April 1958

TELETYPEWRITER REPERFORATOR-**TRANSMITTER**

TT-103/FG

RELATION TO OTHER EQUIPMENT

The TT-103/FG is the same as the TT-102/FG except that the TT-103/FG uses a synchronous motor while the TT-102/FG uses a series governed motor.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE CHARACTERS: English. TAPE WIDTH: 11/16 in.

SPEED: 60 wpm. UNIT CODE: 7.42 RECTIFIER DATA

> INPUT: 95 to 125 v, 190 to 250 v, 25 to 60 cps, single ph.

OUTPUT: 120 v DC, 0.2 amps; AC for motor. SYNC MOTOR DATA: 110 v, 60 cps, 1800 rpm, geared for 368 opm.

POWER REQUIREMENTS: 115 v, 60 cps, 160 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corporation, Chicago, Ill. Contract NObsr-59583, dated 15 December 1952.

Approximate Cost: \$1025.00 with equipment spares.

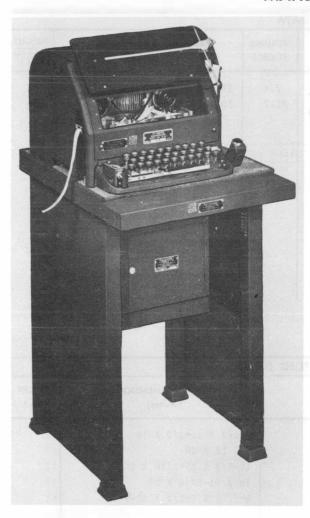
TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Technical Manual for Teletype Corporation Reperforator-Transmitter 96MA.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE STOCK NO.



Teletypeuriter Reperforator-Transmitter TT-103/FG

FUNCTIONAL DESCRIPTION

The TT-103/FG is a Teletype Model 14 sendreceive typing reperforator set designed to provide a means for interchanging typewritten telegraph messages between two or more points. Transmission is accomplished through direct keyboard operation and messages are received on standard width perforator tape on which both the printed characters and corresponding chadless code perforations are automatically recorded in the same operation.

No field changes in effect at time of preparation (18 March 1958).

TT-103/FG

TELETYPEWRITER REPERFORATOR-TRANSMITTER

April 1958

| SHIPPING DATA | | | | |
|-----------------------|-------------------------------|--------------------|-----------------------------|---------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGH PACKEI (Ibs.) |
| 1 | Typing Reperforator FPR23H246 | 7.4 | 19-1/2 X 21-3/4 X 29-5/8 | 135 |
| 1 | Keyboard FK200LD15 including: | 21.7 | 25-1/2 X 30-1/4 X 48 | 265 |
| | Cover FPR200AA | | | |
| | Rectifier REC29 | | | |
| | Table XRT200AA | | 2.2 | |
| | Service Assembly 105014 | | | |
| | Relay RY30 | | | |
| | Copyholder 115700AA | | | |
| | Tape Container 115702AA | | | |
| | Power Cord 95052 | | | |
| | Power cord 95050 | | | |
| | Line Cord 89438 | | | |
| | Line Cord 89472 | | | |
| | Technical Manuals | | | |

| | EQUIPMENT SUPPL | IED DATA | Tay . |
|---------------------------|-------------------------------|-----------------------------|---------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
| 1 | Typing Reperforator FPR23H246 | 7-1/2 X 11-1/2 X 12 | 33 |
| 1 | Keyboard FK200LD15 | 9 X 15 X 16 | 17 |
| 1 | Cover FPRC200AA | 10-3/8 X 13-1/16 X 14 | 12 |
| 1 | Table XRT200AA | 18 X 21-5/16 X 27 | 39 |
| 1 | Rectifier REC29 | 8-3/16 X 9-1/4 X 12-9/16 | 41 |
| 1 | Relay RY30 | | 1 |
| 1 | Tape Container 115702AA | | 4 |
| 1 | Copyholder 115700AA | 3/4 X 6 X 12-1/2 | 2 |
| 1 | Service Assembly 105014 | 3-7/8 X 4 X 12-13/16 | 8 |
| 1 | Power Cord 95052 | | 0.5 |
| 1 | Power Cord 95050 | | 0.5 |
| 1 | Line Cord 89438 | | 0.25 |
| 1 | Line Cord 89472 | | 0.25 |
| 2 | Technical Manual | | |

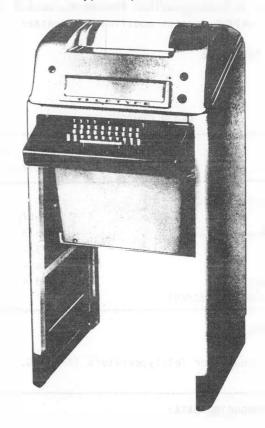
10 January 1962

Cog Service: FSN: Functional Class:

USA USN USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.



Teletypewriter TT-128/UG

FUNCTIONAL DESCRIPTION:

Teletypewriter TT-128/UG is a sending and receiving page-printing teletypewriter set used to disseminate aerological weather information in typewritten page form between two or more ships or stations that are connected to radio or wire telegraph channel.

No field changes in effect at time of preparation (23 June 1961).

TECHNICAL CHARACTERISTICS:

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Weather communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 76 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

TT-128/UG TELETY PEWRITER

UNIT CODE: 5.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: 115 v porm 10%, 60 cyc, single ph.

RELATION TO OTHER EQUIPMENT:

This equipment is similar to Teletypewriter TT-129/UG, except has synchronous motor; also similar to Teletypewriter TT-47/UG, except modified for weather circuits.

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

(1) Set of tools.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|-------------------------------------|---------------|-------------------------------------|-----------------|
| 1 | Teletypewriter TT-128/UG includes: | | | |
| 1 | Cabinet CY-870/UG | | 18-1/4 × 20-1/2 × 39-1/2 | 81 |
| 1 | Power Distribution Panel SB-154/UG | | 4-5/8 × 8-1/8 × 15 | 5 |
| 1 | Keyboard MX-1421/UG | | $4-3/4 \times 15-1/2 \times 17-1/2$ | 11 |
| 1 | AC Motor PD-17/U | | 4 × 4-3/8 × 8 | 8 |
| 1 | Automatic Typer MX-1422/UG | | 9-3/4 × 10-1/2 × 15-1/2 | 19 |
| 1 | Set of gears for 60 wpm (CTT-151060 | 0) | | |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 91393: Technical Manual for Teletypewriters TT-47/UG, TT-48/UG, TT-69/UG and TT-70/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEM!-CONDUCTORS: None used.

SHIPPING DATA

| PKGS | VOLUME (CU FT) | WEIGHT (LBS) |
|------|----------------|--------------|
| | | |

PROCUREMENT DATA

PROCURING SERVICE:
SPEC &/OR DWG:

DESIGN COG: USN, BuShips

1.5 TT-128/UG: 2

| | | TELETYPEWRI | TER TT-128/UG |
|----------------------|-------------------|-----------------------|---------------|
| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. |
| Teletype Corporation | Chicago, Illinois | | 9390 |

Radio-Communication Terminal Equipment

TELETYPEWRITER

TT-128A/UG



Teletypewriter TT-128A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-128A/UG is used to disseminate aerological weather information in typewritten page form between two or more ships or stations that are connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

UNCLASSIFIED

SLECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Weather communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTER: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171A/UG, and TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

TT-128A/UG

TELETYPEWRITER

| SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-1422A/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-1421A/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 |
| 1 | Gears and Technical Manuals | 0.8 | 5-5/8 X 11-3/8 X 19-5/8 | 16 |

| | EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | | |
| 1 | Teletypewriter TT-128A/UG Including: | | | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | | |
| 1 | Keyboard MX-1421A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | | |
| 1 | A.C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 | | | |
| 1 | Automatic Typer MX-1422A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | | | | |
| | | | | | | |

TT-129A/UG



Teletypewriter TI-129A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-129A/UG is used to disseminate aerological weather information in typewritten page form between two or more ships or stations that are connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Weather communication key-

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction. TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: 115 v +10%, 50 to 60 cy,

1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG. TT-130A/UG, TT-131A/UG, TT-171A/UG, TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO

TT-129A/UG

TELETYPEWRITER

| SHIPPING DATA | | | | | |
|---------------|--|--------------------|--|----------------------------|--|
| OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Automatic Typer MX-1422A/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | |
| 1 | Keyboard MX-1421A/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | |
| 1 | A.C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | |
| 1 1 1 1 | A.C. Motor PD-18/U Power Distribution Panel SB-964/UG Cabinet CY-2538/UG | 0.8 | 6-5/8 X 11-3/8 X 19- 22-7/8 X 24-7/8 X 44 | -3/4 | |

| EQUIPMENT SUPPLIED DATA | | | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGH1 (lbs.) | | | |
| 1 | Teletypewriter TT-129A/UG Including: | | and the same | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | | |
| 1 | Keyboard MX-1421A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | | |
| 1 | A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | | |
| 1 | Automatic Typer MX-1422A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | | | |

TT-130A/UG



Teletypewriter TT-130A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-130A/UG is used to disseminate aerological weather information in typewritten page form between two or more ships or stations that are connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Weather communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

TYPE OF FEED: Friction. TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130 A/UG, TT-131A/UG, TT-171A/UG, TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|--------------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-1422A/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-1421A/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 23-5/8 X 24-5/8 | 100 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |

TT-130A/UG

TELETYPEWRITER

| EQUIPMENT SUPPLIED DATA | | | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | | |
| 1 | Teletypewriter TT-130A/UG Including: | | | | | |
| 1 | Cabinet CY-2539/UG | 16 X 18-1/4 X 20-1/2 | 70 | | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | | |
| 1 | Keyboard MX-1421A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | | |
| 1 | A.C. Motor PD-17A/U | 4 X 4-3/4 X 8-1/2 | 9 | | | |
| 1 | Automatic Typer MX-1422A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | | | |

TT-131A/UG



Teletypewriter TT-131A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-131A/UG is used to disseminate aerological weather information in typewritten page form between two or more ships or stations that are connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Weather communication key-

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction. TYPE OF MOTOR: Series.

