INDEX

C A Advancement of enlisted personnel, 2-18 Capacitance-inductance-resistance bridge (SCAT 4457), 11-6 AFTS, 6-7 to 6-9 AFTS system, 6-16 to 6-17 Carrier controlled approach (CCA) equipment, 7-25 to 7-28 AIMS Mark 12 IFF system, 7-31 to 7-38 Casualty reporting, 12-10 Air-search radars, 7-19 to 7-23 Air-search three-coordinate radars, 7-23 to 7-25 Categories of maintenance, 4-17 to 4-18 Alden 519M(T)-BA Marine Radio Facsimile Classification, change in, 3-22 Weather Map Recorder, 6-23 Classified documents, destruction of, Alterations to ships and equipment, 4-28 to 4-32 3-24 to 3-25 Altitude, 7-3 to 7-4 Classified information, categories of, Ammeter, 11-3 3-20 to 3-21 Amplitude modulation, 5-4 to 5-5 Classified material, stowage of, ANORS, 12-10 3-26 to 3-29 AN/SRN-15 Beacon-Transponder Set, Closed circuit television, 10-3 8-24 to 8-28 Cognizance symbol, 15-13 AN/SRN-18, radio navigation set, 8-16 to 8-17 Combat System Readiness Review and Elec-AN/SRN-19(V)2 radio navigation set functional description, 8-14 to 8-16 tronics Examining Board, 11-15 Command security programs, 3-29 to 3-30 Antenna distribution systems, 5-39 to 5-43 Communication system equipment, intro-Antennas, 5-43 to 5-48 Antennas and propagation, 5-18 to 5-22 duction to, 5-30 Communication system operation, 6-10 AN-URN-25 radio set, 8-24 Communication systems equipment AN/UXC-4()(V) tactical digital facsimile configurations, 5-48 to 5-55 (TDF), 6-23 to 6-24 Appropriation Purchase Account (APA), 15-14 Communications equipment configuration, Assembly, 4-3 5-55 to 5-56 Communications equipment systems, Audio and video signal generators, 11-8 Automatic test equipment, 11-14 5-31 to 5-39 Communications security (COMSEC) Availabilities, 13-3 to 13-11 equipment repair and maintenance, 6-27 to 6-28 Communications theory and equipment, B 5-1 to 5-65 antenna distribution systems, 5-39 to 5-43

Bearing, 7-1 to 7-2

Broadband antennas, 5-46 to 5-47

hf multicouplers, 5-41 to 5-43

receiving multicoupler, 5-41

communications theory and	Communications theory and
equipment—Continued	equipment—Continued
antennas, 5-43 to 5-48	multiplexing, 5-13 to 5-18
broadband antennas, 5-46 to 5-47	frequency division multiplexing,
matching networks, 5-47 to 5-48	5-15 to 5-18
uhf antennas, 5-47	time-division multiplexing,
whip antennas, 5-44 to 5-46	5-13 to 5-15
wire antennas, 5-43 to 5-44	portable and pack radio equipment,
antennas and propagation, 5-18 to 5-22	5-56 to 5-59
groundwave propagation, 5-19	radio receiver R-1051/URR, 5-39
skywave propagation, 5-19 to 5-21	receivers, 5-7 to 5-13
spacewave propagation, 5-21 to 5-22	receiver characteristics, 5-8 to 5-9
communication systems equipment	single-sideband communications,
configurations, 5-48 to 5-55	5-12 to 5-13
high frequency, 5-51 to 5-53	superheterodyne receiver (AM),
low frequency, 5-48 to 5-51	5-9 to 5-10
ultrahigh frequency, 5-54 to 5-55	superheterodyne receiver (FM),
very high frequency, 5-53 to 5-54	5-10 to 5-11
communications equipment configuration,	satellite communications, 5-22 to 5-29
5-55 to 5-56	a basic satellite communication
communications equipment systems,	system, 5-22 to 5-23
5-31 to 5-39	CUDIXS link traffic, 5-29
general description, 5-34 to 5-37	CUDIXS/NAVMACS, 5-27
handset, 5-31 to 5-32	fleet satellite broadcast subsystem,
radio set control, 5-32	5-25 to 5-27
radio transmitter T-827()/URT,	fleet satellite communications,
5-37 to 5-39	5-23 to 5-24
radio transmitting set AN/URT-23(V),	general information on NAVMACS,
5-34	5-27 to 5-29
transfer switchboards, 5-32 to 5-33	shore based terminals, 5-24 to 5-25
transmitters, 5-33 to 5-34	satellites, 5-29 to 5-30
continuous wave, 5-2 to 5-3	FLTSATCOM satellite, 5-29 to 5-30
cw transmitter, 5-3	shipboard communication systems quality
designation of modulation classes, 5-18	monitoring (QMCS), 5-59 to 5-60
electromagnetic interference (EMI),	quality monitoring, 5-59 to 5-60
5-61 to 5-65	
electromagnetic compatibility,	Complex overhaul (COH), the, 13-19 to 13-20
5-61 to 5-62	Component identification, 4-11
Electronics Material Officer's Guide	Confidential, 3-21
to Shipboard Electromagnetic	Continuous wave, 5-2 to 5-3
Interference (EMI) control, 5-63 to 5-65	Controlled area, 3-20
sources of electromagnetic	Controlled equipage, 12-3 to 12-4
interference, 5-62 to 5-63	Corrective maintenance, 4-24 to 4-26
introduction to communication system	,
equipment, 5-30	Correspondence, 1-13
introduction to equipment systems,	COSAL, 15-17 to 15-25
5-30 to 5-31	COSAL development, 15-18 to 15-21
modulation, 5-3 to 5-7	COSAL production, 15-21 to 15-25
amplitude modulation, 5-4 to 5-5	CUDIXS link traffic, 5-29
frequency and phase modulation,	CUDIXS/NAVMACS, 5-27
5-5 to 5-7	Cw transmitter, 5-3

