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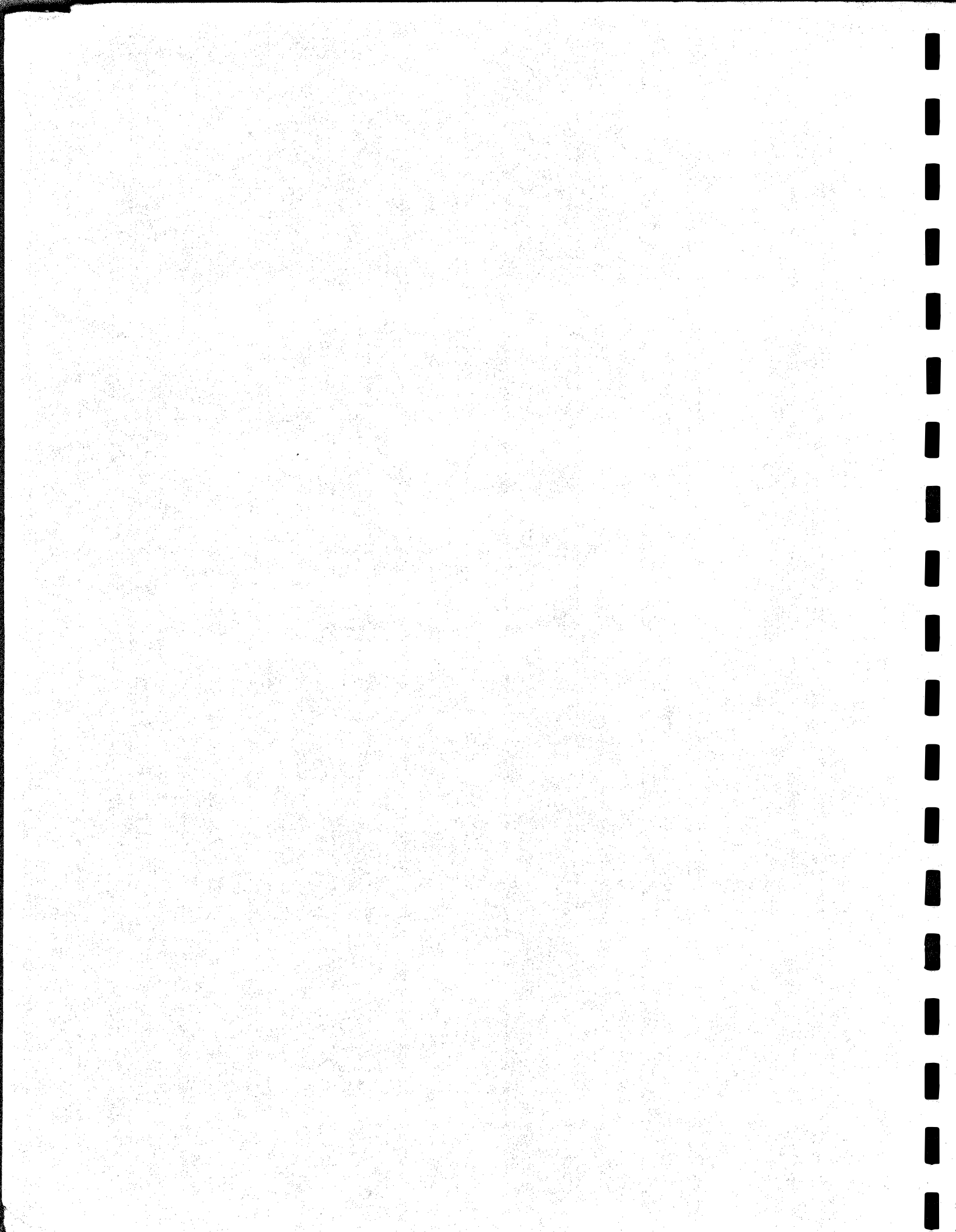
CONFIDENTIAL

# NAVY TYPE NUMBER BOOK

A LIST OF TYPE NUMBERS  
ASSIGNED TO NAVAL  
ELECTRONIC EQUIPMENT

NAVSHIPS 900,109—(FORMERLY RE 15A 101)

BUREAU of SHIPS - NAVY DEPARTMENT



BUREAU OF SHIPS,  
NAVY DEPARTMENT,  
Washington 25, D. C., 1 August 1945

1. NAVSHIPS 900,109 contains the essential descriptive data on all Naval electronic equipment to which Navy type numbers and "AN" nomenclature have been assigned. This publication supersedes "Navy Model Letter and Type Number Book" dated 1 December 1943 (RE 15A 101K) and the supplement thereto dated March 1944. All pages of these publications should be destroyed by burning but no report of such destruction is required.

2. While NAVSHIPS 900,109 is in its entirety *confidential*, all component parts and many major units are unclassified. Therefore, classification of correspondence or other reference to individual items should be considered separately in terms of existing classification directives. To facilitate the use of the book, many pages are classified *restricted* depending upon the classification of the listing involved.

3. Revisions to this publication will be issued periodically in order to keep the type number records up to date. These revisions will include all changes and additions made in the records of the now existing type numbers and also new assignments. In order that these supplements may be sure to reach the holder of the basic book, it is requested the fly-leaf receipt be mailed at once. Indicate the official mailing address on this receipt.

4. It will be noted that Navy Model Letters assigned to complete equipments are not included in this publication. Salient characteristics on all electronic equipments will be found in *List of Naval Radio, Radar, and Sonar Equipment*" (SHIPS 242A). Copies of SHIPS 242A can be obtained from the nearest Registered Publications Issuing Office.