UNIT CODE: 7.42. SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 50 to 60 cy, 1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171A/UG, TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-1422A/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-1421A/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 23-5/8 X 24-5/8 | 100 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |
| | | | | |

TT-131A/UG

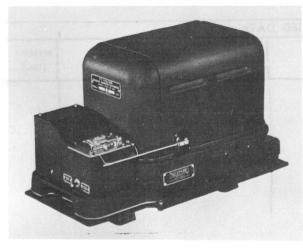
TELETYPEWRITER

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-131A/UG Including; | | | | |
| 1 | Cabinet CY-2539/UG | 16 X 18-1/4 X 20-1/2 | 70 | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1421A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1422A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gear for 60 w.p.m. (CTT-151060) | | | | |

April 1958

TELETYPEWRITER DISTRIBUTOR -**TRANSMITTER**

TT-143/UG



Teletypewriter Distributor-Transmitter TT-143/UG

FUNCTIONAL DESCRIPTION

The TT-143/UG is a transmitter-distributor designed to provide means for automatically translating 5 unit code combinations from 11/16 inch chadless tape into electrical impulses and transmitting these impulses to one or more receiving stations.

It is used as fixed plant, signal center, equipment and is particularly useful in message and signal centers where large amounts of traffic, both relay and originating, must be handled without delay.

No field changes in effect at time of preparation (18 March 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

SPEED: 65 wpm.

TAPE WIDTH: 11/16 in. UNIT CODE: 7.42.

TYPE MOTOR: Sync motor, 110 v, 60 cps, geared

for 390 opm at 1800 rpm.

POWER REQUIREMENTS: 115 v, 60 cps, single

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corporation, Chicago, Illinois. Contract NObsr-63264, dated 6 March

Approximate Cost: \$300.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals Used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92561: Technical Manual for Teletypewriter Distributor-Transmitter TT-143/UG.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE STOCK NO.

| | SHIPPING DATA | | | | | |
|-----------------------|--|--------------------|--------------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Transmitter Distributor XD104GV including: (1) Base Plate 115932BA (1) Set of Equipment spares (2) Technical Manual NAVSHIPS 92561 | 7.4 | 19-1/2 X 21-3/4 X 29-1/2 | 110 | | |

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|--|---------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 1 1 2 | Transmitter—Distributor XD104GV Base Plate 115932BA Set of Equipment Spares Technical Manual NAVSHIPS 92561 | 7-7/8 X 9-1/2 X 15-1/2 2-1/2 X 9 X 16 | 30 3 | | |

REPERFORATOR

TT-15/FG

April 1958



Reperforator TT-15/FG

FUNCTIONAL DESCRIPTION

The TT-15/FG is a nontyping, motor-driven machine that receives messages in the form of electrical impulses and records the message in code perforations on standard width (11/16) paper tape This tape can then be fed into a transmitter-distributor for transmission to a line circuit. It is connected to other teletypewriter equipment and is not capable of operating by itself.

The TT-15/rG is used with Teletypewriter Sets AN/FGC-11, AN/SGC-2, AN/FGC-12 and other equipment as a monitor to record messages transmitted or received on the circuit either for record purposes or for retransmission.

No field changes in effect at time of preparation (18 March 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SOURCE REQUIRED: 110 v, 50 to 60 cps, single ph. OPERATING POWER REQUIREMENTS: 120 W at 115

UNITE CODE: 7.42

TYPE OF MOTOR: 95 to 130 v, 60 cps, series governed motor, 368 or 404 opm. TAPE: Fully perforated.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Ill. Contract: NObsr-59583, dated 15 Dec 1952. Approximate Cost; \$627.72 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Instruction Book Teletype Corp. Manual 101MA TM11-487B: Technical Manual for Signal Corps Wire Communication Equipment.

TYPE CLASSIFICATION DESIGN COGNIZANCE PROCUREMENT COGNIZANCE STOCK NO.

| | SHIPPING DATA | | | | | |
|-----------------------|--|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Reperforator RPE26 consist of: Motor Unit MU27 Cover RPEC200AA Table RT201AA Gear Set 90269 Relay RY30 Tuning Fork 103628 Tuning Fork 104984 | 13.0 | 21-1/4 X 21-1/2 X 50 | 170 | | |

TT-15/FG

REPERFORATOR

April 1958

| | EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---------------------------------|-----------------------------|------------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | | |
| 1 | Reperforator RPE26 consists of: | 11 X 11 X 12-1/2 | 22 | | | |
| | Motor Unit MU27 | 9 X 10 X 11 | 15 | | | |
| | Cover RPEC 200AA | 12-1/8 X 12-1/8 X 13-3/8 | 14 | | | |
| | Table RT201AA | 5-11/16 X 13-3/4 X 13-7/8 | 9 | | | |
| | Gear Set 90269 | | | | | |
| | Relay RY30 | | 1 | | | |
| | Tuning Fork 103628 | | | | | |
| | Tuning Fork 104984 | | | | | |

DISTRIBUTOR TRANSMITTER TELETYPEWRITER

TT-155/FG

FUNCTIONAL DESCRIPTION

The TT-155/FG is a component which translates code combinations from a previously perforated paper tape into electrical impulses and transmits these impulses.

No field changes in effect at time of preparation (12 February 1959).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OT TAPE: Perforated or chadless.

SIZE OF TAPE: 11/16 in. w. UNIT CODE: 7.00 unit code.

NUMBER OF WORDS PER MUNUTE: 100.

TYPE OF MOTOR: Synchronous governed motor.

OPERATING POWER REQUIREMENT: 110 v AC, 60 cps, single ph.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corporation, Chicago, Illinois.

Gontract NObsr-63176, dated 21 January 1953.

Approximate Cost: \$60.720.79 with

Approximate Cost: \$60,720.79 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and Crystal data not available.

REFERENCE DATA AND LITERATURE

Teletype Technical Manual 102MA for the Distributor Transmitter Teletypewriter TT-155/FG.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Distributor Transmitter Teletypewriter Incl: | 6-1/4 X 7-1/2 X 41 | 313 SE | | |
| 6 | Teletype Transmitter Type MXD3 and MXB3 | l. | - It | | |

UNCLASSIFIED 1.5 TT-155/FG: 1

January 1958

Radio-Communications Terminal Equipment

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

TT-157/FG, 158/FG

FUNCTIONAL DESCRIPTION

ELECTRICAL AND MECHANICAL CHARACTERISTICS

The TT-157/FG and TT-158/FG operate on 110 volts, 60 cps power and when used in combination with reperforators provide combined sending and receiving facilities for tape message relaying.

The TT-157/FG features 11/16 inch perforated or chadless tape, letters sensing mechanism, can lubricator sensing lever guide, tape lid scribed with line, 5 terminal connecting block, power cord, 4 conductor control cord with Jones plug, code designation plates marked MXD 6 and MXB 6, mounts on four telephone feet, drive gear and hub for MXB 6 base, 7.00 code unit.

The TT-158/FG uses a 6 unit code and a series governed motor operating at 368.34 RPM. It features perforated or chadless 11/16 inch tape, hinged tape lid, transmitting contacts filter, sensing lever guide, code designation plates marked MXD10, MXD11 and MXB8, mounts by 4 rubber feet, letters sensing mechanism, equipped to operate at 100 WPM, motor demountable as unit, governor circuit elements, terminal block for external power connections, two conductor power cord and eight conductor cable with plugs for external connections. Consists of 2 teletype units MXD10 and 1 MXD11 on MXB8 base.

No field changes in effect at time of preparation (30 July 1957).

UNIT CODE

TT-157/FG: 7.00. TT-158/FG: 6.00.

TYPE OF TAPE: Perforared or chadless.

TAPE SIZE: 11/16 in.

