was the Corps formed?
5. Why was the navigation system named McClellan-Kerr Arkansas River Navigations System?
6. What was the first Commercial towboat to transit the locks?
7. What division is the Little Rock District in?
8. In what year was the flood that was estimated to have covered half of Arkansas?
9. What was the construction cost of the McClellan-Kerr Arkansas River Navigations System?

Lesson #3

1. Is public relations a desirable aspect or a duty in lock operations?
2. How do internal problems between operators affect public relations?
3. Who is affected by a sloppy, irritable lock employee?
4. Is public relations really necessary?
5. Should a lock employee bodily eject a visitor from the lock area?
6. Name three important aspects of public relations.

Lesson #4

1. Where are the navigation lights located?
2. Of navigation lights, how many and what color are at each location?
3. How many sirens are there on the lock and dam?
4. What is the purpose of each siren?
5. Where are the traffic control lights?
6. What is the purpose of the "RED" traffic light?
7. What is the purpose of the "GREEN" traffic light?
8. What color traffic light would you use to allow traffic to enter the lock under caution?
9. What is the purpose of the howler (buzzer) on the lock?
10. Define single lockage.

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11. Define multi-vessel lockage.
12. Define double lockage.
13. Define set-over lockage.
14. Give the order of priority for lockage.
15. Under normal conditions when opposing vessels approach the lock at the same time, which one should be locked first?
16. Who has the authority to depart from the navigation regulations to better achieve maximum utilization of the lock?
17. Who has authority over vessels within the lock limits?
18. When will the operator check to see if the miter gates are properly mitered?

Lesson #5

1. What do the letters "L.P.M.S." stand for?
2. What is the purpose of L.P.M.S.?
3. Who enters the traffic data into the computer?
4. Would you enter data into the computer if you only locked one small fishing boat?

Lesson #6

1. What is a navigation notice?
2. Who issues navigation notices?
3. Who would be interested in a navigation notice?
4. Where are they posted?

Lesson #7

1. What is the primary use of channel 16 on the marine radio?
2. When should you give your call sign on the radio?
3. Is it permissible to use the "*police 10 code*" when talking to a pleasure craft?
4. Give at least 5 word pronunciations for letters in the phonetic alphabet.
5. What are the international distress signal words?
6. When answering the telephone what two things should you always give?

Lesson #8

1. What are the normal headwater limits?
2. What is the elevation of the top of the lock wall?
3. What is the normal lift at this lock?
4. Give the useable size of the lock chamber.
5. What are the length of the guide-walls?
6. What is the purpose of the tainter valves?
7. Give the size of the tainter valves.
8. How many pintle balls are at the lock and how high can you bounce them.
9. What is the purpose of the pintle ball?
10. How many tainter gates are at this project?

Lesson #9

1. At what speed should a tow enter the lock?
2. Is it permissible for a fishing boat to use a dip-net to secure to a mooring bit?
3. Is it permissible to lock a pleasure craft with a tow?
4. What kind of clearance do you need to lock a pleasure craft with a tow?
5. If there is an accident at the lock, do you know where the forms are and how to fill them out?
6. If there were a fire on a towboat what would you do to minimize damage to the project?
7. What should an operator do if he/she finds a body floating at the project?
8. When there is a chance of the lock freezing, how often should the miter gates be checked?
9. If the operator coming on duty appears to be under the influence of alcohol or drugs, what are your responsibilities as the duty operator?
10. Do you know where the high flow notification list is?
11. At what flow does the *small craft advisory* go into effect?

Lesson #10

1. If you notice that a tow is not properly aligned as he is entering the lock, what should you do?
2. How can an operator recognize a dangerous cargo barge without a report from the pilot?
3. What kind of fire fighting equipment is at the lock?
4. What is the first consideration in the event of a fire at the lock?

Lesson #11

1. What are navigation charts used for?
2. Who uses navigation charts?
3. How is the navigation chart helpful to the lock operator?