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10. Requests for additional copies of this publication should be addressed to the Bureau of Ships.

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Vice Admiral, USN,  
Chief of the Bureau of Ships.

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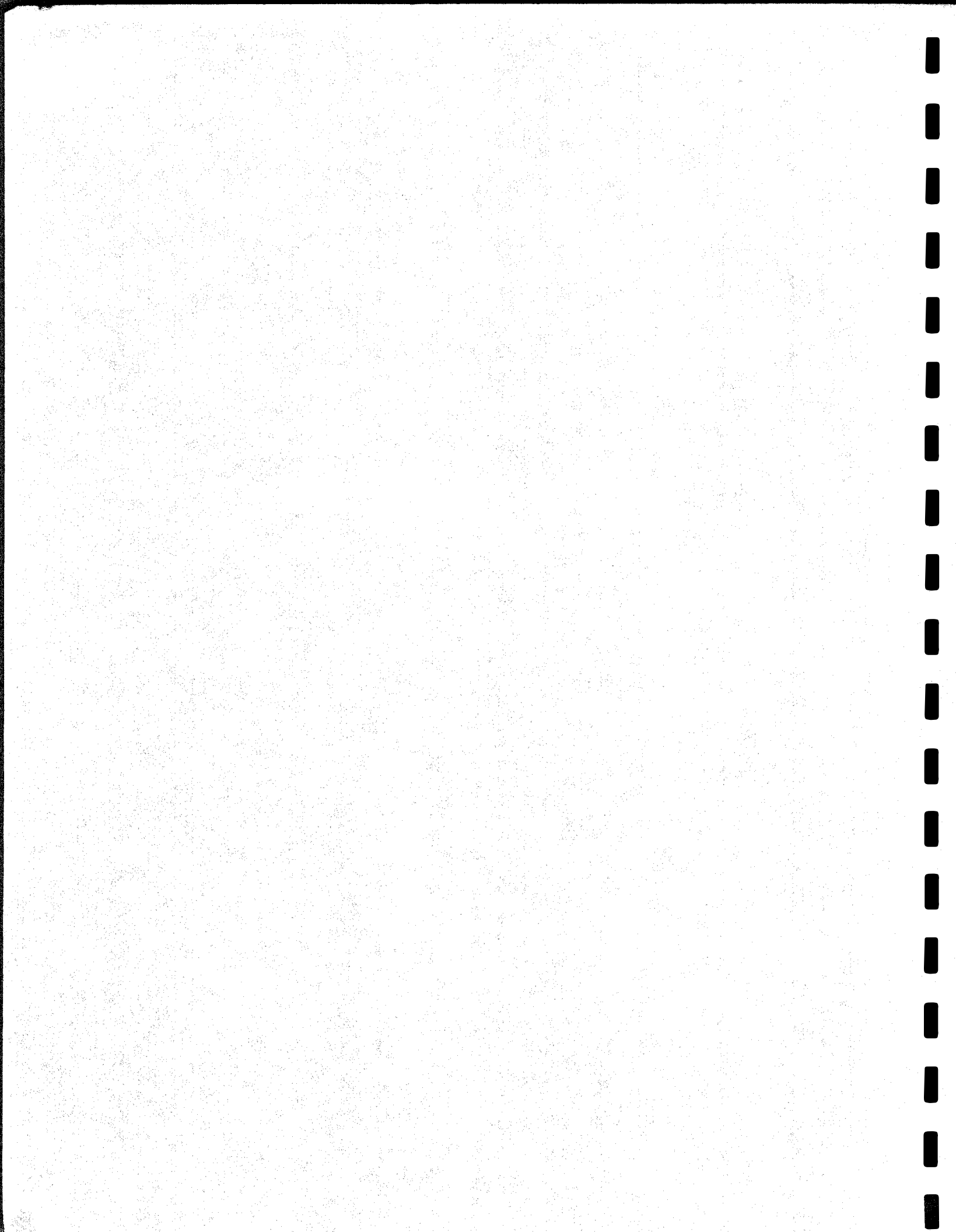
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Section I. INTRODUCTION





## SECTION I. INTRODUCTION

### A. NAVY MODEL LETTER AND TYPE NUMBER SYSTEM

The Navy Model Letter and Type Number System outlined herein has been designed to facilitate the identification of all electronic apparatus and component parts manufactured for Naval use. Also, the Navy type number system simplifies all reference to such apparatus in correspondence, procurement requisitions, and stock lists inasmuch as one Navy type number may be used in lieu of a lengthy description of the item and several commercial designations denoting items which are electrically and mechanically identical but manufactured by various activities.

#### DEFINITIONS

The items to which Navy designations are applied have been denoted by the fundamental terms listed below which are defined in the following manner:

*Component Part.*—An item not amenable to further disassembly, such as: a resistor, capacitor, relay, insulator, audio transformer.

*Major Unit.*—A group of component parts which as an assembly perform a definite function necessary to the operation of the entire equipment, such as a: radio receiver, radio transmitter, modulator.

*Accessory.*—This item is defined as being of the same form as a major unit except that it is not necessary to the operation of the equipment as originally designed: such as; headphones for an equipment which is supplied with a loud-speaker, a vibrator power unit for use with a unit having a built-in power supply, or a motor-generator set and associated magnetic controller for use with an equipment designed for a standard power supply.

*Equipment.*—A complete group of major units, plus accessories and spares, deriving power from one or more sources and delivering output to the required load. An equipment is capable of operation by itself, and is not dependent on other equipments or accessories to perform its intended purpose. Frequently, an equipment may consist of a single major unit and accessories such as a receiver with a built-in speaker and power supply.

