



**NONRESIDENT
TRAINING
COURSE**



February 1993

Equipment Operator, Advanced

NAVEDTRA 14080

Although the words “he,” “him,” and “his” are used sparingly in this course to enhance communication, they are not intended to be gender driven or to affront or discriminate against anyone.

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PREFACE

By enrolling in this self-study course, you have demonstrated a desire to improve yourself and the Navy. Remember, however, this self-study course is only one part of the total Navy training program. Practical experience, schools, selected reading, and your desire to succeed are also necessary to successfully round out a fully meaningful training program.

THE COURSE: This self-study course is organized into subject matter areas, each containing learning objectives to help you determine what you should learn along with text and illustrations to help you understand the information. The subject matter reflects day-to-day requirements and experiences of personnel in the rating or skill area. It also reflects guidance provided by Enlisted Community Managers (ECMs) and other senior personnel, technical references, instructions, etc., and either the occupational or naval standards, which are listed in the *Manual of Navy Enlisted Manpower Personnel Classifications and Occupational Standards*, NAVPERS 18068.

THE QUESTIONS: The questions that appear in this course are designed to help you understand the material in the text.

VALUE: In completing this course, you will improve your military and professional knowledge. Importantly, it can also help you study for the Navy-wide advancement in rate examination. If you are studying and discover a reference in the text to another publication for further information, look it up.

*1993 Edition Prepared by
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AND TECHNOLOGY CENTER

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Sailor's Creed

“I am a United States Sailor.

I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me.

I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.

I proudly serve my country's Navy combat team with honor, courage and commitment.

I am committed to excellence and the fair treatment of all.”

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REGULATIONS ON ENVIRONMENTAL POLLUTION AND HAZARDOUS MATERIALS

Environmental Pollution and Hazardous Waste Handling and Disposal programs have been Enacted and are United States Law. These programs are of immense importance and should be taken into consideration during the planning stages before beginning any new construction or rehabilitation project.

As a member of the Naval Construction Forces, United States law requires you to be constantly aware of potential environmental pollution hazards or hazardous material spills and to report them to your immediate supervisor or other senior personnel at the earliest possible time.

The following list of directives contains information on the cognizant government departments and the procedures for preventing, reporting, and correcting environmental pollution hazards and hazardous materials disposal worldwide:

- **Naval Occupational Safety and Health Program Manual, OPNAVINST 5100.23B**
- **Environmental and Natural Resources Protection Manual, OPNAVINST 5090.1**
- **Domestic Wastewater Control, MIL-HDBK 1005/8**

INSTRUCTIONS FOR TAKING THE COURSE

ASSIGNMENTS

The text pages that you are to study are listed at the beginning of each assignment. Study these pages carefully before attempting to answer the questions. Pay close attention to tables and illustrations and read the learning objectives. The learning objectives state what you should be able to do after studying the material. Answering the questions correctly helps you accomplish the objectives.

SELECTING YOUR ANSWERS

Read each question carefully, then select the BEST answer. You may refer freely to the text. The answers must be the result of your own work and decisions. You are prohibited from referring to or copying the answers of others and from giving answers to anyone else taking the course.

SUBMITTING YOUR ASSIGNMENTS

To have your assignments graded, you must be enrolled in the course with the Nonresident Training Course Administration Branch at the Naval Education and Training Professional Development and Technology Center (NETPDTC). Following enrollment, there are two ways of having your assignments graded: (1) use the Internet to submit your assignments as you complete them, or (2) send all the assignments at one time by mail to NETPDTC.

Grading on the Internet: Advantages to Internet grading are:

- you may submit your answers as soon as you complete an assignment, and
- you get your results faster; usually by the next working day (approximately 24 hours).

In addition to receiving grade results for each assignment, you will receive course completion confirmation once you have completed all the

assignments. To submit your assignment answers via the Internet, go to:

<http://courses.cnet.navy.mil>

Grading by Mail: When you submit answer sheets by mail, send all of your assignments at one time. Do NOT submit individual answer sheets for grading. Mail all of your assignments in an envelope, which you either provide yourself or obtain from your nearest Educational Services Officer (ESO). Submit answer sheets to:

COMMANDING OFFICER
NETPDTC N331
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32559-5000

Answer Sheets: All courses include one “scannable” answer sheet for each assignment. These answer sheets are preprinted with your SSN, name, assignment number, and course number. Explanations for completing the answer sheets are on the answer sheet.