SPEED (TT-158/FG): 100 WPM.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Ill.. Contract NObsr-63176.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92032, Technical Manual for Teletype Printing Telegraph Equipment.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Distributor-Transmitter, Teletypewriter TT-157/FG or | 6-1/4 X 7 X 14-3/16 | | |
| 1 | Distributor—Transmitter, Teletypewriter TT—158/FG | 7 X 16-7/8 X 17 | | |
| 1 | Set of Maintenance Spares |) I | | |

TT-159/UG

REPERFORATOR-TRANSMITTER EQUIPMENT

FUNCTIONAL DESCRIPTION

The TT-159/UG is primarily designed for shipboard installations because of its weight, size and functional utility. It has been called atyping perforator-reperforator.

Functions of the TT-159/UG are: (a) Cuts and types a tape on or off of a line or on an outgoing or incoming radio channel.

The TT-159/UG together with a separate transmitter-distributor provides essentially greater flexibility than the AN/FGC-11 or AN/SGC-2 and TT-45/FG combination at reduced weight, space and cost requirements.

No field changes in effect at time of preparation (9 June 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OUTPUT SIGNAL CHARACTERISTICS: 7.42 unit code.

TYPE OF FEED: Sprocket paper feed.

TYPE OF ARRANGEMENT: Gothic style type pal-

POWER INPUT: 115 v, 60 cps, 1 ph, 200 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Illinois. Contract NObsr-49179, dated 31 May 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tube or Crystal Data Available.

REFERENCE DATA AND LITERATURE

NAVSHIPS 4457 (Rev. 11-56) Preliminary Data Form for TT-159/UG Reperforator-Transmitter, Teletypewriter.

Nomenclature Card for TT-159/UG Reperforator-Transmitter, Teletypewriter.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| | EQUIPMENT SUPPLIED [| DATA | |
|---------------------------|--|-----------------------------|---------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (Ibs.) |
| 1 | TT-159/UG Typing Perforator-Reperforator | 12 X 16-1/4 X 16-1/2 | April s male |

REPERFORATOR

TT-16/FG



Reperforator TT-16/FG

FUNCTIONAL DESCRIPTION

The TT-16/FG is a typing, motor-driven machine that receives messages in the form of electrical impulses and records the message in code perforations and typewritten form on paper type. This tape can then be fed into a transmitter distributor for transmission to a line circuit. The TT-16/FG is connected to other teletypewriter equipment and is not capable of operating by itself.

Reperforator TT-16/FG is used as a monitoring set with Teletypewriter TT-7/FG. Its advantages is that it permits a check of the text of the message and rapid retransmission by transmitter-distributor, if relay of message is desired. The TT-16/FG is used in

fixed plant teletypewriter systems of permanent or semi-permanent installations in the communications zone of a theater of operation or in the zone of the interior.

No field changes in effect at time of preparation (13 September 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

SPEED OF OPERATION: 60 speed (368 operations per minute).

TAPE: Chadless. KEYBOARD: Standard.

POWER SOURCE: 110 v, 60 cps.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

REFERENCE DATA AND LITERATURE

TM-11/487B: Technical Manual for Wire Communication Equipment TT-16/FG.

TYPE CLASSIFICATION DESIGN COGNIZANCE TASSA PROCUREMENT COGNIZANCE STOCK NO.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Reperforator TT-16/FG | 9.8 | | 150 | | |

TT-16/FG

REPERFORATOR

March 1957

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Repreforator Unit TT-16/FG consisting of: | 12-5/8 X 13-3/4 X 22-3/16 | 62.5 | | |
| 1 | Motor Unit | | | | |
| 1 | Gear (368 юрт) | | | | |
| 1 | Cover C-168 | | | | |
| 1 | Speed indicator (87.6 VPS) | | | | |
| 1 | Motor-Switch Assembly | | | | |

TT-171/UG



Teletypewriter II-171/UG

FUNCTIONAL DESCRIPTION

Telstypewriter TT-171/UG is used to receive only typewritten page messages from a ship or station with which it is connected by means of a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed. TYPE OF CHARACTERS: English. QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42. SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-52088, dated 4 December

Contract NObsr-52089, dated 7 December 1950.

Contract NObsr-63205 dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91713: Technical Manual for TELE-TYPEWRITERS TT-47A/UG, TT-48A/UG, TT-69A/ UG, TT-70A/UG, TT-171/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|--------------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Teletypewriter TT-171/UG | 24.09 | 22-3/4 X 40 X 45-3/4 | 310 | | |



Teletypewriter TT-171A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-171A/UG is used to receive only typewritten page messages from a ship or station with which it is connected by means of a radio or wire telegraph channel.

No field changes in effect at time of

preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 360 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1 ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171A/UG, TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Automatic Typer MX-1115B/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | | |
| 1 | Base NT-1443/UG | 2.0 | 9-1/8 X 19-3/8 X 20-3/4 | 28 | | |
| 1 | A.C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 | | |

TT-171A/UG

TELETYPEWRITER

| | SHIPPING DATA | | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | | |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 | | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | | |

| THE HUND | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|---------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-171A/UG Including: | | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Base NT-1443/UG | 4-3/4 X 14-1/2 X 15-1/2 | 6.5 | | |
| 1 | A.C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 | | |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | | | |

TT-176/UG

April 1958



Teletypewriter TT-176/UG

FUNCTIONAL DESCRIPTION

The TT-176/UG is used to exchange typewritten page messages, between two or more ships or stations that are connected via a radio or wire telegraph channel. The operating speed is in the order of 368 opm, which is generally referred to as 60 wpm. The speed may be increased to 75 or 100 wpm, by changing to other gears which are not supplied. but are available as optional components. Signaling between stations is accomplished electrically by use of the five-unit startstop per mutation code and utilizes the 7.42 unit transmission pattern. The Teletypewriter, when on a local circuit and equipped with power Supply PP-1010/UG (not supplied), may be used as an all-capital letters printing typewriter for correspondence or for recording of telegraphic communications received by audible (Morse) means.

No field changes in effect at time of preparation (14 March 1958).

RELATION TO OTHER EQUIPMENT

Equipment Required but not Supplied: (1) Set of Tools, (1) Power Supply PP-1010/UG (Optional) and technical Manual for PP-1010/UG, (1) Gear Set for 75 wpm (Optional) (1) Gear Set for 110 wpm (Optional).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

CHARACTER TYPE: English.

OPERATION RATE

OPERATIONS PER MINUTE: 368; 460 or 600 by gear changes.

by gear changes.
WORDS PER MINUTE: 60.

SIGNALING FREQUENCY

60 WPM: 22.8 dot cycles. 75 WPM: 28.5 dot cycles. 100 WPM: 37.1 dot cycles.

FREQUENCY CONTROL: Depends upon a stable power source of ± 0.5 cycle.

OUTPUT TELEGRAPH SIGNAL: Must be on-off DC, nominally 0.060 amp from an external source of either positive or negative polarity.

INPUT TELEGRAPH SIGNAL: Applied to the selector magnet must be on-off DC, nominally 0.060 amp (or 0.020 amp) from an external source of either positive or negative polarity.

PAGE DATA: Single-copy continuous roll 8-1/2 in. w x 5 in. (max) dia.

CODE: 5 unit.

TRANSMISSION PATTERN: 7.42 unit.

MOTOR TYPE: Synchronous.

SIGNAL LINE CURRENT: Furnished from an external rectifier.

POWER SOURCE REQUIRED: 115 v ±10%, single ph, 60 cps ±0.5 cps, 65 W, 0.30 pf, 9 amp starting, 1.85 amp running, 50 W heat dissipation.

TEMPERATURE

AMBIENT: -20 deg C to +50 deg C.
RISE: Not in excess of +40 deg C above

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Ill. Contract: NObsr-52089, dated 7 Dec 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

NAVSHIPS 92361: Technical Manual for Teletypewriter TT-176/UG.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

TT-176/UG

TELETYPEWRITER

April 1958

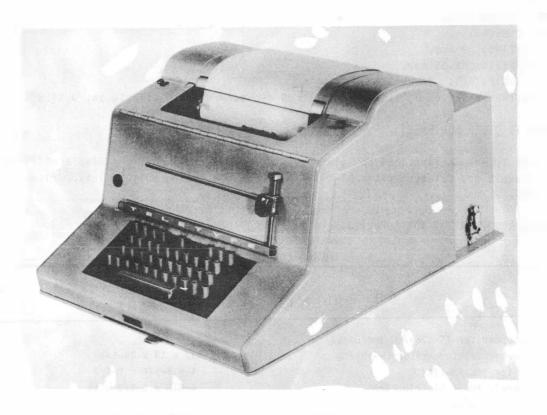
| | SHIPPING DATA | | | | | |
|-----------------------|--|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Teletypewriter TT-176/UG consists of Cover CW-354/UG AC Motor PD-17A/U Power Distribution Panel SB-408/UG Keyboard MX-1677/UG Automatic Typer MX-1676/UG Set of Gears (151060) Spare Parts Kit | 19.7 | 26-1/2 x 29-1/2 x 43-1/2 | 230 | | |

| EQUIPMENT SUPPLIED DATA | | | |
|---------------------------|---------------------------------------|-----------------------------------|------------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
| 1 | Teletypewriter TT-176/UG consists of: | | |
| 1 | Cover CW-354/UG | 12 × 17 × 24 | 23 |
| 1 | AC Motor PD-17A/U | $4 \times 5 - 3/4 \times 8 - 1/2$ | 9 |
| 1 | Power Distribution Panel SB-408/UG | 4-5/8 × 8-1/8 × 15 | 5 |
| 1 | Keyboard MX-1677/UG | 4-3/4 × 15-1/2 × 17-1/2 | 11 |
| 1 | Automatic Typer MX-1676/UG | 9-3/4 × 10-1/2 × 15-1/2 | 19 |
| 1 | Set of Gears (151060) | | |
| 1 | Spare Parts Kit | 7 × 20-5/8 × 21-5/8 | 14 |

9 January 1962 TELETYPEWRITER TT-176A/UG Cog Service: FSN: Functional Class: USA USN USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.