D

Defective material reporting, 12-11
Defense Logistics Agency, 14-6 to 14-7
Defense Supply Centers, 14-6 to 14-7
Departmental budgets, 14-27
Depot (shipyard) level maintenance, 13-2
Destruction of classified documents, 3-24 to 3-25
Differential voltmeter (SCAT 4208), 11-5 to 11-6
Directives, 1-12 to 1-13
Division drill and instruction schedule, 2-9 to 2-10
Dosimeter, 10-14
Duties and responsibilities of an EMO, 1-1 to 1-3

E

ECCM, 10-10 ECM, 10-10 Eight o'clock reports, 12-11 Electrical meters, 11-3 to 11-7 Electrical/electronic test equipment index, 11-2 to 11-3 Electrical/electronic test equipment, requirements for, 11-23 to 11-26 Electrical/electronic test equipments, allowance lists for, 11-26 Electromagnetic compatibility, 5-61 to 5-62 Electromagnetic interference (EMI). 5-61 to 5-65 Electromagnetic radiation, information sources on resources for hazards of, 3-14 to 3-18 Electromagnetic radiation to ordnance, hazards of, 3-14 Electromagnetic radiation to personnel, hazards of, 3-9 to 3-14 Electronic field engineers and technical assistance, 13-26 to 13-29 Electronic warfare, 10-3 to 10-10 Electronics division, mission of the, 1-1 to 1-8 Electronics division, organizing the, 1-8 to 1-12 Electronics Information Bulletin, 12-14 Electronics Installation and Maintenance Book, 12-12 to 12-14

Electronics material, 15-1 to 15-26 COSAL, 15-17 to 15-25 COSAL development, 15-18 to 15-21 COSAL production, 15-21 to 15-25 Ship's Selected Records (SSR), 15-17 to 15-18 summary, 15-25 how identification to a current NSN is accomplished aboard ship, 15-10 to 15-13 entry with noun name or physical description, 15-13 entry with NSN, 15-10 entry with part, drawing, or piece number, 15-10 to 15-13 management data lists, 15-4 to 15-10 management list-Navy (ML-N) and related publications, 15-5 to 15-7 miscellaneous sources of identification, 15-7 to 15-10 material classification, 15-1 to 15-4 Federal Catalog System, 15-1 Federal Supply Classification system, 15-1 National Stock Number (NSN) format, 15-1 to 15-2 Navy Item Control Numbers (NICNs), 15-2 to 15-4 North Atlantic Treaty Organization (NATO) use of the Federal Catalog System, 15-4 material cognizance, 15-13 to 15-17 Appropriation Purchase Account (APA), 15-14 cognizance symbol, 15-13 material identification aboard ship, 15-14 to 15-17 Navy Stock Account (NSA), the, 15-13 to 15-14 system improvements by means of automation, 15-25 to 15-26 Electronics training, 2-12 to 2-13 Emergency bills, 1-10 to 1-12 Emergency destruction, 3-25 Emergency tender availability, 13-3 Emergent essential repair requests, 13-20 EMO, duties and responsibilities of an, 1-1 to 1-3 Enlisted personnel, advancement of, 2-18 Equipage, controlled, 12-3 to 12-4 Equipment designations, 4-1 to 4-11

Equipment maintenance, levels of,
4-18 to 4-19
Equipment systems, introduction to,
5-30 to 5-31
ESM systems, 10-6 to 10-10
Exclusion area, 3-20
Expenditure of material without survey, 14-25