Do not use answer sheet reproductions: Use only the original answer sheets that we provide—reproductions will not work with our scanning equipment and cannot be processed.

Follow the instructions for marking your answers on the answer sheet. Be sure that blocks 1, 2, and 3 are filled in correctly. This information is necessary for your course to be properly processed and for you to receive credit for your work.

COMPLETION TIME

Courses must be completed within 12 months from the date of enrollment. This includes time required to resubmit failed assignments.

PASS/FAIL ASSIGNMENT PROCEDURES

If your overall course score is 3.2 or higher, you will pass the course and will not be required to resubmit assignments. Once your assignments have been graded you will receive course completion confirmation.

If you receive less than a 3.2 on any assignment and your overall course score is below 3.2, you will be given the opportunity to resubmit failed assignments. **You may resubmit failed assignments only once.** Internet students will receive notification when they have failed an assignment--they may then resubmit failed assignments on the web site. Internet students may view and print results for failed assignments from the web site. Students who submit by mail will receive a failing result letter and a new answer sheet for resubmission of each failed assignment.

COMPLETION CONFIRMATION

After successfully completing this course, you will receive a letter of completion.

ERRATA

Errata are used to correct minor errors or delete obsolete information in a course. Errata may also be used to provide instructions to the student. If a course has an errata, it will be included as the first page(s) after the front cover. Errata for all courses can be accessed and viewed/downloaded at:

<http://www.advancement.cnet.navy.mil>

STUDENT FEEDBACK QUESTIONS

We value your suggestions, questions, and criticisms on our courses. If you would like to communicate with us regarding this course, we encourage you, if possible, to use e-mail. If you write or fax, please use a copy of the Student Comment form that follows this page.

For subject matter questions:

E-mail: n314.products@cnet.navy.mil
Phone: Comm: (850) 452-1001, Ext. 1826
DSN: 922-1001, Ext. 1826
FAX: (850) 452-1370
(Do not fax answer sheets.)
Address: COMMANDING OFFICER
NETPDTC (CODE N314)
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32509-5237

For enrollment, shipping, grading, or completion letter questions

E-mail: fleetservices@cnet.navy.mil
Phone: Toll Free: 877-264-8583
Comm: (850) 452-1511/1181/1859
DSN: 922-1511/1181/1859
FAX: (850) 452-1370
(Do not fax answer sheets.)
Address: COMMANDING OFFICER
NETPDTC (CODE N331)
6490 SAUFLEY FIELD ROAD
PENSACOLA FL 32559-5000

NAVAL RESERVE RETIREMENT CREDIT

If you are a member of the Naval Reserve, you will receive retirement points if you are authorized to receive them under current directives governing retirement of Naval Reserve personnel. For Naval Reserve retirement, this course is evaluated at 9 points. (Refer to *Administrative Procedures for Naval Reservists on Inactive Duty*, BUPERSINST 1001.39, for more information about retirement points.)

COURSE OBJECTIVES

This course provides the basic information required for Advanced Equipment Operators to perform the duties and responsibilities in the following positions: Transportation Supervisor; Air Detachment Equipment Supervisor; Crane Crew Supervisor; Project Supervisor; Quarry Supervisor; Crusher Supervisor; Concrete Batch Plant Supervisor; Asphalt Plant Supervisor; and Well Drilling Supervisor.

Student Comments

Course Title: Equipment Operator, Advanced

NAVEDTRA: 14080 **Date:** _____

We need some information about you:

Rate/Rank and Name: _____ SSN: _____ Command/Unit _____

Street Address: _____ City: _____ State/FPO: _____ Zip _____

Your comments, suggestions, etc.:

| |
|--|
| <p>Privacy Act Statement: Under authority of Title 5, USC 301, information regarding your military status is requested in processing your comments and in preparing a reply. This information will not be divulged without written authorization to anyone other than those within DOD for official use in determining performance.</p> |
|--|

NETPDTC 1550/41 (Rev 4-00)

CHAPTER 1

TRANSPORTATION SUPERVISOR

The Navy has millions of dollars invested in transportation and construction equipment. In the Naval Construction Force (NCF), equipment represents more than 70 percent of the total NCF outfitting cost.