Teletypewriter II-178A/UG

FUNCTIONAL DESCRIPTION:

Teletypewriter TT-176A/UG is designed to exchange typewritten page messages between two or more ships or stations that are connected via a radio or wire telegraph channel. No field changes in effect at time of preparation (10 July 1961).

TECHNICAL CHARACTERISTICS:

TYPE KEYBOARD: Standard Communication.

CHARACTERS PER LINE: 72.

OPERATING SPEED: 368 opm, 60 wpm; 460 opm, 75 wpm; 600 opm, 100 wpm.

CODE: 5 unit, start-stop.

TRANSMISSION PATTERN: 7.42 unit.

FREQUENCY CONTROL: Depends upon a stable power source of porm 0.5 cycle.

SIGNALING FREQUENCY

TT-176A/UG TELETYPEWRITER

60 WPM: 228 dot-cycle. 75 WPM: 28.5 dot-cycle. 100 WPM: 37.1 dot-cycle.

OUTPUT SIGNAL: On-off dc, 0.060 amp nominal from an external source, either positive or negative polarity.

INPUT SIGNAL: On-off dc, 0.060 amp nominal (or 0.020 amp) from an external source, either positive or negative polarity.

AC MOTOR

TYPE: Synchronous.

INPUT CURRENT

STARTING: 9 amp.

OPERATING: 1.85 amp.

HEAT DISSIPATION: 50 W.

POWER REQUIREMENTS: 65 W, 115 v porm 10%, 60 cyc porm 0.5 cyc, single ph, 0.30 pf.

RELATION TO OTHER EQUIPMENT:

This equipment is identical to Teletypewriter TT-176/UG, except includes a modified Key-board-Transmitter, Teletypewriter MX-1677A/UG and a new Typing Unit, Teletypewriter MX-3080/UG.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|--|---------------|--------------------------------|--------------|
| 1 | Teletypewriter TT-176A/UG includes: | | | |
| 1 | Cover, Teletypewriter CW-354/UG | | $12 \times 17 \times 24 - 1/4$ | 23 |
| 1 | Motor, AC PD-17A/U | | 4 × 5-3/4 × 8-1/2 | 9 |
| 1 | Panel, Power Distribution SB-40B/UG | | 4-5/8 x 8-1/8 x 15 | 5 |
| 1 | <pre>Keyboard-Transmitter, Teletypewri MX-1677A/UG</pre> | ter | 4-3/4 × 15-1/2 × 17-1/2 | 11 |
| 1 | Typing Unit, Teletypewriter MX-3080/UG | | | |
| 1 | Set of Gears | | | |
| 1 | Spare Parts Kit | | | |

REFERENCE DATA AND LITERATURE:

Technical Manual for Teletypewriter TT-176A/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

1.5 TT-176A/UG: 2

TELETYPEWRITER TT-176A/UG

SEMI-CONDUCTORS: None used.

SHIPPING DATA

VOLUME (CU FT) PKGS

WEIGHT (LBS)

1

PROCUREMENT DATA

PROCURING SERVICE:

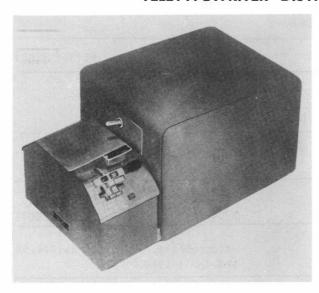
DESIGN COG: USN, BuShips

SPEC &/OR DWG:

CONTRACT OR APPROX. LOCATION CONTRACTOR UNIT COST ORDER NO. Chicago, Illinois NObsr-81159, \$1,274.56 Teletype Corporation 29 April 1960

TELETYPEWRITER DISTRIBUTOR-TRANSMITTER

TT-187/UG



Teletypewriter Distributor-Transmitter TI-187/UG

FUNCTIONAL DESCRIPTION

Teletypewriter Distributor-Transmitter TT-187/UG is an automatic transmitter distributor designed for use in transmitting or relaying stations where large amounts of traffic must be handled with minimum delay. The unit translates code impulses from fully perforated or chadless tape into electrical impulses and transmits these impulses, in the form of a five-unit, start-stop permutation code to one or more receiving stations.

The TT-187/UG consists principally of tape sensing and tape feeding mechanisms, a distributor commutator, and a motor, all of which are housed in a metal cabinet. It has an all steel external expansion clutch, sensing pins with longer travel located in line with the axis of the feed wheel, and an increased number of feed pins engaging the feed holes in the tape.

No field changes in effect at time of preparation (4 January 1961).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Teletypewriter Tool Set TE-50-B, (1) Teletypewriter Test Set TS-658/UG.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE TAPE: Chad (perforated) or chadless.

OPERATING SPEED: 368 opm, 60 wpm; 460 opm,

75 wpm; 600 opm, 100 wpm.

TYPE SIGNALING CODE: 5 unit, start-stop. TRANSMISSION PATTERN: 7.42 unit.

SIGNALING FREQUENCY

60 WPM: 22.8 dot-cycles.
75 WPM: 28.5 dot-cycles.
100 WPM: 37.1 dot-cycles.
TYPE MOTOR: Synchronous.
MOTOR SPEED: 3,600 rpm.

CURRENT RATING

STARTING: 9.0 amp. OPERATING: 1.85 amp.

POWER REQUIREMENTS: 65 W, 0.3 pf, 115 vporm

10%, 60 cyc porm 0.75%, single ph.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Ill.
Contract NObsr-64214, dated 27 May

Approximate unit cost \$1,320.00. Contract NObsr-75256, dated 28 April 1958.

Approximate unit cost \$342.22. Contract NObsr-75523, dated 13 February

Approximate unit cost \$335.51.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92733: Technical Manual for TELE-TYPEWRITER DISTRIBUTOR-TRANSMITTER TT-187/UG.

TYPE CLASSIFICATION (NAVY)
PROCUREMENT COGNIZANCE
DESIGN COGNIZANCE USN, BUSHIPS
STOCK NO.

Π-187/UG

TELETYPEWRITER DISTRIBUTOR-TRANSMITTER

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|-------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | ·WEIGHT (lbs.) | | |
| 1 | Teletypewriter Distributor-Transmitter TT-187/UG includes: | 7 × 8-1/4 × 14 | | | |
| 1 | Teletypewriter Base Unit | | | | |
| 1 | AC Motor PD-17A/U | | | | |
| 1 | Cover, Teletypewriter | | | | |
| 1 | Gear Set 60 wpm | | | | |
| 1 | Gear Set 75 wpm | | | | |
| 1 | Gear Set 100 wpm | | | | |

20 July 1962

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER TT-187A/UG

Cog Service: USN FSN: 5815-752-1169 Functional Class:

USA

USN

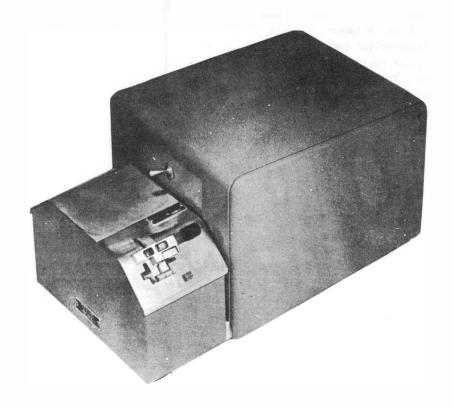
USAF

TYPE CLASS:

Used by

Used by

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation, (59433).



Distributor-Transmitter, Teletypewriter TT-187A/UG

FUNCTIONAL DESCRIPTION:

The Distributor-Transmitter, Teletypewriter TT-187A/UG is designed to provide a means for translating code combinations, perforated in a paper tape, into electrical impulses and transmitting these impulses in the form of a five-unit, start-stop permutation code to one or more receiving stations. The transmitter distributor is suitable for automatic operation in transmitting or relaying stations where large amounts of traffic must be handled with a minimum of delay.

No field changes in effect at time of preparation (23 February 1962).

TECHNICAL CHARACTERISTICS:

TYPE OF STATION: Portable.

TYPE OF KEYBOARD: Standard communication keyboard.