Lesson #12

1. What are sailing line instructions?

Lesson #13

1. Are navigation regulations important to lock personnel?
2. Should the lock operator try to enforce navigation regulations?
3. If the regulations are not followed at the lock, what should the operator do?

Lesson #14

1. What is the purpose of the hydraulic oil pumps?
2. How many hydraulic pumps are used to operate the lock?
3. What are the four delivery rates?
4. Must both pumps be started at the same time?
5. How many four-way valves are there?
6. Where are the four-way valves located?

7. What is the hydraulic oil reservoir?
8. Where is the hydraulic oil reservoir located?
9. How can you tell if the oil in the oil reservoir is low?

Lesson #15

1. Can you still lock boats if one hydraulic pump is broken?
2. Can you make gate changes if one hydraulic pump is broken?

Lesson #16

1. What is the purpose of the stand-by generator?
2. What is the voltage of commercially supplied power to the lock and dam?
3. Is it possible to use commercial and emergency power at the same time?
4. What is the purpose of the power roof ventilator?
5. If the phase alarm goes off what should the operator do?

Lesson #17

1. Is it necessary to be tested on the operation of the motorboat?

Lesson #18

1. Why would an operator use the tow haulage?
2. How many deckhands are required on the first cut of a double when using tow haulage?
3. At what location is each deckhand?
4. How will the lock operator communicate with the deckhands?
5. What will the lock operator do if the first cut does not clear the miter gates?
6. What is the reset winch used for?
7. What would happen if the deckhand on the head of the tow were to place a line on the auxiliary bit as the tow was being pulled from the chamber?
8. Who is responsible for the speed at which the barges will be pulled out?

Lesson #19

1. What should you do to the computer if a thunderstorm moves through?
2. Can you access the World Wide Web from the lock computer?
3. Can you send E-mail to anyone who works for the Corps?

Lesson #20

1. What three things are met with good housekeeping?
2. To whom should tools be loaned for personal use?
3. Why do some tools have a bar-tag?
4. Should you use spray silicone on the floor to make it shine?

Lesson #21

1. If an operator finds a hydraulic leak, whom should he tell?

2. Is it necessary for the lock operator to know anything about the hydraulic system since the repairman already know the system?
3. Why is it important for you to know if the machinery is making an unusual noise?

Lesson #22

1. What is:
 - a. Handy line
 - b. Cavel
 - c. Face wire
 - d. Ratchet
 - e. Mile board
 - f. Timberhead
 - g. Crest of flood
 - h. Bull nose
 - i. Out draft

Lesson #23

1. What is the proper name for the spillway gates?
2. Is it normal to move all of the spillway gates at one time?
3. How is the elevation of the headwater regulated?
4. Where do you find regulations for each pool?
5. Do the headwater limits ever change?

Lesson #24

1. When should the doors and gates be kept locked?
2. Is public access allowed on the lock walls?
3. Who is allowed access to the operating controls for the lock and spillway?
4. Are the keys that you are issued numbered the same as everyone else on that lock?

Lesson #25

1. Should a lock operator have first-aid training?
2. What is the *lockout tagout* program?
3. Who is primarily responsibility for the lockout tagout program?
4. If you see someone in the water, would you go in after them?

Lesson #26

1. If there is an accident at the lock, who fills out the "Accident Summary" SWL Form 210.
2. Who fills out the SWD Form 832-R?
3. Where are these forms located?
4. What do you do if the pilot of the vessel refuses to sign his form?

Lesson #27

1. What form is used to report a grounding?
2. Who gets copies of the report?
3. Where are the blank forms located?

Lesson #28

1. If there was a fire in the trash can at the lock would you attempt to put it out? How?
2. What is the phone number for the fire department?

Lesson #29

1. What is the elevation of the upper miter sill?
2. What is the elevation of the lower miter sill?
3. What is a selsyn recorder?
4. What is a staff gage?
5. What is the purpose of the selsyn indicators?
6. Where are the selsyn transmitters located?
7. What is the graduation on the staff gages?
8. What is the horizontal graduation on the headwater and tailwater charts?
9. What is the vertical graduation on the headwater and tailwater charts?