F

Facsimile, 6-19 to 6-26 Facsimile recorder AN/UXH-2(), 6-22 to 6-23 Facsimile recorder RD-92()/UX, 6-22 Facsimile transceivers TT-41()/TXC-1B and TT-321A/UX, 6-20 to 6-21 Federal Catalog System, 15-1 Federal Supply Classification system, 15-1 Field calibration technical representatives (FCTR), 11-20 to 11-21 Field maintenance agents (FMAs), 11-21 to 11-22 Fleet commands, 14-8 to 14-10 Fleet Improvement Logistic Support Program (FILS), 11-15 to 11-16 Fleet modernization program (FMP), 13-30 to 13-31 Fleet satellite broadcast subsystem, 5-25 to 5-27 Fleet satellite communications, 5-23 to 5-24 Fleet supply, 14-8 to 14-11 FLTSATCOM satellite, 5-29 to 5-30 Frequency and phase modulation, 5-5 to 5-7 Frequency counter (SCAT 4296), 11-10 Frequency division multiplexing, 5-15 to 5-18 Frequency measurements, 11-9 to 11-14 Frequency shift converter CV-172()/U, 6-26 Frequency standards, 11-9 to 11-10

 \mathbf{G}

General purpose electronic test equipment (GPETE), 11-23
General Services Administration, 14-7
Getting underway reports, 12-10
Government Property Lost, Damaged, or Destroyed (GPLD) Survey Certificate (DD Form 2090), 14-25 to 14-27
GPETE Assets Screening Program (GASP), 11-15

GPETE Loan Pools, 11-15 Groundwave propagation, 5-19 Group, 4-2

H

Handset, 5-31 to 5-32
Hazards of electromagnetic radiation to ordnance (HERO), 3-14
Hazards of electromagnetic radiation to personnel (HERP), 3-9 to 3-14
Height-finding radars, 7-10 to 7-11
Hf multicouplers, 5-41 to 5-43
High frequency, 5-51 to 5-53

I

Identification, Friend or Foe (IFF) equipment, 7-12 to 7-14 Identification, miscellaneous sources of, 15-7 to 15-10 Identification to a current NSN aboard ship, 15-10 to 15-13 IFF systems, 7-31 to 7-38 Indicators, 7-11 to 7-12 Information on training, sources of, 2-19 Information sources on resources for hazards of electromagnetic radiation, 3-14 to 3-18 Infrared equipment (Nancy gear), 10-11 to 10-12 Inspections of ships and equipment, 4-35 to 4-36 Installation and maintenance publications, 12-11 to 12-17 Insulation test set (megger) (SCAT 4452), 11-6 Integrated Naval/DLA supply system, 14-1 to 14-2 Intermediate level maintenance activity (IMA), 13-2 Inventory management, 14-3 to 14-5 Investigative actions required, 3-26

J

Joint electronic type designation system (JETDS), 4-4 to 4-10

K	Material responsibilities—Continued
	maintenance—Continued
Keyer adapter KY-44()/FX, 6-24 to 6-25	levels of equipment maintenance, 4-18 to 4-19
	maintenance and material management
${f L}$	systems, 4-20 to 4-24
	preventive maintenance program,
Levels of ship maintenance, 13-1 to 13-3	4-19 to 4-20
Limited area, 3-20	repair activities, 4-26 to 4-27
Long-range training schedule, 2-9	repair at the organizational level
Loran C, 8-1 to 8-2	(ships force repair), 4-26
Loran systems, 8-1 to 8-2	reporting changes to equipment
Low frequency, 5-48 to 5-51	configuration, 4-32 to 4-35
Low level teletype, 6-19	reporting aboard as EMO, 4-11 to 4-17
	relieving process, the, 4-16 to 4-17
M	MEASURE, 11-16 to 11-19
	(Megger) insulation test set (SCAT 4452),
Maintenance, 4-17 to 4-36	11-6
Maintenance and installation publications,	METER card, 11-19
12-11 to 12-17	MILSTRAP, 14-14 to 14-19
Maintenance and material management systems,	Miniature and microminiature electronic repair
4-20 to 4-24	and certification program (2M), 13-32
Maintenance, categories of, 4-17 to 4-18	Miscellaneous equipment, 10-1 to 10-17
Management data lists, 15-4 to 15-10	closed circuit television, 10-3
Matching networks, 5-47 to 5-48	electronic warfare, 10-3 to 10-10
Material classification, 15-1 to 15-4	ECCM, 10-10
Material cognizance, 15-13 to 15-17	ECM, 10-10
Material identification aboard ship, 15-14 to 15-17	ESM systems, 10-6 to 10-10
Material responsibilities, 4-1 to 4-36	infrared equipment (Nancy gear),
equipment designations, 4-1 to 4-11	10-11 to 10-12
assembly, 4-3	radiac equipment, 10-12 to 10-17
component identification, 4-11	dosimeter, 10-14
group, 4-2	ratemeter, 10-14 to 10-17
joint electronic type designation	radio direction finders, 10-1 to 10-3
system (JETDS), 4-4 to 4-10	Mission of the electronics division, 1-1 to 1-8
part, 4-4	•
set, 4-2	Mobile logistics support force (MLSF), 14-10 to 14-11
subassembly, 4-3	
system, 4-1 to 4-2	Mobile technical units, 13-27 to 13-28
unit, 4-3	Modulation, 5-3 to 5-7
maintenance, 4-17 to 4-36	Modulation classes, designation of, 5-18
alterations to ships and equipment,	Modulation rate, 6-6
4-28 to 4-32	Modulator MD-168()/UX, 6-25 to 6-26
categories of maintenance, 4-17 to 4-18	Monthly training plan, 2-9
classes of overhaul work, 4-27 to 4-28	Multimeters, 11-4 to 11-5
corrective maintenance, 4-24 to 4-26 inspections of ships and equipment,	Multiplexing, 5-13 to 5-18
4-35 to 4-36	Multiplexing equipment, 6-17 to 6-18
4-33 10 4-30	Muniplexing equipment, 0-1/ to 0-16