*Assembly.*—This term has been frequently used to denote either an accessory or major unit consisting of several items such as a headset assembly comprised of two earphones, a headband, cord and plug; or a chest microphone assembly consisting of a chestplate, adjustable halter, microphone, microphone cord, switch cord, push-to-talk switch, and a plug.

The Navy system is comprised of two sets of designations:

- (1) Navy model letters.
- (2) Navy type designations.

#### ASSIGNMENT OF NAVY MODEL LETTERS

Model designations are usually assigned to complete equipments by the Bureau upon award of contract or order for equipment. If such designations are not included in the notification of award, they should be requested immediately by the contractor from the Bureau of Ships. All correspondence thereafter pertaining to such equipments should state both the contract number and equipment model designation.

Equipments identical in all respects and purchased from the same contractor will bear the same model designation. Whenever additional equipment is obtained for service use by additional purchase, a numeral shall be designated to follow the original model letters. As an example, on subsequent orders for the Model TAQ transmitting equipment, the equipment shall be identified by the following designations: TAQ-1, TAQ-2, etc. Additionally, if after acceptance by the Navy Department, the Bureau of Ships authorizes a modification of the equipment, a lower case alteration letter shall be assigned to follow the model letters. As an example; if a Model TAB-1 transmitter is modified after delivery by the addition of a harmonic suppressing circuit or unit, the model designation shall be changed to TAB-1a. An additional modification of the TAB-1a or a modification of the TAB-1 differing from the "a" modification, shall be indicated by "b" and the equipment designated known as a TAB-1b.

The Navy Model Letter series is shown in the following table:

## NAVY MODEL LETTER SYSTEM

Model letter series	Model subseries	Type equipment	Remarks
A	AB AI AM AR AS AT AY	Airborne Radio and Radar Equipment Airborne IFF Airborne Radar Intercept Airborne Radio Transmitting and Receiving Airborne Radio Receiving Airborne Search Radar Airborne Radio Transmitting Airborne Radar Altimeters	All new assignments to Airborne Equipments shall be in the "AN" (Army-Navy) Nomenclature System.
B		Ship-Shore IFF Equipment	
C	CX	All Commercial Experimental Equipment	
D	DX	Ship-Shore Radio and Radar Direction Finding Equipment: Assembled Direction Finder Equipments	DF Assemblies which when used with a standard receiver form a complete DF equipment.
E		Emergency Power Equipment	Gasoline or Diesel Engine Generator Sets.
F		Radar Fire Control Equipment	"F" Series superseded by the BUORD RADAR MARK—MOD—Series.
	See remarks		Subseries of "F" Series in use for other than Fire Control Radar.
	FP FQ FR FS	Facsimile Recording Equipment Facsimile Scanning Equipment Frequency Shift Receiver Converter Equipment Frequency Shift Keying Equipment	
G		Airborne Radio Transmitting Equipment	Classification cancelled—Reassigned "AT" Series.
H		Hoist Train Mechanism	Cancelled — Hoist Train Mechanism considered as part of an equipment.
I		Intercept Radar.	
J		Sonar—Sound Listening (Receiving)	
L		Precision Calibrating Equipment	
M		Radio Transmitting and Receiving Equipment	
R a d a r Equipt. Mark— Mod—		Radar Fire Control Equipment	

Model letter series	Model subseries	Type equipment	Remarks
N	NA NG NK NJ NM	Sonar Echo Sounding: Sonar Beacon. Echo Sounding (Rochelle Salt). Portable Echo Sounding Recording. Lightweight Echo Sounding Recording. Echo Sounding (Magnetostriction).	
O	OE OF OG OK OM OP OQ OR OS OT OV OW OZ	Measuring, Test and Operator Trainer Equipments for Models OA to OCZ inclusive. For Models OCZ on, the subseries breakdown is as follows: Xmtr and/or Rec. Analyzers. Vacuum Tube Voltmeters. Volt-Ohm-Milliammeters. Multimeters. Echo Boxes, Wavemeters, Frequency Meters (Non-Precision). Signal Generators (Non-Precision), Test Oscillators. Sonar Computers. Test Monitor Equipment. Signal and Sound Pulse or Wave Analyzers. Sonar Practice Target Equipment. Field Intensity or Standing Wave Measuring Equipment, Noise Meters. Oscilloscopes. Radar Operator Trainers. Vacuum Tube Analyzers or Testers. Sonar Test Equipment. Impedance Measuring Equipment.	
P		Automatic Transmitting and Receiving Equipment. Coding Equipment.	
Q	QA QB QC QD QF QG QJ QK QL QX	Sonar Echo-Ranging-Listening Equipments: E/R/L (Quartz). E/R/L (Rochelle Salt). E/R (Magnetostriction) with L (Rochelle Salt). Depth Determining Equipment. Teacher & Training Equipment. Console Version of "QC" Series. Console Version of "QB" Series. Scanning Sonar—Crystal. Frequency Modulated Sonar. Auxiliary Equipments to Echo Ranging Gear.	
R	RP	Radio Receiving Equipment: Panoramic Radio Adaptors.	Panoramic Radio Adaptors were included in this class up through Model REZ.
S		Search Radar Equipment.	
T	TP	Radio Transmitting Equipment: Power Amplifiers.	
U	UX	Remote Control: Mobile Remote Control.	

