1-TBS-7: Same as 1-TBS

2-TBS-7: Same as 2-TBS

3-TBS-7: Same as 3-TBS

1-TCK: Brush Replacement Kit Correction Material: See NS98764 A FA-0.5 NS98764

A FA-0.2 N398704

None

SERIAL: All

IDENTITY: Replace brushes on 12V M/G set when worn.

2-TCK: Not applicable

1-TCK-1: Same as 1-TCK

2-TCK-1 thru 3-TCK-1: Not applicable

1-TCK-2: Same as 1-TCK

2-TCK-2 thru 3-TCK-2: Not applicable

1-TCK-3: Same as 1-TCK

2-TCK-3; Not applicable

3-TCK-3: Addition of Protective Meter Cover

2-A FA-1 NS981104

SERIAL: All before 6-24-44

IDENTITY: Presence of protective cover.

1-TCK-4: Same as 1-TCK

2-TCK-4: Replacement of Filament Transformer

Correction Material: See NS98764 A FA-4 NS98764

None

None

SERIAL: All before 6-24-44

IDENTITY: Filament transformer, T-303, NT CG-301111 replaced.

3-TCK-4: Not applicable

1-TCK-5: Same as 1-TCK

2-TCK-5: Not applicable

3-TCK-5: Same as 3-TCK-3

1-TCK-6: Not applicable

2-TCK-6: Same as 2-TCK-4

3-TCK-6: Not applicable

1-TCK-7: Same as 1-TCK

2-TCK-7: Not applicable

3-TCK-7: Same as 3-TCK-3

I-TCS: Modification of Relay Circuit

Correction Material: See NS98761

A FA-1 NS98761

None

SERIAL: All

IDENTITY: A jumper is connected across two outside bottom contacts of K-101.

2-TCS: Modification of Tap Switch

Correction Material: See NS98761

A FA-2 NS98761

None

SERIAL: All

IDENTITY: Plugs are placed in blank holes in wafers on switches S-101, S-102, S-103, and S-104.

3-TCS: Modification of Loading Coils

Correction Material: See NS98761

NS98761 None

SERIAL: All

IDENTITY: Drop of solder placed at each end of roller coil.

4-TCS: Not applicable

FA-l

5-TCS: Superseded by F.C. 9

6-TCS: Noise Limiter, Type-50159

Correction Material: See NS98761

YF-3 NS98761

None

SERIAL: All

IDENTITY: Coupling unit (noise limiter) added in 2nd det. stage in place of 12SQ7. Function sw. with 'NL' position, and nameplate added in place of recvr 'on-off' switch.

7-TCS: Cancelled

8-TCS: Replacement of R-303 and R-304

Correction Material: See NS98761

SERIAL: All

IDENTITY: R-303 and R-304 are changed from 12.5K, 12 watt to 12K, 40 watt resistors.

9-TCS: Installation of Radio Interference Elimination Kit

A FA-3 NS

F5820-301-

7657

SERIAL: All

IDENTITY: FILTER, CAYH-10597, is installed in 12V DC power line to dynamotor power supply.