N
Naval Electronic Systems Command (NAVELEX), 14-2 to 14-3
Naval electronic systems command fleet liaison program, 11-21, 13-29 to 13-30
Naval Material Command, 14-2 to 14-6
Naval sea systems command detachments, 13-28 to 13-29
Naval Ships Technical Manual, 12-12
Naval shipyards, 13-11
Naval Supply Systems Command (NAVSUP), 14-3
Naval Tactical Data System (NTDS), 9-1 to 9-15 introduction to NTDS/WDS, 9-1 to 9-15 command and control, 9-14 to 9-15 development of Naval Tactical Data System, 9-3 NTDS Data Processing Subsystem (DPS), 9-5 to 9-7 NTDS data transmission subsystems, 9-12 to 9-13 NTDS display system components, 9-7 to 9-12 NTDS objective, 9-3 to 9-4 NTDS overview, 9-1 to 9-3 NTDS system configuration, 9-4 to 9-5 NTDS system overview, 9-4
Naval Tactical Data system, development of 9-3
Navigation system description, 8-10 to 8-14 Navigation theory and equipment, 8-1 to 8-28 loran systems, 8-1 to 8-2 loran C, 8-1 to 8-2
Navstar system, 8-17
Omega navigation system, 8-2 to 8-7 Omega Receiving Set AN/SRN-12, 8-7
Omega signal propagation, 8-7
principles of operation, 8-3 to 8-7
satellite navigation systems, 8-9 to 8-17
AN/SRN-19(V)2 radio navigation set

functional description, 8-14 to 8-16

navigation system description,

Ship's Inertial Navigation System,

radio navigation set, AN/SRN-18,

8-10 to 8-14

8-16 to 8-17

8-7 to 8-9

Navigation theory and equipment—Continued tactical air navigation, 8-18 to 8-28 AN/SRN-15 Beacon-Transponder Set, 8-24 to 8-28 AN/URN-25 radio set, 8-24 TACAN equipment, 8-24 TACAN principles, 8-18 to 8-24 NAVMACS, general information on. 5-27 to 5-29 Navstar system, 8-17 National Stock Number (NSN) format, 15-1 to 15-2 Navy Campus Program Afloat (PACE), 2-16 to 2-17 Navy Item Control Numbers (NICNs), 15-2 to 15-4 Navy Retail Office, 14-5 to 14-6 Navy Stock Account (NSA), the, 15-13 to 15-14 Nonexpendable shipboard equipment status log 4855/2, 12-8 Non-PERA planned regular overhaul, 13-18 to 13-19 North Atlantic Treaty Organization (NATO) use of the Federal Catalog System, 15-4 NSN, entry with, 15-10 NTDS Data Processing Subsystem (DPS), 9-5 to 9-7 NTDS data transmission subsystems, 9-12 to 9-13 NTDS display system components, 9-7 to 9-12 NTDS objective, 9-3 to 9-4 NTDS overview, 9-1 to 9-3 NTDS system configuration, 9-4 to 9-5 NTDS system overview, 9-4 NTDS/WDS, introduction to, 9-1 to 9-15

0

Octopus, 11-12 to 11-14
Ohmmeter, 11-14
Omega navigation system, 8-2 to 8-7
Omega Receiving Set AN/SRN-12, 8-7
Omega signal propagation, 8-7
Operator personnel, training of, 2-17
Organization and administration, 1-1 to 1-13
correspondence, 1-13
directives, 1-12 to 1-13
format, 1-13
promulgation and dissemination, 1-13
terminology, 1-12 to 1-13