Model letter series	Model subseries	Type equipment	Remarks
V		Visual—PPI Repeaters.	
W	WA WB WC WD WE WF	Sonar—Combined Ranging and Sounding: Combined Sounding-Ranging (Magnetostriction). Combined Sounding-Ranging (Rochelle Salt). Combined Sounding-Ranging (M/S Sounding) (R/S & M/S Listening). Combined Sounding-Ranging (R/S Sounding) (M/S & R/S Ranging and Listening). Combined Lightweight M/S Echo Ranging with sounding feature removed. Combined Ranging-Sounding-Listening (Sonic & Super- sonic Listening using ADP crystals).	
X		Experimental (Navy Designed).	
Y		Navigation and Landing Equipment: (Other than Direction Finders) (Beacons).	
Z		Airborne Navigation and Landing	Classification cancelled— Reassigned "AY" Series

Equipments of an experimental nature are assigned model letters beginning with "X" if manufactured by a Naval organization (e. g., XA, XB, etc.), or with "C" if manufactured by a commercial company (e. g., CXA, CXB, CXAA, CXAB, etc.).

Preliminary models of equipments, subsequently to become the property of the Navy, as required by the terms of a contract or similar authorization are given an "X" prefix letter, and shall be separated from the basic designation by a dash. The purpose of a preliminary model is to test an equipment in advance of quantity production. The conclusions drawn from such tests are used in the redesign of the equipment to better meet the requirements of the Naval service. The preliminary (test) model of "Model TBU" was therefore designated "Model X-TBU".

Preliminary models of major units are identified by a special description consisting of the Navy type number assigned for the corresponding unit of the production equipment prefixed by the letter "X", i. e., CRV-X52041.

#### ASSIGNMENT OF NAVY TYPE DESIGNATIONS

Navy type designations are assigned to denote major units and also to most component parts

likely to require replacement during the normal life of the equipment involved. Such designations are assigned in order to permit ready identification by a single reference number rather than to several commercial designations for identical items.

*The Numerical System.*—The Navy type designation is composed of a Navy type number (e. g., 21426), a group of prefix letters to indicate the manufacturer of the item (e. g., CZZ) and when necessary, a suffix letter. The prefix letters and the Navy type number are separated by a dash to form the complete Navy type designation (e. g., CZZ-21426). *Prefix letters* are assigned to a manufacturer, hereby defined as the organization accomplishing the final assembly of a major unit or component part, only when the manufacturer has been delegated to actually fabricate material for Naval use. Once assigned to a manufacturer the same designating letters remain the permanent identification of the company and shall precede the Navy type numbers of all material manufactured by him. For "List of Manufacturer's Designating Letters" see Section II. The *numerical portion* of the Navy type designation is assigned in order of receipt of request, the last three or four numbers being the order, the first two being the "class" (Class 21....: Motors,

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Generators, Controllers; Class 48....: Capacitors; Class 63....; Resistors, etc., in accordance with the latest revision of Bureau of Ships Specification RE-1A-106). The *suffix letter* is assigned to differentiate units of improved or different manufacture which are entirely interchangeable as units but, due to differences in construction, are not necessarily interchangeable with respect to their integral parts. The suffix letter is separated from the numerical portion by a dash. For example:

(a) Navy type -61046-A insulator is identical to -61046 except the glaze is changed from white to chocolate color.

(b) Navy type -21426-A motor-generator set is identical to -21426 except that steel has replaced cast-iron throughout.

*The Alphabetical System.*—The above paragraph describes what may be referred to as the "Numerical System of Navy Type Designations". The designation is comprised of prefix letters, the numerical portion and the suffix letter. However, there is in existence a system which is used for units peculiar to radar equipments and special apparatus which may be called the "Alphabetical Systems of Navy Type Designations." This type is analogous to that described above except the last three or four numbers of the numerical portion are replaced with alphabetical letters starting with AAA and progressing alphabetically; such as, AAA, AAB, AAC...AAZ, ABA, ABB... etc. Also, the suffix letter is replaced by a suffix number; the first modification being indicated by the number "1", etc. A few examples of this system are CZZ-21AAA, CRV-46ABK, CRV-66ACY, CRV-66ACY-1, etc. The fundamental principles governing the application of both systems of Navy type designations are the same.

As soon as possible after a contract is assigned to any contractor for definite apparatus, he should request from the Bureau of Ships type numbers for this apparatus, in accordance with latest revision of RE 13A 595 or superseding specification.<sup>1</sup> The following data must be supplied in order that prompt and final action can be taken relevant to the issuance of the desired type numbers:

<sup>1</sup> In the event that the contractor should elect to request the assignment of Navy type designations using the "Signal Corps Manual of Standard Descriptions," this will be acceptable to the Bureau provided each request is accompanied by three copies of dimensional outline drawings as specified in paragraph (B).

(A) *Description:* The description should be a brief summary of the unit in question; it should include all input and output power data capabilities, operating frequency (range), etc., and/or similarity of this unit to others which already bear Navy type designations. All requests for Navy type designations are to be complete and detailed to such degree that the submitted data will be ample to permit satisfactory replacement from the open market. As a part of the description the manufacturer will obviously identify the particular unit by a name. If the name is satisfactory to the Bureau, it will be retained. In any event, the name used by the Bureau in the type number assignment shall be the one to be used in all references to the item.

(B) *Manufacturer's Drawings or Specifications:* Manufacturer's drawings submitted shall incorporate an "Alteration" or "Revision" chart. Any change on a drawing, however slight, is to be explained in the alteration chart, and the drawing number is to take the next higher alteration symbol, letter, or number. When drawings are not included with the request for type numbers, they must be forwarded prior to the consummation of the contract. These drawings should include dimensions of:

- (1) Detailed mounting provisions and methods thereof.
- (2) Maxima (to allow for opening of access doors, removal of chassis, etc.).
- (3) Location and description of exterior components (such as sockets, outlets, etc.) which may require replacement as a result of wear.