Equipment is the “backbone” of the Seabees. The enforcement of instructions to ensure proper management and supervision of equipment operations starts with the first-class community.

This chapter presents the responsibilities of an Equipment Operator assigned to provide supervision of a construction and automotive equipment pool at the Naval Mobile Construction Battalion (NMCB) level.

TRANSPORTATION SUPERVISOR RESPONSIBILITIES

The responsibilities of the transportation supervisor are to supervise and control operations, operator maintenance, and the cycle of automotive, construction, and weight-handling equipment. Also, the transportation supervisor ensures the transportation pool supports the transport of personnel, equipment, and materials, and maintains and operates all fuel, petroleum oil, and lubricant storage and dispensing facilities.

The basic goal of the transportation supervisor is to ensure that safe and serviceable equipment is available for use and the maximum service life of the equipment is achieved.

EQUIPMENT MANAGEMENT INSTRUCTIONS

Instructions and publications have been established to regulate the management and control of equipment. Equipment and supplies procured for the Navy are assigned to various inventory managers. Major construction equipment, automotive equipment, specialized equipment, amphibious gear, and civil engineer support equipment (CESE) are classed as 2C materials. The Naval Facilities Engineering Command (NAVFACENGCOM) is the inventory manager for all 2C material in the Navy.

The Civil Engineer Support Office (CESO) at the Naval Construction Battalion Center, Port Hueneme, California, has the management responsibility for 2C materials.

Management of Transportation Equipment, NAVFAC P-300

To supervise a transportation pool properly, you must be knowledgeable of the applicable publications and instructions.

The NAVFAC P-300 was developed for the management of equipment in a stable environment. The NAVFAC P-300 is a compilation of directives issued by the Secretary of the Navy (SECNAV), the Chief of Naval Operations (CNO), and the Commander, Naval Facilities Engineering Command (COMNAVFACENGCOM). NAVFAC P-300 provides general and detailed procedures for the administration, operation, and maintenance of transportation equipment. The areas included are as follows: administration, procurement, rental, charter, assignment, loan, utilization, registration, and technical record control. Additionally, NAVFAC P-300 provides instructions for the disposition of and the operational procedures for automotive, construction, railroad, and special category transportation equipment. Procedures are included for maintenance planning, scheduling, maintenance control, material support, equipment modification, painting, identification markings, protective coatings, and selection and application of fuels and lubricants.

Equipment Management Manual, NAVFAC P-404

The NAVFAC P-404 establishes criteria, policies, and procedures for the management of CESE assigned to the Naval Construction Force (NCF), Special Operating Units (SOUs), and the Naval Construction Training Centers (NCTCs). The NAVFAC P-404 meets the needs of the NCF and the SOUs. These organizations are required to perform projects in a variety of extreme conditions while experiencing a constant turnover of personnel who require specific procedural direction.

**Naval Mobile Construction Battalion
(NMCB) Equipment Management
Instruction, COMSECON/COMTHIRDNCBINST 11200.1 Series**

administration, operation, and maintenance of automotive and construction equipment.

**Naval Construction Force Manual,
WV FAC P-315**

The COMSECON/COMTHIRDNCBINST 11200.1 Series contains policies and procedures to assist personnel concerned with the management of equipment in units under Second and Third Naval Construction Brigade (NCB), or reserve NCB operational and administrative control. The intent is to assist all levels of personnel to accomplish assigned responsibilities in an efficient manner. Divided into four parts, the instruction provides a convenient directory to locate information or procedures for the

This manual provides technical guidance from the Chief of Civil Engineers regarding the organization and operation of the NCF. The manual is divided into two distinct parts. The first part presents an overview of the NCF, including reserve NCF, and the organizational structure and functional roles of key members of an NMCB. The second part describes the mission, organizational structure, and concepts of operation for NCF units other than the NMCB, and describes the commands involved with NCF support.