Organization and administration—Continued Radar system, basic, 7-5 to 7-14 mission of the electronics division, Radar theory and equipment, 7-1 to 7-38 1-1 to 1-8 basic radar system, 7-5 to 7-14 duties and responsibilities of an EMO. factors affecting radar performance, 1-1 to 1-3 7-6 to 7-9 standard ship organization, 1-3 to 1-8 Identification, Friend or Foe (IFF) organizing the electronics division, equipment, 7-12 to 7-14 1-8 to 1-12 radar distribution switchboard, 7-14 emergency bills, 1-10 to 1-12 types of radar sets, 7-9 to 7-12 Watch, Quarter and Station Bill, 1-12 determining target position, 7-1 to 7-5 Organizational (shipboard) level maintenance, altitude, 7-3 to 7-4 13-1 Organizing the electronics division, 1-8 to 1-12 bearing, 7-1 to 7-2 Oscilloscopes (SCAT 4308), 11-11 radar detecting methods, 7-4 to 7-5 Overhaul, 13-13 to 13-26 range, 7-2 to 7-3 Overhaul work, classes of, 4-27 to 4-28 IFF systems, 7-31 to 7-38 AIMS Mark 12 IFF system, 7-31 to 7-38 P radar equipment, 7-14 to 7-31 air-search radars, 7-19 to 7-23 Parent tender/automatic availability, air-search three-coordinate radars, 13-3 to 13-5 7-23 to 7-25 Part. 4-4 carrier controlled approach (CCA) PERA-planned regular overhaul, 13-17 to 13-18 equipment, 7-25 to 7-28 PERAs, 13-20 to 13-22 Personnel advancement requirement (PAR), repeaters (indicators), 7-28 to 7-31 2-10 surface-search radar, 7-14 to 7-19 Personnel Qualification Standards (POS), 2-16 Radiac equipment, 10-12 to 10-17 Phase and frequency modulation, 5-5 to 5-7 Radio direction finders, 10-1 to 10-3 Portable and pack radio equipment, Radio-frequency signal generators, 11-8 to 11-9 5-56 to 5-59 Radio navigation set, AN-SRN-18, 8-16 to 8-17 Preventive maintenance program, 4-19 to 4-20 Radio receiver R-1051/URR, 5-39 Procurement and issue, 14-12 to 14-14 Product format distribution, 11-19 to 11-20 Radio set controls, 5-32 Propagation and antennas, 5-18 to 5-22 Radio teletype (RATT) systems, 6-7 Publications, 12-11 to 12-20 Radio transmission security, 3-23 to 3-24 Radio transmitter T-827()/URT, 5-37 to 5-39 O Radio transmitting set AN/URT-23(V), 5-34 Radiotelephone security, 3-24 Ouality monitoring, 5-59 to 5-60 Ouarterly training plan, 2-9 Range, 7-2 to 7-3 Ratemeter, 10-14 to 10-17 Recall schedules, 11-19 R Receiver characteristics, 5-8 to 5-9 Receivers, 5-7 to 5-13 Radar detecting methods, 7-4 to 7-5 Receiving multicoupler, 5-41 Radar distribution switchboard, 7-14 Record of qualifications at battle stations, Radar equipment, 7-14 to 7-31 2-10 to 2-12 Radar performance, factors affecting, 7-6 to 7-9