NOTE.—In the event that manufacturer's drawings are not available at the time that the Navy designations are requested, the description must indicate clearly the differences between the unit in question and similar units to which Navy type designations have been assigned. However, the applicable drawings shall be forwarded as soon as possible in order to complete the Bureau's records and also to clearly define the interchangeability of this unit with others, thus facilitating the assignment of new Navy type designations.

(C) *Applicable Navy Department Drawing or Specification (if known, or if required by the terms of the contract under which purchased):* When an item fails to comply with the applicable specification or drawing, the Bureau is to be fully advised on all points of non-compliance, and the authority therefore. For instance, the mere statement by

a contractor that an item is in accordance with a given Navy specification "as modified by contractor's descriptive specification, #0000..." is considered insufficient.

(D) *Manufacturer's Designation*: Style, type, class, form or other methods used by him in his records to denote the item.

When a type number has once been assigned, the design of the apparatus *shall not be changed in the slightest without notifying the Bureau*. In such notification, full details must be given of the desired change, the reason therefore and whether the new device is mechanically and/or electrically interchangeable in all respects with the previous design. The Bureau positively cannot assign a suffix letter to a type number without knowing specifically the nature of the alteration. A drawing showing and explaining the change should be sent in and a statement telling the reason for the change, the authority, and the improvement it is hoped to attain by making the change.

In the past the data called for above have not generally been forthcoming, thereby causing unnecessary delay and much unnecessary correspondence. It should be evident that such information is the only means the Bureau has to identify the material for which Navy type numbers or model letters are requested. The need for the information is also vital to establish a complete and permanent record and insure satisfactory replacement. The need for the information is so great that if it is not supplied, the omission will be considered sufficient cause to eliminate the contractor from the list of approved bidders.

All Navy model letters and type numbers are assigned by the Technical Records Section of the Design Branch, Electronics Division, Bureau of Ships.

The assignment of Navy Model and Type Designations does not constitute approval of the subject equipment or the use of the particular item in a specific equipment and does not waive any requirements of the contract involved.

#### MARKING:

Items to which Navy designations have been assigned shall be marked in the manner required by the specifications for the particular item and in accordance with the comments listed below. Wherever practicable the marking shall be placed such that the nomenclature data is readily visible after the item has been mounted.

(a) Where space permits, such as on equipments, major units, and complete assemblies, name plates in accordance with the latest revision of Bureau of Ships Specification RE 13A 516 or superseding specification shall be employed as a means of marking.

(b) Small items and parts, such as insulators, small capacitors, resistors, etc., shall be treated as follows:

(1) If the item or part is a molded glass or phenolic product, such as a glass insulator or a phenolic jack box, the type number shall be molded in either raised or depressed characters or sand blasted. If the item or part is a cast metal product the type number shall appear in raised or depressed letters.

(2) If glazed material, with no metal parts, such as porcelain, the type number shall be molded or stamped, or marked on in ink before the item or part is put through the glazing operation.

(3) If the material is made from some insulating product in sheet or rod form, the type number shall be stamped or engraved in the material.

(4) If the item or part is of soft rubber, such as gaskets, the type number should preferably be indelibly impressed or marked in ink, if this is possible without impairing the qualities of the gasket. If the gasket is of such design, however, that such a procedure is impracticable, the spare gaskets shall be supplied wrapped in small packages and these packages shall have the type number of the gasket printed on the outside.

(5) If the item or part is of metal, the type number shall be stamped in, etched, or engraved.

(6) If the item or part is too small or its nature prohibits placing a type number thereon, such as small key contacts, head-phone cords, cables, etc., the type number shall appear or be printed on the containing package, or a non-corrosive metal seal shall be attached to the item or part with the type number stamped thereon.

(7) If the item or part is supplied in a paper container such as dry cells, the type number shall be indelibly printed on the label in large conspicuous characters.

The method of assigning *serial numbers* to be included on the nameplates of the apparatus shall be in accordance with the latest revision of Bureau of Ships Specification XA-8840 "Method of Assigning Serial Numbers to Naval Radio and Underwater Sound Apparatus," or superseding specification.

Reference to the old "SE" or four digit type number system has been omitted in this issue of the Navy Type Number Book inasmuch as such designations have not been assigned within the past ten years; the system described herein has superseded the old system.

## B. "AN" NOMENCLATURE SYSTEM

The "AN" Nomenclature system is designed such that a common nomenclature may be used to denote radio and radar apparatus for the Army and Navy. This system is being applied by the Army to all new Signal Corps equipment and by the Navy to all airborne equipment and to newly developed equipments under joint procurement by the Army and Navy.

### DEFINITIONS

The items to which "AN" designations are applied have been denoted by the fundamental terms listed below and defined in the following manner:

*Set or Equipment.*—These terms have the same meaning as the term "Equipment" defined on page 1-1.

*Assembly.*—This term denotes a group of major units which perform a definite function. However, this group of units will not comprise a complete set or equipment nor perform as such.

*Major Units (or Component as used by the Signal Corps).*—Same as the term "Major Unit" defined on page 1-1.

*Accessory.*—This term has the same meaning as the term "Accessory" defined on page 1-1.

### DEFINITIONS OF INDICATORS

*Basic Indicator.*—A combination, usually of three letters, placed at the right side of the slant bar in assigning "AN" nomenclature. Example: AN/ARC, the first letter after the slant bar indicates the type of installation, the second letter indicates the type of equipment, and the third letter the general purpose for which the equipment is used.