TYPE OF CHARACTERS: English.

TT-187A/UG DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

TYPE OF MOTOR: Series governed.

TAPE WIDTH: 11/16 in. w fully punched.

UNIT CODE: 7.42.

TRANSMITTING SPEED: 60, 75 and 100 wpm.

OPERATING POWER ROMT: 115 v ac, 60 cps, single ph; 115 v dc.

RELATION TO OTHER EQUIPMENT:

The TT-187A/UG is designed the same as Distributor-Transmitter, Teletypewriter TT-187/UG except that it uses a series motor instead of a synchronous motor.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|--|---------------|-------------------------------|-----------------|
| 1 | Distributor-Transmitter, Tele- typewriter TT-187A/UG in- cludes: | | 7 x 8-1/4 x 14 | |
| 1 | Distributor-Transmitter LXD4 | | | |
| 1 | Base Unit, Teletypewriter LXDB4 | | | |
| 1 | Motor (LMU4) | | $4 \times 5-1/2 \times 6-1/2$ | |
| 1 | Cover, Teletypewriter LXDC201 | | | |
| 1 | Gear Set (60 wpm) CTT no. 156658 | | | |
| 1 | Gear Set (75 wpm) CTT no. 156728 | | | |
| 1 | Gear Set (100 wpm) CTT no. 156659 | | | |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 92733: Technical Manual for Distributor-Transmitter, Teletypewriter TT-187A/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER TT-187A/UG

SHIPPING DATA

VOLUME (CU FT) WEIGHT (LBS) PKGS

PROCUREMENT DATA

PROCURING SERVICE: USN

DESIGN COG: USN, BuShips

SPEC &/OR DWG:

| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
|----------------------|-------------------|-----------------------|----------------------|
| Teletype Corporation | Chicago, Illinois | N0bsr-75523 | |
| Model no. 2B | | N0bsr-75256 | |

TT-190/TGC

FUNCTIONAL DESCRIPTION

The TT-190/TGC is a lightweight, portable type teletypewriter, which is capable of tape receiving and keyboard sending, is designed for tactical field or mobile installation.

No field changes in effect at time of preparation (11 June 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English characters.

OPERATING POWER ROMT: 115 v, 60 cps, 1 ph,

35 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Illinois

TUBE AND/OR CRYSTAL COMPLEMENT

Electron Tube and Crystal data not available.

REFERENCE DATA AND LITERATURE

NAVSHIPS 4457 (Rev. 11-56) Preliminary Data form for TT-190/TGC Teletypewriter. Nomenclature Card for TT-190/TGC Teletypewriter.

TYPE CLASSIFICATION

DESIGN COGNIZANCE BUSHIPS

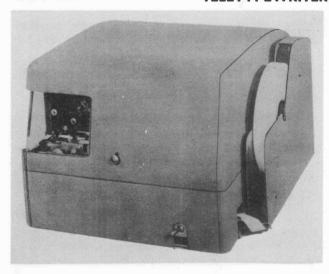
PROCUREMENT COGNIZANCE

STOCK NO.

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|-------------------------|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | TT-190/TGC-Page Printer | 6 X 12-1/2 X 14-1/2 | | | |

TELETYPEWRITER REPERFORATOR

TT-192/UG



Tybing Reperforator II-192/UG

FUNCTIONAL DESCRIPTION

Teletypewriter Reperforator TT-192/UG is a receiving unit only used to receive messages transmitted over wire or radio circuits and to record the message both in code perforations and typed characters on the same tape. It is used for relaying purposes in teletypewriter receiving and distributing center. Messages received by the typing reperforator may be retransmitted to one or more stations by a transmitter distributor. The printed characters simplify tape relay procedures by eliminating the necessity of reading the code perforations.

The typing reperforator may be used with five-unit code teletypewriter equipment geared for 368 operations per minute. The operating speed of 60 words per minute may be increased to 100 words per minute by changing to other gears that are available as optional equipment.

No field changes in effect at time of preparation (4 January 1961).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE_TAPE: Chadless.

OPERATING SPEED: 368 opm, 60 wpm.

CODE: 5 unit, start-stop.

SIGNAL LINE CURRENT

SERIES: 0.02 amp.

PARALLEL: 0.06 amp.

TYPE MOTOR: Synchronous. MOTOR SPEED: 3.600 rpm.

POWER REOUIREMENTS: 115 v porm 10%, 60 cyc

porm 0.5 cyc, single ph.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-64214, dated 27 May

Approximate unit cost \$1,320.00.

Contract NObsr-75256, dated 30 April

Approximate unit cost \$1,122.00.

Contract NObsr-75523.

Approximate unit cost \$901.80.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 92734: Technical Manual for Teletypewriter Reperforator TT-192/UG.

TYPE CLASSIFICATION (NAVY) DESIGN COGNIZANCE USN, BUSHIPS PROCUREMENT COGNIZANCE STOCK NO.

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter Reperforator TT - 192/UG | 10-1/4 × 12-1/4 × 16-1/4 | | |

20 July 1962

FSN: 5815-752-1167 Cog Service: USN

REPERFORATOR, TELETYPEWRITER TT-192A/UG

Functional Class:

USA

USN

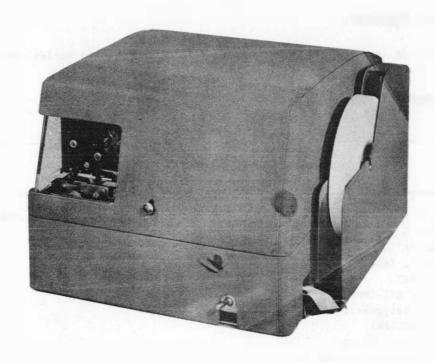
USAF

TYPE CLASS:

Used by

Used by

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation, (59433).



Reperforator, Teletypewriter TT-192A/UG

FUNCTIONAL DESCRIPTION:

The Reperforator, Teletypewriter TT-192A/UG is designed to provide a means for recording telegraph messages on standard width (11/16 inch) perforator tape. Printed characters and corresponding chadless code perforations are automatically recorded in the same operation. These typing reperforations are commonly used for relaying purposes as the recorded message may be retransmitted automatically by a transmitter distributor. The printed characters simplify tape relaying procedures by eliminating the necessity of reading the code perforations. No field changes in effect at time of preparation (1 February 1962).

TECHNICAL CHARACTERISTICS:

METHOD OF MOUNTING: Shock mounted. TYPE OF MOTOR: Series governed motor.

TYPE OF PERFORATOR: Chadless.

TT-192A/UG REPERFORATOR, TELETYPEWRITER

PERFORATOR TAPE SIZE: 11/16 in. w.

UNIT CODE: 7.42.
SIGNAL LINE CURRENT
SERIES: 0.020 amp.
PARALLEL: 0.060 amp.

MOTOR SPEED: 3600 rpm.

TYPING SPEED: 60 or 100 wpm.

OPERATING POWER ROMT: 115 v ac, 60 cps, single ph; 115 v dc.

RELATION TO OTHER EQUIPMENT:

The TT-192A/UG is interchangeable with the TT-192/UG except uses series motor instead of synchronous motor.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|---|---------------|--------------------------|-----------------|
| 1 | Reperforator, Teletypewriter TT-192A/UG consists of: | | 10-1/2 x 12-1/4 x 16-1/4 | |
| 1 | Teletypewriter TT-266/UG | | | |
| 1 | Base Unit, Teletypewriter CTT-LRB3 | | | |
| 1 | Motor, AC CTT-LMU3 | | | |
| 1 | Cover, Teletypewriter CTT-LRC20282 | | | |
| 1 | Reperforator, Speed Indicator CTT-109628 | | | |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 92734: Technical Manual for Reperforator, Teletypewriter TT-192/UG and TT-192A/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

| PKGS | VOLUME (CU FT) | WEIGHT (LBS) |
|------|----------------|--------------|
| rkus | VOLUME (CU FI) | MEIGHI (FR2) |
| | | |

REPERFORATOR, TELETYPEWRITER TT-192A/UG

PROCUREMENT DATA

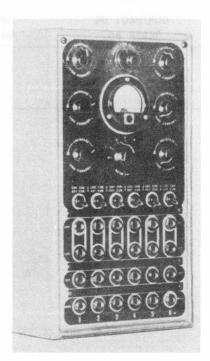
PROCURING SERVICE: USN

SPEC &/OR DWG:

DESIGN COG: USN, BuShips

CONTRACTOR LOCATION CONTRACT OR APPROX. ORDER NO. UNIT COST Teletype Corporation Chicago, Illinois NObsr-75256, \$1,122.00 Model no. 28 28 April 1958 NObsr-75523

TT-23/SG



Teletype Panel TT-23/SG

FUNCTIONAL DESCRIPTION

The TT-23/SG is intended for general shipboard use to facilitate the interconnection and transfer of teletype equipment with various radio adapters such as frequency shift keyers and converters and tone modulation terminal equipment.

No field changes in effect at time of preparation (31 May 1957).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

NUMBER OF CHANNELS: Six.