| FACSO RPT SYM,NO 11201/FB221R01 | | | | | | | | | | | | | |
|---|-------------------|-----------------|--------------|---------|--------|--------|-----|-----|-----|------|-----------|---------|-----------------|
| EQUIPMENT / ATTACHMENT TAB | | | | | | | | | | | | | |
| RECORD HOLDER N57034 COMBLANT LITTLE CREEK VA | | | | | | | | | | | | | |
| LOCATION EUS: P25 EUROPEAN SEA ECHELON | | | | | | | | | | | | | |
| EQUIP CODE | USN OR ATTACHMENT | ECC DESCRIPTION | MANUFACTURER | MODEL | MFR YR | WEIGHT | LEN | WID | HIG | CUBE | MEAS TONS | SO FEET | REMARKS |
| | T20AD2003 | ANGLE DOZER | INT HAR | T020 | 70 | | 20 | 156 | 46 | 83 | 2 | 21 | N6/074;26FEB87 |
| | T20AD2039 | ANGLE DOZER | IHC | T020BP | 67 | | 135 | 27 | 103 | 103 | 2 | 25 | ONELTR5200/SER3 |
| | T20RP2006 | RIPPER | AMERTRAC | HRTD20B | 68 | 1728 | 72 | 90 | 84 | 315 | 7 | 45 | FOURMSG280922ZN |
| | T20WH2002 | WINCH DRUM | PACARFDY | T020B | 70 | | 39 | 45 | 42 | 43 | 1 | 12 | N6/074;26FEB87 |
| | 10B411016 | BUCKET 4 IN 1 | DROTT | 955K | 68 | 375 | 89 | 48 | 57 | 141 | 3 | 29 | N6/240/12AUG86 |
| | 32FL1055 | FAIRLEAD CRANE | THEW | MC32M | 66 | 285 | 33 | 30 | 29 | 17 | | 6 | HUELTRSER3706/1 |
| 030731 | 94-17102 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 191 | 85 | 75 | 705 | 17 | 112 | DD1342 DTD 8710 |
| | 94-17104 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 191 | 85 | 75 | 705 | 17 | 112 | 62MSG231306ZSEP |
| | 94-17967 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 192 | 86 | 75 | 717 | 17 | 114 | 62MSG231306ZSEP |
| | 94-17968 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 191 | 85 | 75 | 705 | 17 | 112 | 62MSG231306ZSEP |
| | 94-17969 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 192 | 86 | 75 | 717 | 17 | 114 | 62MSG231306ZSEP |
| | 94-17970 | TRK 3/4T UTIL | GMC/TRK | M1009 | 84 | 5200 | 191 | 85 | 75 | 705 | 17 | 112 | 62MSG231306ZSEP |
| 034812 | 95-23194 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG101526ZJAN |
| | 95-23198 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG101526ZJAN |
| | 95-23199 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG261407ZFEB |
| | 95-23200 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG050946ZFEB |
| | 95-23203 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG050946ZFEB |
| | 95-23207 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG050946ZFEB |
| | 95-23212 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG271506ZMAR |
| | 95-23214 | TRK 1T PICKUP | CHRYSLER | W200 | 78 | 5022 | 217 | 80 | 77 | 774 | 19 | 120 | 74MSG050946ZFEB |
| 036131 | 94-17709 | AMBULANCE HEAVY | GMC/TRK | M1010 | 84 | 7370 | 227 | 91 | 102 | 1219 | 30 | 143 | DD1342 DTD 8718 |
| 053901 | 96-39252 | TRK 2 1/2T CARG | JEEP CORP | M35A2C | 84 | 13100 | 265 | 96 | 112 | 1649 | 41 | 176 | NMCB62MSG021206 |
| | 96-39261 | TRK 2 1/2T CARG | JEEP CORP | M35A2C | 84 | 13100 | 265 | 96 | 112 | 1649 | 41 | 176 | NMCB62MSG021206 |
| | 96-39262 | TRK 2 1/2T CARG | JEEP CORP | M35A2C | 84 | 13100 | 265 | 96 | 112 | 1649 | 41 | 176 | NMCB62MSG021206 |
| | 96-39263 | TRK 2 1/2T CARG | JEEP CORP | M35A2C | 84 | 13100 | 265 | 96 | 112 | 1649 | 41 | 176 | NMCB62MSG021206 |
| | 96-39264 | TRK 2 1/2T CARG | AM GEN | M35A2C | 84 | 13100 | 265 | 96 | 112 | 1649 | 41 | 176 | NMCB62MSG021206 |
| 060700 | 96-31740 | TRK 5T TRACTOR | JEEP CORP | M52A2 | 69 | 17410 | 257 | 98 | 111 | 1618 | 40 | 174 | NMCB133LTRSER A |
| | 96-32661 | TRK 5T TRACTOR | JEEP CORP | M52A2 | 69 | 17410 | 257 | 98 | 111 | 1618 | 40 | 174 | DD1342 DTD 8819 |
| 060701 | 96-37485 | TRK 5T TRACTOR | AM GEN | M818 | 79 | 20290 | 264 | 97 | 103 | 1526 | 38 | 177 | ONE MSG 210900Z |
| | 96-37486 | TRK 5T TRACTOR | AM GEN | M818 | 79 | 20290 | 264 | 97 | 103 | 1526 | 38 | 177 | ONE MSG 210900Z |
| 064411 | 96-34576 | TRK 20T DUMP | INT H CD | F5070 | 75 | 31000 | 300 | 101 | 132 | 2315 | 57 | 210 | DD1342 DTD 8720 |
| | 96-34580 | TRK 20T DUMP | INT H CD | F5070 | 76 | 31000 | 300 | 101 | 132 | 2315 | 57 | 210 | DD1342 DTD 8720 |