*Component Indicator.*—A combination of one, two, or three letters placed at the left of the slant bar when assigning "AN" nomenclature to components or major units, and special groups of units.

### APPLICATION OF INDICATORS

*For Complete Sets.*—Consists of the AN system indicator "AN" followed by a slant bar and a basic indicator. Example: Telephone Central Office Set AN/TTC-4.

*For Major Units.*—Consists of a component indicator followed by a slant bar and a basic indicator indicating the general installation, type and purpose for which the unit is to be used. Example: Reel Unit RL-1/GT is a device for handling reels of field wire which is not a component of a set. "RL-1" including the component indicator "RL" designates the first design of a reel unit, and GT indicates that the reel unit is for general ground telephone use; DY-2/ARR-2 is a dynamotor first assigned to Equipment AN/ARR-2 (However, once assigned this designation shall be retained regardless of the equipment involved, "DY-2/ARR-2" may be used as a unit of "AN/ARC-2" or any other applicable set).

### MAINTENANCE, TEST, AND TOOL SETS

Major maintenance, test and tool assemblies for general tactical use for which military requirements and characteristics have been determined will be considered as "sets" and assigned nomenclature with the system indicator. Example: Maintenance Set AN/GTM-1. Tests and maintenance kits which have general use or are associated with one or more sets will be assigned component indicators rather than the system indicator.

### HOW THE "AN" SYSTEM WORKS

The "AN" Nomenclature System is based on the principle that nomenclature will consist of a name followed by a type number. The name portion will be terminology of standard engineering usage, following standard Navy nomenclature practice. The type number portion for complete



sets consists of the AN system indicator "AN" followed by a *slant bar* and a *basic indicator*. The addition of a number following the basic indicator designates a specific complete set; such as, "AN/ARR-2."

The type number for a component of a set consists of a component indicator and a number, followed by a slant bar and a basic indicator, the slant bar indicating that the item is a part of or used with the set.

The type number for a major unit consists of a component indicator and a number followed by a slant bar and a basic indicator. The basic indicator is to indicate the general installation, type, and purpose for which the unit or group is used, or as much of this information as applies. Example: Switchboard SB-1/TT is a transportable switchboard for general ground use. SB is the component indicator for a switchboard and /TT indicates that it is ground transportable telephone equipment.

In cases where a major unit is generally employed with several sets, only so much of the basic nomenclature will follow the slant bar as is necessary to indicate the extent of its use. Example: assume that test equipment is designed to be used with several airborne radio communication sets. Such an item would be indicated as follows: Test Unit TS-1/ARC. A test equipment designed to work specifically with a certain radio set would be indicated as follows: Test Unit TS-2/ARC-5 would indicate that TS-2 was originally designed to be used with Radio Set AN/ARC-5. In case a major unit developed for one set is later used in another set, the major unit will continue to bear its original nomenclature assignment, thus indicating the purpose for which it was originally developed.

The chart on the following page includes the terms, explanatory material and examples of the "AN" system.

EXAMPLE OF COMPONENT TYPE NUMBER:

**T — 2B /**

Radio Transmitter      Number Modification Letter (See Note 3)      Part of or Used With Slant