Records, 12-1 to 12-4

Radar sets, types of, 7-9 to 7-12

Records, reports, and	Safety and security—Continued
publications, 12-1 to 12-20	destruction of classified documents,
publications, 12-11 to 12-20	3-24 to 3-25
catalogs, lists, indexes, and directories,	emergency destruction, 3-25
12-17 to 12-18	routine destruction, 3-25
installation and maintenance	preparation and marking, 3-22
publications, 12-11 to 12-17	safety, 3-1 to 3-18
records, 12-1 to 12-4	enforcing safety, 3-4 to 3-7
controlled equipage, 12-3 to 12-4	hazards of electromagnetic radiation
3-M Systems, the, 12-1 to 12-3	to ordnance (HERO), 3-14
reports, 12-4 to 12-11	hazards of electromagnetic radiation
additional reports, 12-11	to personnel (HERP), 3-9 to 3-14
ANORS, 12-10	information sources on resources for
casualty reporting, 12-10	hazards of electromagnetic
defective material reporting, 12-11	radiation, 3-14 to 3-18
eight o'clock reports, 12-11	promoting safety, 3-3 to 3-4
getting underway reports, 12-10	responsibility, 3-1 to 3-2
nonexpendable shipboard equipment	safety education, 3-2 to 3-3
status log 4855/2, 12-8	safety requirements in work
ship equipment configuration account-	· · · · · · · · · · · · · · · · · · ·
ing system (SECAS), 12-4 to 12-8	areas, 3-7 to 3-9
survey report, 12-8	security, 3-18 to 3-20
trouble reports, 12-8 to 12-10	definitions of security terms, 3-20
Regular overhaul, 13-3	purpose of security program, 3-19
Relieving process, the 4-16 to 4-17	security principles, 3-19 to 3-20
Repair activities, 4-26 to 4-27, 13-1	security areas, 3-20
Repair at the organizational level, 4-26	controlled area, 3-20
Repair ships, and tenders and SIMAs,	exclusion area, 3-20
13-5 to 13-7	limited area, 3-20
	security violations and compromises,
Repair shops, 13-7 to 13-11	3-25 to 3-30
Repeaters (indicators), 7-28 to 7-31	command security programs,
Reporting aboard as EMO, 4-11 to 4-17	3-29 to 3-30
Reports, 12-4 to 12-11	investigative actions required, 3-26
Restricted availabilities, 13-3	stowage of classified material,
RF in-line wattmeter (SCAT 4958), 11-7	3-26 to 3-29
RFCS, 6-7	transmission, 3-22 to 3-23
RFCS receive system, 6-14 to 6-16	mail, 3-23
RFCS send system, 6-10 to 6-14	messenger, 3-22
Routine destruction, 3-25	transmission security, 3-23 to 3-24
	radio transmission security,
_	3-23 to 3-24
\mathbf{S}	radiotelephone security, 3-24
	speed versus security, 3-23
Safety and security, 3-1 to 3-30	Safety education, 3-2 to 3-3
categories of classified information,	Safety requirements in work areas, 3-7 to 3-9
3-20 to 3-21	Satellite communications, 5-22 to 5-29
confidential, 3-21	Satellite navigation systems, 8-9 to 8-17
secret, 3-21	Satellites, 5-29 to 5-30
special markings, 3-21	Secret, 3-21
top secret, 3-20	Security, 3-18 to 3-20
change in classification, 3-22	Security areas, 3-20

Security principles, 3-19 to 3-20 Security program, purpose of, 3-19 Security terms, definitions of, 3-20 Security violations and compromises, 3-25 to 3-30 Set, 4-2 Ship equipment configuration accounting system (SECAS), 12-4 to 12-8 Ship maintenance, levels of, 13-1 to 13-3 Ship repair facilities, 13-11 Ship superintendent, the, 13-23 to 13-24 Shipboard communication systems quality monitoring (QMCS), 5-59 to 5-60 Shipboard instructor training, 2-13 Shipboard TAMS management, 11-22 to 11-26 Shipboard training organization, 2-1 to 2-3 Ship's force maintenance and repairs, 13-2 to 13-3 Ship's Inertial Navigation system, 8-7 to 8-9 Ship's Selected Records (SSR), 15-17 to 15-18 Shipyards, naval, 13-11 Shops, 13-24 to 13-25 Shore based terminals, 5-24 to 5-25 Signal generators, 11-8 to 11-9 SIMAs and tenders, and repair ships, 13-5 to 13-7 Simplex facsimile system, 6-26 Simplex RFCS teletype system, 6-10 Single-sideband communications, 5-12 to 5-13 Skywave propagation, 5-19 to 5-21 Spacewave propagation, 5-21 to 5-22 Special purpose electronic test equipment (SPETE), 11-23 Standard ship organization, 1-3 to 1-8 Stowage of classified material, 3-26 to 3-29 Subassembly, 4-3 Superheterodyne (AM) receiver, 5-9 to 5-10 Superheterodyne (FM) receiver, 5-10 to 5-11 Supervision of shipbuilding, conversion and repair, USN command, 13-25 to 13-26 Supply Operations Assistance Program (SOAP), 14-27 to 14-30