10-TCS: Substitution of Aluminum Cabinet for Steel

Correction Material: See NS98524

A FA-2 NS98524

F5820-302-

4641

SERIAL: As directed by BUSHIPS IDENTITY: Aluminum cabinets installed

1-TCS-1: Same as 1-TCS

2-TCS-1: Same as 2-TCS

3-TCS-1: Same as 3-TCS

4-TCS-1: Not applicable

6-TCS-4: Same as 6-TCS
7-TCS-4: Cancelled
8-TCS-4: Same as 8-TCS
9-TCS-4: Same as 9-TCS
10-TCS-4: Same as 10-TCS
1-TCS-5: Same as 1-TCS
2-TCS-5: Same as 2-TCS
3-TCS-5: Same as 3-TCS
4-TCS-5: Not applicable
5-TCS-5: Superseded by F.C. 9
6-TCS-5: Same as 6-TCS
7-TCS-5: Cancelled
8-TCS-5: Same as 8-TCS
9-TCS-5: Same as 9-TCS
10-TCS-5: Same as 10-TCS
1-TCS-6: Same as 1-TCS
2-TCS-6: Same as 2-TCS
3-TCS-6: Same as 3-TCS
4-TCS-6: Not applicable
5-TCS-6: Superseded by F.C. 9
6-TCS-6: Same as 6-TCS
7-TCS-6: Cancelled
8-TCS-6: Same as 8-TCS
9-TCS-6: Same as 9-TCS
10-TCS-6: Same as 10-TCS
1-TCS-7: Same as 1-TCS
2-TCS-7: Same as 2-TCS
3-TCS-7: Same as 3-TCS
4-TCS-7: Not applicable
5-TCS-7: Superseded by F.C. 9
6-TCS-7: Same as 6-TCS

5-TCS-10: Superseded by F.C. 9

6-TCS-10: Same as 6-TCS

7-TCS-10: Cancelled

3-TCS-13: Same as 3-TCS

4-TCS-13: Not applicable

5-TCS-13: Superseded by F.C. 9

6-TCS-13: Same as 6-TCS

7-TCS-13: Cancelled

8-TCS-13: Same as 8-TCS

9-TCS-13: Same as 9-TCS

10-TCS-13: Same as 10-TCS

1-TCS-14: Not applicable

2-TCS-14: Same as 2-TCS

3-TCS-14: Same as 3-TCS

4-TCS-14: Cancelled

5-TCS-14: Superseded by F.C. 9

6-TCS-14: Same as 6-TCS

7-TCS-14: Not applicable

8-TCS-14: Same as 8-TCS

9-TCS-14: Same as 9-TCS

10-TCS-14: Same as 10-TCS

1-TCS-15: Not applicable

2-TCS-15: Same as 2-TCS

3-TCS-15: Same as 3-TCS

4-TCS-15: Not applicable

5-TCS-15: Superseded by F.C. 9

6-TCS-15: Same as 6-TCS

7-TCS-15: Cancelled

8-TCS-15: Same as 8-TCS

9-TCS-15: Same as 9-TCS

10-TCS-15: Same as 10-TCS

1-TCS-16: Not applicable

2-TCS-16: Same as 2-TCS

3-TCS-16: Same as 3-TCS

4-TCS-16: Not applicable

5-TCS-16: Superseded by F.C. 9

6-TCS-16: Same as 6-TCS

7-TCS-16: Cancelled

8-TCS-16: Same as 8-TCS

9-TCS-16: Same as 9-TCS

10-TCS-16: Same as 10-TCS

1-TCZ: Replacement of 28 Volt Generator Brushes

Correction Material: None

FA-0.5 NS98765

F5820-310-

9353C2

SERIAL: All w/21101 AC pwr units

IDENTITY: New brushes are stamped 113 into the side of the metal spring tab.

2-TCZ: Removal of Ground on Remote Control Col-23410

Correction Material: None

FA-0.5 NS98765 SERIAL: All u/w std Navy rcvrs None

IDENTITY: Removal of the ground from the input transformer in the remote control unit.

1-TCZ-1: Same as 1-TCZ except

SERIAL: All

2-TCZ-1: Same as 2-TCZ

1-TCZ-2: Not applicable

2-TCZ-2: Same as 2-TCZ

1-TD-855/WLR-6(V): Wiring Change to Power Input Ground Correction Material: T-1, NE0967-LP-207-3271 to

NE0967-207-3270

NE0967-LP-207-3710 4-A FA-1

EIC N81W000

SERIAL: All

IDENTITY: This field change may be identified by pin B on the power input connector (P504) being the ground pin.

1-TD-901/U: Wiring Change to Provide One MPPS Output During Switchover to Standby Oscillator

Correction Material: T- to NS0969-249-6010

4-A FA-1 **EIB 869**

SERIAL: All serial numbers

IDENTITY: Presence of a wire connected to pin A6 of A ! A 102.