Figure 1-1.—A section of an Equipment TAB A.

**CONSTRUCTION AUTOMOTIVE
SPECIAL EQUIPMENT/MANAGEMENT
INFORMATION SYSTEM**

The Construction Automotive Special Equipment/Management Information System (CASE/MIS) is a computer program used for management and procurement of all CESE. The Civil Engineer Support Office (CESO), Port Hueneme, maintains this program. Second and Third NCB equipo offices use the (CASE/MIS) program to perform on-hands management of CESE assignment, replacement, overhaul, and disposal. Information maintained by CASE/MIS is discussed in the following paragraphs.

TAB A

This equipment list is initiated by CESO and is updated by the Second and Third NCB equipo office from the CASE/MIS computer program. The TAB A is printed in any format requested by on-site managers. The basic format (fig. 1-1) is printed showing the equipment code, USN, description, and location.

Equipment Code (EC)

CESO assigns an Equipment Code (EC) for each type of equipment (see table 1-1). The primary purpose of equipment codes is to establish permanent and positive identification of each unit of CESE. For

example, you have six sedans on a TAB A with the 92-00000 series USN numbers, and one of the six sedans is equipped with air conditioning. The standard EC for sedans is 0105/01. Five of the sedans are listed under the 0105/01 EC. The sedan equipped with air conditioning is listed under a special EC of 0105/02 because the last two digits of a EC denotes any special procurement for a piece of equipment.

DISPATCHER

The transportation supervisor must possess an in-depth knowledge of the positions that work together to make the transportation pool function effectively. The dispatch office is the hub of communication for all equipment-related matters; therefore, a dispatcher must have the ability to convey information and instructions in a clear and tactful manner.

The dispatcher controls the status and location of every assigned item of equipment. The dispatcher controls the keys to all vehicle-locking devices, and all spare keys are retained in the equipment history jacket. The dispatcher also maintains all required forms and records for assigned equipment.

Equipment Status Board

The primary function of the equipment status board is to serve as a visual aid that provides a list of all equipment assigned to the unit. The board should

Table 1-1.—Equipment Codes

| EC Number | Type of Equipment |
|-------------------------|---|
| 0001/00 through 0999/99 | Cars, trucks, trailers, and other hauling equipment equipped with wheels |
| 1000/00 through 1999/00 | Includes all forklift equipment. The Naval Supply Systems Command controls the inventory in this standard allowance. |
| 2000/00 through 9999/99 | All construction equipment which includes the following: dozers; conveyors; cranes; excavating equipment; crushers; asphalt plants; concrete plants; and specialty hauling equipment; such as water, asphalt, and cement trucks |