Supply procedures afloat, 14-11 to 14-23 Supply support activities ashore, 14-5 Supply system, 14-1 to 14-30 Defense Logistics Agency, 14-6 to 14-7 Defense Supply Centers, 14-6 to 14-7 General Services Administration, 14-7 departmental budgets, 14-27 fleet supply, 14-8 to 14-11 fleet commands, 14-8 to 14-10 mobile logistics support force (MLSF), 14-10 to 14-11 integrated Naval/DLA supply system, 14-1 to 14-2 Naval Material Command, 14-2 to 14-6 inventory management, 14-3 to 14-5 Naval Electronic Systems Command (NAVELEX), 14-2 to 14-3 Naval Supply Systems Command (NAVSUP), 14-3 Navy Retail Office, 14-5 to 14-6 supply support activities ashore, 14-5 technical systems command functions, 14-2 Supply Operations Assistance Program (SOAP), 14-27 to 14-30 supply procedures afloat, 14-11 to 14-23 MILSTRIP, 14-14 to 14-19 procurement and issue, 14-12 to 14-14 UMMIPS, 14-19 to 14-23 survey, 14-23 to 14-27 expenditure of material without survey, 14-25 Government Property Lost, Damaged, or Destroyed (GPLD) Survey Certificate (DD Form 2090), 14-25 to 14-27 other survey exceptions, 14-25 Support and test equipment engineering program (STEEP), 13-31 Surface-search radar, 7-14 to 7-19 Survey, 14-23 to 14-27 Survey exceptions, other, 14-25 Survey report, 12-8 System, 4-1 to 4-2 System improvements by means of automation, 15-25 to 15-26

T	Teletypewriter and facsimile
	equipment—Continued
TACAN equipment, 8-24	low level teletype, 6-19
TACAN principles, 8-18 to 8-24	TEMPEST, 6-26 to 6-27
Tactical air navigation, 8-18 to 8-28	TEMPEST, 6-26 to 6-27
TAMS action news, 11-22	Tenders and SIMAs, and repair ships,
Target position, determining, 7-1 to 7-5	13-5 to 13-7
Technical availability, 13-3	Test equipment, 11-1 to 11-26
Technical manuals, 12-14 to 12-15	additional test equipment management
Technical training, types of Navy, 2-13 to 2-17	contacts, 11-21 to 11-22
Teletypewriter and facsimile equipment,	field maintenance agents (FMAs),
6-1 to 6-28	11-21 to 11-22
	naval electronic systems command
basic principles, 6-1 to 6-7 codes, 6-2 to 6-4	fleet liaison program, 11-21
d.c. circuits, 6-6 to 6-7	electrical/electronic test equipment index,
modes of operation, 6-4 to 6-6	11-2 to 11-3
modulation rate, 6-6	appendices, 11-3
basic systems, 6-7 to 6-19	test equipment index sections,
AFTS, 6-7 to 6-9	11-2 to 11-3
AFTS system, 6-16 to 6-17	electrical meters, 11-3 to 11-7
communication system operation, 6-10	ammeter, 11-3
multiplexing equipment, 6-17 to 6-18	capacitance-inductance-resistance
radio teletype (RATT) systems, 6-7	bridge (SCAT 4457), 11-6
RFCS, 6-7	differential voltmeter (SCAT 4208),
RFCS receive system, 6-14 to 6-16	11-5 to 11-6
RFCS send sysem, 6-10 to 6-14	(megger) insulation test set,
simplex RFCS teletype system, 6-10	(SCAT 4452), 11-6
communications security (COMSEC)	multimeters, 11-4 to 11-5
equipment repair and maintenance,	ohmmeter, 11-4
6-27 to 6-28	RF in-line wattmeter (SCAT 4958),
facsimile, 6-19 to 6-26	11-7
Alden 519M(T)-BA Marine Radio	voltmeter, 11-4
Facsimile Weather Map Recorder,	•
6-23	frequency measurements, 11-9 to 11-14
AN/UXC-4()(V) tactical digital	automatic test equipment, 11-14
facsimile (TDF), 6-23 to 6-24	frequency counter (SCAT 4296), 11-10
facsimile recorder AN/UXH-2(),	frequency standards, 11-9 to 11-10
6-22 to 6-23	octopus, 11-12 to 11-14
facsimile recorder RD-92()/UX,	oscilloscopes (SCAT 4308), 11-11
6-22	transistor tester (SCAT 4557), 11-12
facsimile transceivers TT-41()/	tube tester (SCAT 4548), 11-11
TXC-1B and TT-321A/UX, 6-20 to 6-21	general test equipment resources/ information, 11-20 to 11-21
frequency shift converter	field calibration technical
CV-172()/U, 6-26	representatives (FCTR),
keyer adapter KY-44()/FX,	11-20 to 11-21
6-24 to 6-25	shipboard TAMS management,
modulator MD-168()/UX,	11-22 to 11-26
6-25 to 6-26	allowance lists for electrical/electronic
simplex facsimile system, 6-26	test equipments, 11-26
simplex raesimine system, 0-20	test equipments, 11-20