2-TD-901/U: Addition 1PPM Output Driver Circuit Card

Correction Material: Supplement 2, NE0969-246-5012 to NE0969-246-5010

1-A FA-4 NS0969-246-5030

SERIAL: Only those equipments to be used with AN/GGC-15(V) Data Preparation Data

IDENTITY: The IPPM output driver circuit card will be installed in the spare card socket previously utilized to store printed circuit card extender (2119-40113-61).

1-TD-1066(XG-1)/SYQ-6(V): Data Accumulation and Distribution System (TD-1066) Power Control Panel Assembly and

nent changes in this guide are identified by the letters CH (or Chg.) followed by a dash and the assigned number and publication number; for example, CH-3 NSO967-LP-042-0073 or Chg. 3 NSO967-LP-042-0073.

- f. Publications Material the instruction information required to accomplish a field change and the data required to correct applicable manuals, drawings, charts, and other equipment systems publications.
- g. Publications Package a collection of publications material in a single cover or envelope.

3-4 FIELD CHANGE TYPES AND CLASSIFICATION

Field changes are identified by number and applicable equipment designation. They are classified by type and class designations which appear in the main body of the field change bulletin.

- a. Types of Field Changes. Field changes are designated as Type I, Type II, Type III, or Type IV. The type designation affords an abbreviated method of indicating material and publication matter contained in a field change kit. It is not intended that Planned Maintenance System (PMS) documentation be included as part of the Publications material or publications package. If corrections are needed, updated PMS, identified to the appropriate field change, will be provided directly to the ship for use and incorporation as part of the ship's authorized PMS package. PMS documentation will be updated and distributed in accordance with OPNAVINST 4790.4.
- (1) A Type I Field Change Kit consists of a publications package, containing field change bulletins, publications correction material and all parts, material, and special tools required to accomplish the change to one equipment and to revise existing equipment nameplates, publications, and charts.
- (2) A Type II Field Change Kit consists of only the publication

material required to accomplish the field change to the equipment(s) and to revise the existing equipment publication and charts. The Type II field change information may be in the form of a publications package or may be promulgated by means of a published article. Type II field changes may require that parts be requisitioned from stock.

- (3) A Type III Field Change Kit consists of a publication package, containing field change bulletins and publications correction material, and only a portion of the parts, materials, and special tools required to accomplish the field change to one equipment and to revise existing nameplates, publications, and charts.
- (4) A Type IV Field Change Kit consists of only the publications material required to accomplish the field change to the equipment(s) and to revise existing equipment publications and charts. The Type IV field change information will be in the form of a publications package, but may be promulgated in advance by means of a published article. Type IV field changes do not require the use of parts, materials, or special tools.
- b. Classes of Field Changes. There are three class designations (A, B, and C) for field changes, one of which is assigned to each field change kit. They provide an abbreviated method of indicating the funding and installation responsibility.
- (1) A Class A field change is approved for forces afloat or station personnel accomplishment; no installation funding is required.

NOTE

Approval of Class A field changes for forces afloat accomplishment indicates only that the work content is within their technical capability. The Class A designation applied to certain field changes does not constitute installation authorization, nor limit

accomplishment to forces afloat; authorization and level of accomplishment are considered to be a forces afloat prerogative. On this basis, no NAVSEA installation funding (for industrial assistance in accomplishing Class A changes) is provided or budgeted,

COMMUNICATIONS

(2) A Class B field change requires Fleet installation funding. Changes to shipboard equipment are approved for accomplishment by Naval Shippards, tenders or repair facilities under conditions stated in the field change bulletin, when authorized by type commanders. Changes to NAVSEA-cognizant technical training equipment at Navy training activities are approved for accomplishment and funded for installation by the Chief of Naval Education and Training.

NOTE

Except for Class B Field changes presently under procurement, in the supply system, or in Fleet installation planning stage, this type of field change will no longer be issued.

(3) A Class C field change normally requires industrial assistance for installation, and requires the appropriate Systems Command installation funding. This class of field change includes, but is not limited to, changes of an operational improvement nature which are to be authorized and accomplished by SHIPALT in the Fleet Modernization Plan. Changes to NAVSEA-cognizant technical training equipment at Navy training activities are approved for accomplishment and funded for installation by cognizant Navy Program/Project/Ship Logistic Managers.

