

HOW TO IDENTIFY SURPLUS GEAR



AN/ARC-3?
SCR/274-N?

R4/274-2?

TBX?
 APS-13?

By **KEN GREENBERG**

MOST ELECTRONICS experimenters and hams recognize the letter-number nomenclatures that refer to common pieces of military surplus equipment, but how many know what these designations mean? Actually, the designations—although complicated and confusing—can usually tell you a great deal about what the equipment is and how it was originally used, so the various systems of nomenclature are well worth knowing.

Army Signal Corps System. Much surplus equipment available today is iden-

tified by the old U. S. Army Signal Corps system which has been discontinued. The small chart on this page gives some of the most common prefix letters used and their meanings.

One trouble with this system was that there was no way of knowing from equipment designations which pieces of gear belonged to a complete setup. For example, the nomenclature doesn't tell you that the BC-624 is the receiver in the SCR-522, or that the BC-625 is the transmitter in the same installation.

Navy Model System. Although this marking system is no longer used with newly-procured equipment, there is still much Navy surplus around that carries

Signal Corps System (Discontinued)

| | |
|---------------------------|---------------------------|
| AN—Antenna | RA—Rectifier power supply |
| BC—Basic component | SCR—Set, complete radio |
| DM—Dynamotor | TS—Test set |
| FT—Mount, rack or adapter | VT—Vacuum tube |
| PL—Plug | |

Navy Model System

| | | |
|---|--|--|
| A—Airborne installation | MARK—Fire control radar | W—Combined sonar ranging and sounding |
| B—IFF | N—Sonar navigational aid (echo sounding) | X—Experimental |
| CX—Commercial experimental | O—Operator training and measuring | Y—Navigational and landing aid |
| D—Radio direction finding | P—Automatic transmitting and receiving | Z—Navigational and landing aid (superseded by "Y") |
| E—Emergency power | Q—Sonar ranging | QA—Quartz steel* |
| FS—Frequency shift keying | R—Radio receiving | QB—Rochelle salt* |
| G—Aircraft transmitting (superseded by "A") | S—Search radar | QC—Magnetostriction* |
| J—Sonar listening (receiving) | T—Radio transmitting | QD—Depth determining* |
| K—Sonar transmitting | U—Remote control (automatic keyer) | QG—Magnetostriction (split-lobe)* |
| L—Precision calibrating | V—Radar repeater | |
| M—Combined radio transmitting and receiving | | |

*In sonar equipment, these designations follow the first letter which indicates the general use of the equipment. The "Q" designations refer to the type of projector used.

Joint Nomenclature ("AN") System

Installation

A—Airborne (installed and operated in aircraft)
 B—Underwater mobile (submarine)
 C—Air transportable
 D—Pilotless carrier
 F—Ground, fixed
 G—Ground, general ground use
 K—Amphibious
 M—Ground mobile
 P—Ground pack or portable (man or horse)
 S—Water surface craft
 T—Ground transportable
 V—Ground vehicular (tanks, jeeps, etc.)
 U—General utility (airborne, shipboard, and ground)
 W—Underwater, fixed

Type of Equipment

A—Invisible light, heat radiation
 B—Pigeon

C—Carrier (wire)
 F—Photographic
 G—Telegraph or teletype (wire)
 I—Interphone and public address
 K—Telemetering
 M—Meteorological
 N—Sound in air
 P—Radar
 Q—Underwater sound
 R—Radio
 S—Special type (magnetic, etc.)
 T—Telephone (wire)
 V—Visual and visible light
 X—Facsimile or television

Purpose

A—Auxiliary assembly (not complete set)
 B—Bombing
 C—Communication (receiving and transmitting)
 D—Direction finder
 G—Gun directing

H—Recording (sound, photographic, etc.)
 J—Countermeasure (receiving and transmitting)
 L—Searchlight control
 M—Maintenance and test assembly (includes tools)
 N—Navigational aid (altimeter, beacon, compass, instrument landing, and depth sounding)
 P—Reproducing (sound and photographic)
 Q—Special or combination of types
 R—Receiving or listening
 S—Detecting and/or range and bearing
 T—Transmitting
 W—Remote control
 X—Identification and recognition