LINE CURRENT SELECTION: Local or external. MEASUREMENT FACILITIES: Line current in any channel.

MANUFACTURER'S OR CONTRACTOR'S DATA

Northeastern Engineering, Inc., Manchester, New Hampshire. Contract NObsr-39378 dated 25 June 1947. Approximate Cost \$180.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

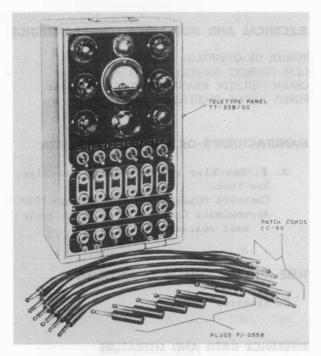
REFERENCE DATA AND LITERATURE

NAVSHIPS 91103, Technical, Manual for Teletype Panel TT-23/SG.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu-Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Teletype Panel TT-23/SG | | | | | |

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--------------------------|-----------------------------|---------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletype Panel TT-23/SG | 5 × 8-1/4 × 14-5/8 | 12.5 | |
| 6 | Patch Cards Dunniy Plugs | 18 lg | 1.12 | |

TT-23B/SG



Teletype Panel II-23B/SG

FUNCTIONAL DESCRIPTION

The TT-23B/SG supplies the teletype interconnection facilities required aboard ship for connecting teletype equipment with radio adapters (frequency shift keyers, converters and tone modulated equipment). Permanent and patching connections provide the units with many different circuit possibilities. The panel also controls the line current in these circuits.

No field changes in effect at time of

preparation (31 May 1957).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

NUMBER OF CHANNELS: 6. CURRENT SOURCE: Local or external. MEASUREMENT FACILITIES: Line current.

VOLTAGE: 115 v DC. CURRENT: 60 ma.

MANUFACTURER'S OR CONTRACTOR'S DATA

Precision Associates, Brooklyn New York; Contract NObsr-52142 dated 18 December 1950.

Approximate Cost: \$180.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

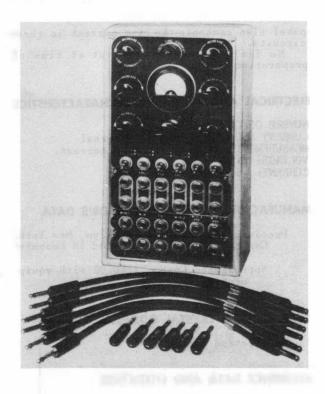
REFERENCE DATA AND LITERATURE

NavShips 91480, Technical Manual for Teletype Panel TT-23B/SG.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (Ibs.) | | |
| 1 | Teletype Panel TT-23B/SG | 0.568 | 6-1/2 X 9-7/8 X 15-1/2 | 15 | | |

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--------------------------|-----------------------------|------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | | | |
| 1 | Teletype Panel TT-238/SG | 5-1/4 X 8-1/4 X 14-3/4 | 12.5 | | |
| 6 | Patch Cords | 18 lg | 1.12 | | |
| 6 | Telephone Plugs | 1/2 in diam | - | | |

TT-23E/SG



Teletype Panel TT-23E/SG

FUNCTIONAL DESCRIPTION

The TT-23E/SG is intended for general shipboard use to facilitate the interconnection and transfer of teletype equipment with various radio adapters such as frequency shift keyers and converters and tone modulation terminal equipments.

The equipment is similar to the TT-23/SG and TT-23A/SG except for one piece front panel.

No field changes in effect at time of preparation (3 June 1957).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

NUMBER OF CHANNELS: 6.
LINE CURRENT SOURCE: Local or remote.
CHARACTERISTIC MEASURED: Line currents.
POWER SOURCE REQUIRED: 115 v DC.

MANUFACTURER'S OR CONTRACTOR'S DATA

A. F. Smuckler and Co., Inc., Brooklyn, New York. Contract NObsr-49233 dated 19 June 1950. Approximate Cost: \$180.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91495, Technical Manual for Teletype Panel TT-23E/SG.

| | SHIPPING | G DATA | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Teletype Panel TT-23E/SG | | | 1 |

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|---------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 6 6 | Teletype Panel TT-23E/SG Patch Cards Dummy Plugs | 5 X 8-1/2 X 14-5/B 18 lg | 12.5 1.12 0.2 | |

TT-23F/SG

FUNCTIONAL DESCRIPTION

The TT-23F/SG supplies the teletype inter connection facilities required aboard ship for connecting teletype equipment with radio adapters (frequency shift Keyers, converters and tone modulated equipment, permenant and patching connections provide the units with many different circuit possibilities. The panel also controls the line current in these circuits.

No field changes in effect at time of preparation (3 June 1957).

RELATION TO OTHER EQUIPMENT

The existing models of the teletype panel are electrically and mechanically interchangeable. There are some minor mechanical and electrical differences between models which will not effect the interchangeability of existing models.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

NUMBER OF CHANNELS: 6.

INDICATION: local line current.

POWER SOURCE REQUIRED: 115 v, 60 ma DC.

MANUFACTURER'S OR CONTRACTOR'S DATA

Kane Electronics Corp, Brooklyn, N.Y. Contract NObsr-64252.

Approximate Cost: \$180.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes.

REFERENCE DATA AND LITERATURE

Technical Manual for Teletype Panel TT-23F/SG.

| SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Teletype Panel TT-23F/SG | 0.568 | 6-1/2 X 9-7/8 X 15-1/2 | 15 |

| 0.5 - 1.5 | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|----------------------------|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletype Panel TT-23F/SG | 5-1/4 X 8-1/4 X 14-3/4 | 12.5 | | |
| 6 | Patch Cords | 18 lg | 1.12 | | |
| 6 | Telephone Plugs NT-49034-A | 1/2 dia X 2-7/8 lg | | | |

TT-234/SGA-3



Teletypewriter TT-234/SGA-3

FUNCTIONAL DESCRIPTION

Teletypewriter TT-234/SGA-3 is designed to receive the output of a TSEC/HL-2 Code Converter in type written page form. The keyboard provides a source for the preparation of perforated tape on a typing reperforator.

No field changes in effect at time of preparation (8 September 1959).

RELATION TO OTHER EQUIPMENT

This equipment is similar to TT-47C/UG except that it has separate SEND and RECEIVE lines, and an extra switch and terminal board for the control and distribution of power to associated equipment.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 460 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TEYPWRITERS TT-47 C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171/UG, TT-234/ SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT, NO.

TT-234/SGA-3

TELETYPEWRITER

| | SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Automatic Typer MX-11158/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | |
| 1 | Keyboard MX-11148/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | |
| 1 | A. C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 | |
| 1 | Power Distribution Panel S8-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | |
| 1 | Cabinet CY-2320/SGA-3 | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 181 | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | |

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|---------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-234/SGA-3 including: | | 130 | | |
| 1 | Cabinet CY-2320/SGA-3 | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel S8-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-11148/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A. C. Motor (Synchronous) PD-178/U | 4 X 5-3/4 X 8-1/2 | 9 | | |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 75 w.p.m. (CTT-151075) | | 300 0 | | |

TT-242/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-242/UG is a light weight continuous duty send/receive page printer designed for continuous duty operation at speeds of 60, 75 and 100 wpm. It has a standard communication keyboard, works into 60 ma loop, receivers page (8-1/2 in.) and transmits from keyboard.

No field changes in effect at time of preparation (2 December 1959).

RELATION TO OTHER EQUIPMENT

This equipment is a modified Teletype-writer TT-190/TGC.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Portable.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 5.

POWER REQUIREMENTS: 115 v, 60 cy, single ph,

35 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.
Contract NObsr-75191.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for PAGE PRINTER TT-242/UG.

Nomenclature Card for TELETYPEWRITER TT-242/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--------------------------|-------------------------|----|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS W | | | |
| 1 | Teletypewriter TT-242/UG | 6-1/2 X 13-1/4 X 15-1/2 | 20 | | |

TELETYPEWRITER PERFORATOR-REPERFORATOR

TT-253/UG

FUNCTIONAL DESCRIPTION

Teletypewriter Perforator-Reperforator TT-253/UG prepares a perforated and type-written tape for on or off-line use, or it prepares a perforated and typewritten tape from on-line signals. The tape used is a thadless type.

No field changes in effect at time of preparation (5 January 1961).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

UNIT CODE: 7.42.

TAPE WIDTH: 11/16 in.

POWER REQUIREMENTS: 115 v, 60 cyc, single

pn; 115 v dc.

MANUFACTURER'S OR CONTRACTOR'S DATA

Telétype Corp., Chicago, Illinois. Model No. 28. Contract NObsr-75256, dated 30 April 1959.