3-5 INSTRUCTIONS REGARDING ACCOMPLISHMENT

a. Accomplishment of applicable field changes is essential to the proper functioning, identity, and logistic support of electronics equipment.

- b. Record of Accomplishment: Personnel accomplishing a field change shall record its completion by stamping (or imprinting) the number of this field change on the Field Changes Accomplished Plate (COG I S/N 0264-LP-085-000). If the Record of Field Changes Card, NAVSEA 537 (COG I S/N 0105-LF-601-0000), is used, record the accomplishment of this field change on the card in addition to stamping (or imprinting) the field change number on the Field Changes Accomplished Plate.
- c. Report of Accomplishment (Shipboard Equipment): Personnel accomplishing a field change shall report its completion by completing a copy of the Ship's Maintenance Action Forms (2-Kilo), OPNAV 4790/2K, in accordance with Volume 2 of the Ship's 3-M Manual, OPNAVINST 4790.4.
- d. Report of Accomplishment (Shore-Based Equipment: Personnel accomplishing a field change shall report its completion in accordance with the 3-M Manual for the Naval Security Group (NAVSEC-GRUINST 4790.4); the 3-M Manual for Shore Naval Communications (COMNAVTELCOMINST 4790.1A); or as otherwise directed in the Field Change Bulletin.

3-6 USE OF THE GUIDE

- a. Equipment designations are arranged alphanumerically. Periodically, the FCIG will be updated by the issuing of revised pages.
- b. Field change data is arranged in the guide in the following manner:
 - (1) Field Change Number,
 - (2) Field Change Title,
- (3) Correction Material interim changes, permanent changes, and revisions to existing equipment publications, supplementary publications, and new publications.
- (4) Field Change Type and Class (e.g. 1-A means Type 1, Class A).

- (5) Modifying Activity dependent upon type and class: "FA" indicates that the change is authorized for accomplishment at the organizational level, or higher (i.e.), Intermediate or Depot level); "YF" indicates that the change is authorized for accomplishment only at the Intermediate or Depot level, depending on the specific terms as specified in the Field Change Bulletin. The number following the "FA" or "YF" is the estimated manhours needed to accomplish the change.
- (6) Field Change Bulletin Publication Stock Number.
- (7) National Stock Number assigned to a particular field change kit. NSN's ending with C and CI-C4 have been cancelled. "None" indicates Type 1 field change not converted to NSN, or Type 2 not requiring NSN. (NSN's are not currently being entered into the FCIG.)
- (8) Equipment Identification Code (EIC) - used in newer inserts as a means to functionally identify systems and subassemblies.
- (9) Current data entered into the FCIG in place of both the NSN and EIC is the date status of the Field Change Bulletin. "Prelim" indicates that the Field Change Bulletin is in its preliminary (or draft) status. A numeric month-year date (e.g., 08-77 is August 1977) indicates that the Field Change Bulletin is final and stocked with that issue date.
- (10) Serial numbers or applicable conditions of specific equipments affected by a particular field change.
- (11) Identity information applicable to each field change for use in determining its accomplishment.

3-7 ABBREVIATIONS

a. Except for those listed below, the abbreviations used in this FCIG were taken from Military Standard Abbreviations for Use on Drawings, Specifications, Standards and in Technical Documents MIL-STD-12.

- CH Permanent Change to Technical
 Manual
- EIB Electronics Information Bulletin
- EIC Equipment Identification Code
- FA Forces Afloat
- FC Field Change
- FCB Field Change Bulletin
- NS NAVSEA
- NE NAVELEX
- T Interim Change
- YF Yard Forces
- () Series

3-8 CORRECTIONS

- A. Recommendations for correction of errors and the addition of pertinent information to this guide should be reported to the Technical Data and Publications Section (SEC 6181C), Naval Ship Engineering Center, via Comment Sheet or other suitable correspondence. Include in the correspondence:
- (1) Designation of affected equipment.
- (2) Location of error by page and line.
- (3) Description of error and indication of what correction should be made.