"AN" System Component Indicator Letters

AB—Support, antenna
 AM—Amplifier
 AS—Antenna assembly
 AT—Antenna
 BA—Battery, primary type
 BB—Battery, secondary type
 BZ—Signal device, audible
 C—Control article
 CA—Commutator assembly, sonar
 CB—Capacitor bank
 CG—Cable and transmission line, r.f.
 CK—Crystal kit
 CM—Comparator
 CN—Compensator
 CP—Computer
 CR—Crystal
 CU—Coupling device
 CV—Converter (electronic)
 CW—Cover
 CX—Cord
 CY—Case
 DA—Antenna, dummy
 DT—Detecting head
 DY—Dynamotor
 E—Hoist assembly
 F—Filter
 FN—Furniture
 FR—Frequency measuring device
 G—Generator
 GO—Goniometer
 GP—Ground rod
 H—Head, hand, and chest set
 HC—Crystal holder
 HD—Air conditioning apparatus

ID—Indicating device
 IL—Insulator
 IM—Intensity measuring device
 IP—Indicator, cathode-ray tube
 J—Junction device
 KY—Keying device
 LC—Tool, line construction
 LS—Loudspeaker
 M—Microphone
 MD—Modulator
 ME—Meter, portable
 MK—Maintenance kit or equipment
 ML—Meteorological device
 MT—Mounting
 MX—Miscellaneous
 O—Oscillator
 OA—Operating assembly
 OS—Oscilloscope, test
 PD—Prime driver
 PF—Fitting, pole
 PG—Pigeon article
 PH—Photographic article
 PP—Power supply
 PT—Plotting equipment
 PU—Power equipment
 R—Radio and radar receiver
 RD—Recorder and reproducer
 RE—Relay assembly
 RF—Radio frequency component
 RG—Cable and transmission line, bulk r.f.
 RL—Reel assembly
 RP—Rope and twine

RR—Reflector
 RT—Receiver and transmitter
 S—Shelter
 SA—Switching device
 SB—Switchboard
 SG—Generator, signal
 SM—Simulator
 SN—Synchronizer
 ST—Strap
 T—Radio and radar transmitter
 TA—Telephone apparatus
 TD—Timing device
 TF—Transformer
 TG—Positioning device
 TH—Telegraph apparatus
 TK—Tool kit or equipment
 TL—Tool
 TN—Tuning unit
 TS—Test equipment
 TT—Teletypewriter and facsimile apparatus
 TV—Tester, tube
 U—Connector, audio and power
 UG—Connector, r.f.
 V—Vehicle
 VS—Signaling equipment, visual
 WD—Cable, two-conductor
 WF—Cable, two-conductor
 WM—Cable, multiple-conductor
 WS—Cable, single-conductor
 WT—Cable, three-conductor
 ZM—Impedance measuring device

the Navy Model system nomenclature. The assignment of letters under this system depended on the primary function of the equipment, the first letter indicating its basic purpose. (One exception is the prefix "MARK" which applies to Bureau of Ordinance equipment.) The large chart on page 66 gives the meanings of these first letters.

The second (and third) letters in these naval designations simply indicate the order in which the designations were assigned (with the exception of "X" which means "experimental"). "TA," for example, would indicate the first transmitting equipment assigned, "TB" the next, and so on. Triple letters (e.g., TAA) are used when the alphabet is exhausted.

The "AN" System. Today, all services are using the Joint Nomenclature ("AN") system. Complete systems are designated by three equipment indicator letters that follow "AN/", and signify kind of installation, type of equipment, and its purpose (see chart at top of page 67).

As an example, the AN/ARC-3 can be identified as follows: "A" indicates an aircraft installation, "R" means that it's

radio equipment, "C" shows that it is used for communication, and the number "3" tells you this was the third piece of equipment designated with the series of letters "ARC."

Incidentally, the "AN" indicators do not mean that the Army, Navy and Air Force all use the same equipment, but simply that the nomenclature was assigned using the "AN" system.

Component Indicators. Independent units that are not part of, or used with, specific sets, have a nomenclature that consists of a component indicator letter (see chart at bottom of page 67), a number, a slant (/), and whatever equipment indicator letters from the top chart on page 67 apply. For example, R65/APN-9 refers to a radar receiver used as airborne radar navigational equipment; this particular unit happens to be a LORAN receiver/indicator.

The next time you see some surplus equipment advertised only by the military designation, check the information presented here. Who knows? It may save you from buying a useless piece of junk, or may put you on the trail of a silk purse disguised as a sow's ear! -30-