Approximate unit cost \$1,532.00. Contract NObsr-75523. Approximate unit cost \$1,279.99.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for PERFORATOR-REPERFORATOR TELETYPEWRITER TT-253/UG.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter Perforator-Reperforator | 12 × 17 × 19 | | |
| | TT-253/UG includes: | | | |
| 1 | Teletypewriter Reperforator | | | |
| 1 | Teletypewriter keyboard-Transmitter | | | |
| 1 | AC Motor PD-17A/U | | 1 | |
| 1 | Teletypewriter Cover | | | |

REPERFORATOR DISTRIBUTOR-TRANSMITTER

TT-268/UG



Reperforator Distributor-Transmitter TT-268/UG

TT-268/UG

REPERFORATOR DISTRIBUTOR-TRANSMITTER

FUNCTIONAL DESCRIPTION

Reperforator Distributor-Transmitter TT-268/UG is used to receive high speed teletype information and to punch this information into paper tape at a very high speed. This taped information is converted at a lower speed into an electrical signal which is then applied to a standard teletype printer. The perforator-reader serves two basic purposes: It makes a permanent record of the incoming information, and it feeds this information to other components at a rate and in a form in which it can be further processed.

No field changes in effect at time of preparation (14 October 1960).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Vacuum Tube Voltmeter RCA WV-98A; (1) Oscilloscope Tektronix Model 535 or 545, (1) Technical Manual NAVSHIPS 92733, (1) 6 inch Precision Scale.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

PERFORATOR

INPUT POWER: 94.5 to 137.5 v, 60 cyc, single ph, 3.5 amp.

PUNCH SIGNAL CHARACTERISTICS (INPUT)

KIND OF SIGNAL: 5-hole teletype code, 5 codes in parallel.

PULSE AMPLITUDE: 85 to 110 ma, 400 v max. peak.

PULSE WIDTH: 2.25 milliseconds approx.

SPEED: 2400 wpm.

CIRCUIT IMPEDANCE: 150 to 300 mh, 250 ohms each code coil.

FEED SIGNAL CHARACTERISTICS

FEED SIGNAL: 120 to 160 ma, 400 v max peak, dc or pulse 4.16 milliseconds wide.

FEED COIL: 500 to 1000 mh, 240 ohms. FEED RESET SIGNAL: 40 to 110 ma, 400 $\,$

v max peak, dc or pulse 4.16 milliseconds wide.

FEED RESET COIL: 50 to 100 mh, 130 ohms

SYNCHRONIZATION SIGNAL: Pos. and neg. pulses of min 2 v peak, 1/4 millisecond wide, 1.9 millisecond spacing pos. to neg., 2.25 millisecond spacing neg. to pos., 400 ohms source impedance.

DRIVING MOTOR

TYPE: Hysteresis synchronous.

HORSEPOWER: 1/6

SPEED: 3600 rpm.

LUBRICATION: Lifetime.

LUBRICATION

TYPE: Splash bath.

SHORT LUBRICATING INTERVAL: Weekly.

ACCURACY

TAPE TRANSPORT: Porm 0.005 in. in six inches of punched tape.

SIGNAL HANDLING: Nominal 100%.

READER

INPUT POWER: 115 v, 60 cyc, single ph, 2.0 amp.

PUNCH SIGNAL CHARACTERISTICS (OUTPUT)

KIND OF SIGNAL: 7.5 unit code.

SPEED: 60, 75 or 100 wpm.

DRIVING MOTOR

TYPE: Induction.

HORSEPOWER: 1/20.

SPEED: 3600 rpm.

LUBRICAT :: Grease.

LUBRICATION

TYPE: Oil and grease.

SHORTEST LUBRICATING INTERVAL: Six months.

ACCURACY

SIGNAL HANDLING: Nominal 100%.

MANUFACTURER'S OR CONTRACTOR'S DATA

Soroban Engineering Inc, Melborne, Florida.

Contract NObsr-75232.

Contract NObsr-75587.

REPERFORATOR DISTRIBUTOR-TRANSMITTER

TT-268/UG

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93454: Technical Manual for REPER-FORATOR DISTRIBUTOR-TRANSMITTER TT-268/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: SHIPS-P-3058

STOCK NO.

R.D.B. IDENT. NO.

VALUE THERE INTO DOTO NAME OF STREET

| SHIPPING DATA | | | | |
|-----------------------|--|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Reperforator Distributor-Transmitter TT-268/UG | 16.2 | 23.0 x 31.75 x 38.38 | 185 |
| w1.01, m1, 1 | Perforator GP-2 | 1.6 | 14.75 x 15.75 | 29 |

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|---------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Reperforator Distributor-Transmitter TT-268/UG | I Menuel WAVSHIPS 92723. | Lechnica | | |

TELETYPEWRITER DISTRIBUTOR-TRANSMITTER

TT-273/UG

FUNCTIONAL DESCRIPTION

Teletypewriter Distributor-Transmitter TT-273/UG is a component which translates code combinations from a previously perforated paper tape into electrical impulses and transmits these impulses.

No field changes in effect at time of preparation (5 January 1961).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Portable.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.
TYPE MOTOR: Series governed.

UNIT CODE: 7.42.

POWER REQUIREMENTS: 115 v, 60 cyc, single

ph; 115 v dc.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Model No. 28.
Contract NObsr-75523.
Approximate unit cost \$417.86.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER TT-273/UG.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

| EQUIPMENT SUPPLIED DATA | | | |
|---------------------------|---|-----------------------------|------------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
| 1 | Distributor-Transmitter, Teletypewriter | A. C. Notor PD-18/U | |
| | TT-273/UG includes: | Teletypawriter Reperforator | - 2 |
| 1 | Distributor-Transmitter, Teletypewriter | Speed indicator | 1 |
| 1 | Teletypewriter Base | | |
| 1 | A.C. Motor PD-18/U | | |
| 1 | Teletypewriter Cover | | |
| 1 | Gear Set 60 WPM | | |
| 1 | Gear Set 75 WPM | | - 1 |
| 1 | Gear Set 100 WPM | | |
| 1 | Speed Indicator | | |

TELETYPEWRITER REPERFORATOR

TT-274/UG

FUNCTIONAL DESCRIPTION

Teletypewriter Reperforator TT-274/UG is a typing, motor-driven machine that receives messages in the form of electrical impulses and records the message on paper tape.

No field changes in effect at time of preparation (5 January 1961).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF MOTOR: Series.
UNIT CODE: 7.42.

POWER REQUIREMENTS: 115 v, 60 cyc, single

ph; 115 v dc.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Model No. 28. Contract NObsr-75523.
Approximate unit cost \$985.75.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for REPERFORATOR, TELETYPEWRITER TT-274/UG.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

EQUIPMENT SUPPLIED DATA

| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
|---------------------------|---|---|---|
| 1 1 1 | Teletypewriter Reperforator TT-274/UG includes: Teletypewriter Reperforator TT-266/UG Base Unit | 10-1/4_× 12-1/4 × 16-1/4 | PER |
| 1 1 1 | A. C. Motor PD-1B/U Teletypewriter Reperforator Cover Speed Indicator | Distributor—Transmitter, Tel TT—273/VG includes: Distributor—Transmitter, | |

9 January 1962 TELETYPEWRITER TT-275/UG

FSN: 5815-796-0035 Cog Service: Functional Class:

USA USN USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.

(No Illustration Available)

FUNCTIONAL DESCRIPTION:

Teletypewriter TT-275/UG is a portable station, receive only teletypewriter. No field changes in effect at time of preparation (10 July 1961).

TECHNICAL CHARACTERISTICS:

TYPE OF CHARACTERS: English.

CHARACTERS PER LINE: 72.

CODE: 7.42 unit.

TYPE OF FEED: Friction.

MOTOR

TYPE: Series-governed.

CURRENT RATING

STARTING: 1.75 amp. OPERATING: 1 amp.

HEAT DISSIPATION: 75 W.

POWER REQUIREMENTS: 95 W. 115 v porm 10%, 60 cyc. single ph. 0.83 pf.

RELATION TO OTHER EQUIPMENT:

This equipment is similar to Teletypewriter TT-261/UG, except for the series governed motor.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS OTY ITEM STOCK NUMBERS DIMENSIONS ' WEIGHT (INCHES) (LBS) 1 Teletypewriter TT-275/UG includes: 16 x 18-1/4 x 20-1/2 1 Cabinet, Electrical Equipment 70 CY-2539/UG $4-5/8 \times 8-1/8 \times 15$ 5 Panel, Power Distribution SB-964/UG $9-3/4 \times 10-1/2 \times 15-1/2$ Typing Unit, Teletypewriter 19 MX-11158/UG Motor, AC PD-18/U 4 x 5-3/4 x 8-1/2 1.0 Base. Teletypewriter MT-1443/UG

TT-275/UG TELETYPEWRITER QTY ITEM STOCK NUMBERS DIMENSIONS

DIMENSIONS WEIGHT (INCHES) (LBS)

- 1 Set of Gears
- 1 Speed Indicator

REFERENCE DATA AND LITERATURE:

Technical Manual for Teletypewriter TT-275/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

PKGS VOLUME (CU FT) WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE:

SPEC &/OR DWG:

DESIGN COG: USN, BuShips

| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
|----------------------|---------------|-----------------------|----------------------|
| Teletype Corporation | Chicago, 111. | NObsr-75250 | \$1,314.81 |
| | | NObsr-81159 | |

TT-292/UG

TELETYPEWRITER PERFORATOR-REPERFORATOR

FUNCTIONAL DESCRIPTION

Teletypewriter Perforator-Reperforator TT-292/UG prepares a perforated and typewritten tape for on or off-line use, or it receives a perforated and typewritten tape from on-line signals.