## TABLE OF COMPONENT INDICATORS

COMP. IND.	FAMILY NAME	DEFINITION OR EXAMPLE
		(Not to be construed as limiting the application of the component indicator to those items)
AB	Antenna Supports	Antenna mounts, mast bases, mast sections, towers, etc.
AM	Amplifiers	Power, audio, interphone, radio frequency, panoramic, etc.
AS	Antenna Assemblies	Complex: Arrays, parabolic type, masthead, etc.
AT	Antennae	Simple: Whip or telescopic, loop, dipole, reflector, etc.
BA	Battery, primary type	B-batteries, battery packs, etc.
BB	Battery, secondary type	Storage batteries, battery packs, etc.
BZ	Audible Signal Devices	Buzzers, gongs, horns, etc.
C	Control Articles	Control box, remote tuning control, control unit, etc.
CG	R. F. Cables and Transmission Line	R. F. cables, wave guides, etc., with terminals.
CK	Crystal Kits	A kit of crystal units.
CM	Comparators	Analyzes or compares two or more input signals.
CN	Compensators	Electrical and/or mechanical compensating, regulating or attenuating apparatus.
CP	Computers	A mechanical and/or electronic mathematical calculating unit.
CR	Crystal Units	Crystal in crystal holder.
CU	Coupling Units	Impedance coupling devices, directional couplers, etc.
CV	Converters (electronic)	Electronic apparatus for changing the phase, frequency, or from one medium to another.
CW	Covers	Cover, bag, roll, cap, radome, nacelle, etc.
CX	Cords	Cord with terminals, also composite cables of R. F. and non-R. F. conductors.
CY	Cases	Rigid and semi-rigid structure for housing or carrying equipment.
DT	Detecting Heads	Magnetic pick-up device, search coil, etc.
DY	Dynamotors	Dynamotor power units.
F	Filters	Band-pass, noise, telephone, wave traps, etc.
FN	Furniture	Chairs, desks, tables, etc.
G	Generators (See PU)	Electrical power generators without prime movers.
GO	Goniometers	Goniometers of all types.
GP	Ground Rods	Ground Rods, stakes, etc.
H	Head, Hand and Chest Sets	Also includes earphone unit.
HC	Crystal Holder	Crystal Holders.
HD	Air Conditioning Apparatus	Heating, cooling, dehumidifying, pressure units, vacuum units, etc.
ID	Indicators	Azimuth, plan position, elevation, panoramic, calibrated dials and meters, indicating light, etc.
IL	Insulators	Strain, stand-off, feed-through, etc.
J	Junction Units	Junction, jack and terminal boxes; connector panels, etc.
KY	Keying Devices	Mechanical, electrical and electronic keyers, coders, interrupters, etc.
LC	Line Construction Tools	Includes special apparatus such as cable plows, hoists, etc.
LS	Loudspeakers	Separately housed loudspeakers.
M	Microphones	Radio, telephone, throat, hand, etc.
MD	Modulators	Device for varying amplitude, frequency or phase of alternating current.
MK	Maintenance Kits or Equipments	Radio, telephone, general utility, etc.
ML	Meteorological Apparatus	Barometer, hygrometer, thermometer, scales, etc.
MT	Mountings	Mountings, racks, frames, stands, etc.
MX	Miscellaneous	Equipment not otherwise classified.
O	Oscillators	Master frequency, blocking, multivibrators, etc. For test oscillators see TS.
OA	Operating Assemblies	Operating units mounted together not otherwise covered.
PF	Pole Fittings	Cable hangar, clamp, protectors, etc.
PG	Pigeon Articles	Container, loft, vest, etc.
PH	Photographic Articles	Camera, projector, sensitometer, etc.
PP	Power Supplies	Non-rotating machine type such as vibrator pack, rectifier, thermoelectric, etc.
PT	Plotting Equipments	Except meteorological. Boards, maps, plotting table, etc.
PU	Power Equipments	Rotating power equipment except dynamotors. Electric motors, combustion type engines, etc.
R	Radio and Radar Receivers	Radio or radar receiver, combined unit such as Receiver-Indicator, etc.
RD	Recorders and Reproducers	Tape, facsimile, disc, magnetic, etc.
RE	Relay Assemblies	Electric, electronic, etc.
RF	Radio Frequency Units	Miscellaneous radio frequency apparatus.
RG	Bulk R. F. Cables and Transmission Line	R. F. cable, wave guides, etc., without terminals
RL	Reel Assemblies	Antenna, field wire, etc.
RP	Rope and Twine	Non-electrical cord, etc.
RR	Reflectors	Target, confusion, etc. Except antenna reflectors. (See AT.)
RT	Receiver and Transmitter	Radio and Radar transceivers, transmitter and receiver in one unit, etc.
S	Shelters	House, tent, protective shelter, etc.
SA	Switching Assemblies	Manual, impact, motor driven, pressure operated, etc.
SB	Switchboards	Telephone, fire control, power, panel, etc.
SM	Simulators	Flight, aircraft, target, signal, etc.
SN	Synchronizers	Equipment to coordinate two or more functions.
ST	Straps	Harness, straps, etc.
T	Radio and Radar Transmitters	Communications, range, marker beacon, interrogator, combined Transmitter-Modulator, etc.
TA	Telephone Apparatus	Miscellaneous telephone equipment.
TD	Timing Devices	Mechanical and electronic timing devices, etc.
TF	Transformers	Transformers when used as separate units.
TH	Telegraph Apparatus	Miscellaneous telegraph apparatus.
TK	Tool Kits or Equipments	Miscellaneous tool assemblies.
TL	Tools	All types except line construction.
TN	Tuning Units	Receiver, transmitter, antenna, etc.
TS	Test Equipments	Test and measuring equipment including dummy antenna, pick-up probes, etc.
TT	Teletypewriter and Facsimile Apparatus	Miscellaneous tape, teletype, facsimile equipment, etc.
U	Audio and Power Connectors	Unions, plugs, sockets, adapters, etc.
UG	R. F. Connectors	Unions, plugs, sockets, choke couplings, adapters, elbows, flanges, etc.
V	Vehicles	Carts, dollies, trucks, trailers, etc.
VS	Visual Signaling Equipments	Flag sets, aerial panels, signal lamp equipment, etc.
WD	Two Conductor Cables	Includes non-R. F. wire, cable and cordage in bulk.
WF	Four Conductor Cables	Includes non-R. F. wire, cable and cordage in bulk.
WM	Multiple Conductor Cables	Includes non-R. F. wire, cable and cordage in bulk.
WS	Single Conductor Cables	Includes non-R. F. wire, cable and cordage in bulk.
WT	Three Conductor Cables	Includes non-R. F. wire, cable and cordage in bulk.

SUMMARY OF JOINT ARMY-NAVY  
FOR COMMUNICATION AND

RESTRICTED

NAVSHIPS 900,109

# A

Airborne

# R

Radio

# C

Communication

-

# 6

Number

# A

Modification  
Letter

## TABLE OF SET OR EQUIPMENT INDICATOR LETTERS

INSTALLATION	TYPE OF EQUIPMENT	PURPOSE
A—airborne (installed and operated in aircraft).	B—pigeon.	A—auxiliary assemblies (not complete operating sets).
C—air transportable (designed to be air transportable as stated in specification or military characteristics).	C—carrier (wire).	B—homing.
F—ground, fixed.	F—photographic.	C—communications (receiving and transmitting).
G—ground, general ground use (includes two or more ground installations).	G—teletype (wire).	D—direction finder.
M—ground, mobile (installed as operating unit in a vehicle which has no function other than transporting the equipment).	I—interphone and public address.	G—gun directing.
P—ground, pack or portable (horse or man).	K—telemetering.	H—recording (photographic and sound).
S—shipboard.	L—searchlight control.	M—maintenance and test assemblies (including tools).
V—ground, vehicular (installed in vehicle designed for functions other than carrying radio equipment, etc., such as tanks).	M—meteorological.	N—maintenance and test assemblies (including altimeters, beacons, compass and instrument landing).
T—ground, transportable.	N—sound.	P—reproducing (photographic and sound).
U—general utility (includes two or more general installation classes, airborne, shipboard and ground).	P—radar.	Q—special, or combination of types.
	R—radio.	R—receiving.
	S—special types (heat, magnetic, etc.) or combination of types.	S—search and/or detecting.
	T—telephone (wire).	T—transmitting.
	V—visual and light.	W—remote control.
	X—facsimile or television.	X—identification and recognition.