Lesson #30

1. How many hours does the lock close down for each holiday?

Tasks

1. History of the Corps of Engineers and Little Rock District and the Arkansas River.
Task: Give a history of the Corps of Engineers and Little Rock District.
Task: Describe the McClellan Kerr Arkansas River Navigation System.

2. Public Relations

- Task: Describe the district policy on public relations.
Task: State the procedure for releasing to the public the river flow, forecasts, and rainfall.

3. Locking Procedures

- Task: Lock a recreational vessel upstream.
Task: Lock a recreational vessel downstream.
Task: Lock commercial towboat with a straight lockage.
Task: Lock commercial towboat with a knockout lockage.
Task: Lock commercial towboat with multi-cut lockage downstream using tow haulage equipment.
Task: Lock commercial towboat with multi-cut lockage upstream using tow haulage equipment.

Task: Lock commercial towboat with multi-cut lockage downstream without tow haulage equipment.

4. Lock Performance Monitoring System

Task: Enter data in the LPMS program for a recreational vessel.

Task: Enter data in the LPMS program for a commercial towboat straight lockage.

Task: Enter data in the LPMS program for a commercial towboat multi-cut lockage.

Task: Enter data in the LPMS program for a light boat.

Task: Run LPMS Reports.

Task: Edit LPMS data.

5. Navigation Notices

Task: Describe how navigation notices are used and whom they are given to.

6. Operation of Telephone and Radio Equipment

Task: Use radio equipment and successfully communicate with adjacent locks and commercial towboat.

7. Operation and Maintenance Manual

Task: Describe the purpose of the O&M Manual.

Task: Show in the manual where the lubrication schedule is.

8. Standing Operating Procedures

Task: Be able to describe each SOP.

9. Safety During Lockage

Task: Describe what to look for during lockages.

10. Navigation Charts

Task: Describe how the navigation charts are used by both towing industry and Corps personnel.

11. Channel Reports

Task: Describe how to read the reports and tell the importance of the report.

12. Navigation Regulations

Task: Be able to answer questions about navigation regulations.

13. Hydraulic System

Task: Describe how the hydraulic system works to include the components and their purpose.

14. One Pump Operation

Task: Put the hydraulic on one pump operation.

15. Electrical System

Task: Describe the electrical system, incoming voltage, location of main breaker, feeder lines and breakers, and what action to take in case of power outage.

16. Stand-by Generator

Task: Start and place generator in service.

17. Motor Boat Operation

Task: Launch and run lock safety skiff.

18. Housekeeping and care of tools and equipment

Task: Describe the responsibilities of each lock position with regards to care of tools and equipment.

Task: Describe the housekeeping responsibilities of each shift.

19. Preventative Maintenance and Repairs

Task: Describe the maintenance card system used by the repairmen.

Task: Describe who is responsible for making repairs and at what level.

20. Language of Western Rivers

Task: Be able to give the meaning of different terms.

21. Regulation of Pools

Task: Give the current pool limits.

Task: State who has the authority to change the limits.

Task: Describe the high flow notification procedure.

Task: Describe how the tainter gates operate.

Task: Describe how the gate control system operates.

Task: Open and Close a tainter gate.

Task: Manually lower a tainter gate using the brake.

22. Physical Security

Task: Describe the physical security plan for the lock and dam.

23. Personal Safety and First Aid

Task: Demonstrate how to wear and use fall protection harness.

Task: Complete Multi-Media First Aid and CPR.

24. Wrecks at Locks

Task: Describe the notification procedure for reporting an accident.

Task: Describe actions taken for different types of accidents, i.e. hazardous cargo, fire, personnel injury.

Task: Complete an accident report.

25. Grounding

Task: Complete the grounding report.

26. Fire Protection and Prevention

Task: Demonstrate knowledge of fire extinguishers.

27. Water Level Measuring Devices

Task: Demonstrate ability to read staff gages and recording charts.

28. District Office Orientation

Task: Learn the different sections that the lock personnel deal with.