Test equipment—Continued	Training—Continued
shipboard TAMS management—Continued	training responsibilities of the
general purpose electronic test	EMO—Continued
equipment (GPETE), 11-23	sources of information on training,
managing test equipment, 11-22	2-19
requirements for electrical/electronic	training of operator personnel, 2-17
test equipment, 11-23 to 11-26	types of Navy technical training,
responsibility definition, 11-22 to 11-23	2-13 to 2-17
special purpose electronic test	training schedules and records, 2-3 to 2-12
equipment (SPETE), 11-23	division drill and instruction
TAMS action news, 11-22	schedule, 2-9 to 2-10
your responsibility, 11-22	long-range training schedule, 2-9
signal generators, 11-8 to 11-9	monthly training plan, 2-9
audio and video signal generators, 11-8	personnel advancement requirement (PAR), 2-10
radio-frequency signal generators,	quarterly training plan, 2-9
11-8 to 11-9	record of qualifications at battle
test equipment management, 11-14 to 11-20	stations, 2-10 to 2-12
Combat System Readiness Review	TYCOM required training, 2-9
and Electronics Examining Board,	Training responsibilities of the EMO,
11-15	2-12 to 2-19
Fleet Improvement Logistic Support	Training schedules and records, 2-3 to 2-12
Program (FILS), 11-15 to 11-16	Training, sources of information on, 2-19
GPETE Assets Screening Program	Transfer switchboards, 5-32 to 5-33
(GASP), 11-15	Transistor tester (SCAT 4557), 11-12
GPETE Loan Pools, 11-15	Transmission, 3-22 to 3-23
MEASURE, 11-16 to 11-19	Transmission security, 3-23 to 3-24
METER card, 11-19	Transmitters, 5-33 to 5-34
product format distribution, 11-19 to 11-20	Trouble reports, 12-8 to 12-10
Recall Schedules, 11-19	Tube tester (SCAT 4548), 11-11
Test equipment, automatic, 11-14	TYCOM required training, 2-9
Test equipment index sections, 11-2 to 11-3	
Test equipment management, 11-14 to 11-20	
Test equipment management contacts,	U
additional, 11-21 to 11-22	
Test equipment resources/information,	Uhf antennas, 5-47
general, 11-20 to 11-21	Ultrahigh frequency, 5-54 to 5-55
3-M Systems, 4-20 to 4-24, 12-1 to 12-3	UMMIPS, 14-19 to 14-23
Time-division multiplexing, 5-13 to 5-15	Unit, 4-3
Top secret, 3-20	
Training, 2-1 to 2-19	
shipboard training organization, 2-1 to 2-3	V
training responsibilities of the EMO,	·
2-12 to 2-19	Vanabiah Carana 5 52 to 5 54
advancement of enlisted personnel,	Very high frequency, 5-53 to 5-54
2-18 electronics training, 2-12 to 2-13	Video and audio signal generators, 11-8 Voltmeter, 11-4
shipboard instructor training, 2-13	Voyage repairs, 13-3
ompoon a more action of a second	A. O abantol vo o

W

Watch, Ouarter and Station Bill, 1-12 Weapon control radars, 7-11 Whip antennas, 5-44 to 5-46 Wire antennas, 5-43 to 5-44 Work beyond capability of ship's force, 13-1 to 13-32 availabilities, 13-3 to 13-11 emergency tender availability, 13-3 intermediate maintenance activity (IMA), 13-3 parent tender/automatic availability, 13-3 to 13-5 regular overhaul, 13-3 repair ships, and tenders and SIMAs, 13-5 to 13-7 repair shops, 13-7 to 13-11 restricted availabilities, 13-3 technical availability, 13-3 voyage repairs, 13-3 electronic field engineers and technical assistance, 13-26 to 13-29 mobile technical units, 13-27 to 13-28 naval sea systems command detachments, 13-28 to 13-29 fleet modernization program (FMP), 13-30 to 13-31 levels of ship maintenance, 13-1 to 13-3 depot (shipyard) level maintenance, 13-2 intermediate level maintenance

activity (IMA), 13-2

Work beyond capability of ship's force—Continued levels of ship maintenance—Continued organizational (shipboard) level maintenance, 13-1 ship's force maintenance and repairs. 13-2 to 13-3 miniature and microminiature electronic repair and certification program (2M), naval electronic systems command fleet liaison program, 13-29 to 13-30 naval shipyards, 13-11 overhaul, 13-13 to 13-26 complex overhaul (COH), the, 13-19 to 13-20 emergent essential repair requests, 13-20 non-PERA planned regular overhaul, 13-18 to 13-19 PERAs, 13-20 to 13-22 PERA-planned regular overhaul, 13-17 to 13-18 ship superintendent, the, 13-23 to 13-24 shops, 13-24 to 13-25 supervisor of shipbuilding, conversion and repair, USN command, 13-25 to 13-26 repair activities, 13-1 ship repair facilities, 13-11 support and test equipment engineering program (STEEP), 13-31

\$ U.S. GOVERNMENT PRINTING OFFICE: 1982-546-093/24