## EXAMPLES OF AN TYPE NUMBERS

TYPE NUMBER	INDICATES
AN/FRC-1( )	General reference set nomenclature of fixed ground radio communications set No. 1
AN/MPS-2(XE-1)	Evans Signal Laboratory developmental model No. 1 of ground mobile radar search set No. 2.
AN/APS-3-T1	Trainer No. 1 for airborne radar search set No. 3.
T-78( )/SPT-6	General reference component nomenclature for transmitter No. 78, part of or used with shipboard radar transmitting set No. 6.
TK-5/FR	Tool kit No. 5 for fixed ground radio equipment, not part of a specific set.

## NOTES

- The system indicator "AN" does not mean that both the Army and Navy use the equipment but simply that the type number was assigned in the AN System.
- In the AN Nomenclature System, nomenclature consists of a name followed by a type number. The name will be terminology of standard engineering usage. The type number will consist of indicator letters shown on this chart and an assigned number.
- Modification suffix letters will be assigned for each modification of a component when detail parts and subassemblies used therein are no longer interchangeable, but the component itself is interchangeable electrically and mechanically.
- The type number of an independent major unit not part of or used with a specific set will consist of a component indicator, a number, the slant and such of the set or equipment indicator letters as apply. Example: SB-5/PT would be the type number of a portable telephone switchboard for independent use.

## NOMENCLATURE SYSTEM ("AN" SYSTEM) ASSOCIATED EQUIPMENT

NAVSHIPS 900,109

## NUMBER, MODIFICATION NUMBERS: AND ADDITIONAL INDICATORS

Modification letters will be assigned for each modification not affecting interchangeability of the sets or equipments as a whole, except that in some special cases they will be assigned to indicate functional interchangeability and not necessarily complete electrical and mechanical interchangeability.

The suffix letters, X, Y, and Z will be used only to designate a set or equipment modified by changing the input voltage, phase or frequency. X will indicate the first change, Y the second, Z the third, XX the fourth, etc., and these letters will be in addition to other modification letters applicable.

## ADDITIONAL INDICATORS

*Experimental Sets.*—In order to identify a set or equipment of an experimental nature with the development organization concerned, the following indicators will be used within the parentheses:

XA—Aircraft Radio Laboratory.  
 XC—Coles Signal Laboratory.  
 XD—Detroit Signal Laboratory.  
 XE—Evans Signal Laboratory.  
 XL—Long Branch Signal Laboratory.  
 XM—Squier Signal Laboratory.  
 XN—Navy.  
 XO—Eatontown Signal Laboratory.  
 XP—Army Pictorial Service.  
 XR—NDR C—Division 14.  
 XT—Toms River Signal Laboratory.  
 XW—Watson Laboratories.

Example: Radio Set AN/ARC-3( ) might be assigned for a new airborne radio communication set under development. The cognizant development organization might then assign AN/ARC-3(XA-1), AN/ARC-3(XA-2), etc., type numbers to the various sets developed for test. When the set was considered satisfactory for use, the experimental indicator would be dropped and procurement nomenclature AN/ARC-3 would be assigned thereto.

*Training Sets.*—A set or equipment designed for training purposes will be assigned type numbers as follows:

1. A set to train for a specific basic set will be assigned the basic set type number followed by a dash, the letter T, and a number. Example: Radio Training Set AN/ARC-6A-T1 would be the first training set for Radio Set AN/ARC-6A.

2. A set to train for general types of sets will be assigned the usual set indicator letters followed by a dash, the letter T, and a number. Example: Radio Training Set AN/ARC-T1 would be the first training set for general airborne radio communication sets.

*Parentheses Indicator.*—A nomenclature assignment with parentheses, ( ), following the basic type number is made to identify an article generally, when a need exists for a more general identification than that provided by nomenclatures assigned to specific designs of the article. Examples: AN/GRC-5( ), AM-6( )/GRC-5, SB-9( )/GG. A specific design is identified by the plain basic type number, the basic type number with a suffix letter, or the basic type number with an experimental symbol in parentheses. Examples: AN/GRC-5, AN/GRC-5A, AN/GRC-5(XC-1), AM-6B/GRC-5, SB-9(XO-3)/GG.

## NOMENCLATURE POLICY

- AN Nomenclature will be assigned to:
    - Complete sets of equipment and major components of military design.
    - Groups of articles of either commercial or military design which are grouped for a military purpose.
    - Major articles of military design which are not part of or used with a set.
    - Commercial articles when nomenclature will facilitate military identification and/or procedures.
  - AN Nomenclature will not be assigned to:
    - Articles cataloged commercially except in accordance with Paragraph 1.d.
    - Minor components of military design for which other adequate means of identification are available.
    - Small parts such as capacitors and resistors.
    - Articles having other adequate identification in American War Standard or Joint Army-Navy Specifications.
- IMPORTANT:** All personnel are cautioned against originating or changing any part of any nomenclature assignment, including modification letters, without authorization.

RESTRICTED