No field changes in effect at time of preparation (5 January 1961).

RELATION TO OTHER EQUIPMENT

This equipment is similar to Perforator-Reperforator, Teletypewriter TT-253/UG, except it has a series governed motor.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE MOTOR: Series.
UNIT CODE: 7.42.
TAPE WIDTH: 11/16 in.

POWER REQUIREMENTS: 115 v, 60 cyc, single

ph; 115 v dc.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-75523. Approximate unit cost \$1,358.00.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93400: Preliminary Data Sheet for PERFORATOR-REPERFORATOR, TELETYPEWRITER TT-292/UG.

TYPE CLASSIFICATION (NAVY)
DESIGN COGNIZANCE USN, BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter Perforator-Reperforator TT-292/UG includes: | 12 x 17 x 19 | | | |
| 1 | Teletypewriter Reperforator | | | | |
| 1 | Teletypewriter Keyboard-Transmitter | | US PROPERTY. | | |
| 1 | A.C. Motor PD-18/U | | on Children | | |
| 1 | Teletypewriter Cover | | | | |
| 1 | Speed Indicator | | 1 | | |

REPERFORATOR

TT-45/FG



Reperforator TT-45/FG

FUNCTIONAL DESCRIPTION

The TT-45/FG is a Teletype Corp Model 14 receiving only typing reperforator unit. It is a synchronous motor driven equipment for receiving messages over wire or radio circuits, and recording the messages in both code perforations and typed characters on the same tape. The messages may be transmitted to one or more stations by means of a transmitter-distributor unit. The TT-45/FG may be used with Teletypewriters TT-45/UG, TT-48/UG, TT-69/UG, TT-70/UG, TT-52/FG, and AN/FGC-11. It is also used with Teletype

Panel TT-23()/SG and associated radio converters.

No field changes in effect at time of preparation (7 May 1958).

RELATION TO OTHER EQUIPMENT

The TT-45/FG is identical to the Reperforator TT-46/FG except that it uses a synchronous instead of a series-governed motor.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OPERATIONS PER MINUTE: 368, 60 wpm.

5 unit

TYPE OF FEED: Friction.

TYPE OF CHARACTERS: Communications.

CHANNELS: 2.

POWER SOURCE REQUIRED: 115 v, 60 cps, 1 ph. MOUNTING DATA: Table for mounting is supplied.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Ill Contract NObsr-49179, Contract NObsr-52179, Contract NObsr-42421. Approximate Cost: \$1000.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

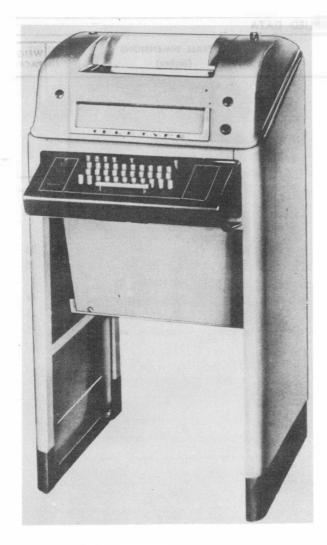
NAVSHIPS 91241: Technical Manual for Teletype Printing Telegraph Equipment, Manual No. 61.

| | EQUIPMENT SU | PPLIED DATA | |
|---------------------------|---|-----------------------------|--------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGH' |
| 1 | Reperforator TT-45/FG Consisting of: 1 Base FB46/15 1 Typing Reperforator FPR23H246 1 Cover FPRC200AA 1 Rectifier REC29 1 Relay RY30 1 Table XRT200AA 1 Electrical Assembly 105014 | | |
| | 1 Tape Container 115702 | | |
| | - 11 - 20170 - 11000 - 11001 | | |
| | | | |
| | | | |
| - 2 | | | |

Radio-Communication Terminal Equipment

TELETYPEWRITER

TT-47/UG



Teletypewriter TT-47/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-47/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: 115 v \pm 10%, 60 cy, 1 ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-42434, dated 28 June 1948.

Contract NObsr-49182, dated 14 June 1950.

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 1 December 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91393: Technical Manual for TELE-TYPEWRITERS TT-47/UG, TT-48/UG, TT-69/UG, and TT-70/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: CS-898 (NAVY)

STOCK NO.

R.D.B. IDENT, NO.

TT-47/UG

TELETYPEWRITER

| SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|--------------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 ITele | etypewriter TT-47/UG | 24.09 | 22-3/4 X 40 X 45-3/4 | 314 |

| EQUIPMENT SUPPLIED DATA | | | |
|---------------------------|---|-----------------------------|------------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
| 1 | Teletypewriter TT-47/UG including: | | |
| 1 | Cabinet CY-870/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 |
| 1 | Power Distribution Panel SB-154/UG | 4-5/8 X 8-1/8 X 15 | 5 |
| 1 | Keyboard MX-1114/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 |
| 1 | A.C. Motor PD-17/U | 4 X 4-3/8 X 8 | 8 |
| 1 | Automatic Typer MX-1115/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 |
| 1 | Equipment Spares (CTT-151681) | 7-7/8 X 19-1/2 X 21-1/2 | 5 |

TT-47A/UG



Teletypewriter TT-47A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-47A/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: $115 \text{ v} \pm 10\%$, 60 cy, 1ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 7 December

Contract NObsr-63205, dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91713: Technical Manual for TELE-TYPEWRITERS TT-47A/UG, TT-48A/UG, TT-69A/ UG, TT-70A/UG, TT-171/UG.

NAVSHIPS 98350: Field Change No. 1 for TT-47A/UG, TT-48A/UG, TT-69A/UG, TT-70A/UG Modification to Keyboard and Type Pallet.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT, NO.

| SHIPPING DATA | | | | |
|---------------|-----------------------------|--------------------|--------------------------------|----------------------------|
| OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Teletypewriter TT-47A/UG | 24.09 | 22-3/4 X 40 X 45-3/4 | 314 |

TT-47A/UG

TELETYPEWRITER

| EQUIPMENT SUPPLIED. DATA | | | |
|---------------------------|---|-----------------------------|--------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT |
| 1 | Teletypewriter TT-47A/UG Including: | | |
| 1 | Cabinet CY-870/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 |
| 1 | Power Distribution Panel SB-154A/UG | 4-5/8 X 8-1/8 X 15 | 5 |
| 1 | Keyboard MX-1114A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 |
| 1 | A.C. Motor (Synchronous) PD-17A/UG | 4 X 5-3/4 X 8-1/2 | 9 |
| 1 | Automatic Typer MX-1115A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 |
| 1 | Equipment Spares (CTT-152730) | 7-7/8 X 19-1/2 X 21-1/2 | 5 |
| 1 | | | |

TT-47B/UG



Teletypewriter TT-478/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-47B/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: $115 \text{ v} \pm 10\%$, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-63205, dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Nomenclature Card for TELETYPEWRITER TT-47B/ UG.

TYPE CLASSIFICATION (Navy)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: CS-898 (Navy)

STOCK NO.

R.D.B. IDENT, NO.

| | SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Teletypewriter TT-478/UG | 24.09 | 22-3/4 X .40 X 45-3/4 | 314 | |

TT-47B/UG

TELETYPEWRITER

| 201124991 | EQUIPMENT SUPPLIED DATA | | | |
|---------------------------|---|-----------------------------|------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter TT-478/UG including: | | | |
| 1 | Cabinet CY-870A/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | |
| 1 | Power Distribution Panel S8-1548/UG | 4-5/8 X 8-1/8 X 15 | 5 | |
| 1 | Keyboard MX-11148/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | |
| 1 | A. C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 | |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | |

TT-47C/UG



Teletypewriter TT-47C/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-47C/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: $115 \text{ v} \pm 10\%$, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171/UG, TT-234/SGA-3.

TT-47C/UG

TELETYPEWRITER

| OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
|-------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| 1 | Automatic Typer MX-1115B/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-1114B/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-47C/UG Including: | | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114B/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor (Synchronous) PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 | | |
| 1 | Automatic Typer MX+1115B/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | Teletypewriter ??-470/80 | 5 | | |

TT-47D/UG



Teletypewriter TT-47D/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-47D/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (17 November 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of tools.

· ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1 ph,

65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Nomenclature Card for Teletypewriter TT-47D/ UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Automatic Typer MX-11158/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | |
| 1 | Keyboard MX-1114C/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | |
| 1 | A. C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | |

TT-47D/UG

TELETYPEWRITER

| | EQUIPMENT SUPPLIED DATA | | | |
|---------------------------|---|-----------------------------|---------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter TT-47D/UG including: | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | |
| 1 | Keyboard MX-1114C/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | |
| 1 | A. C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 | |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | | |

24 April 1962

TELETYPEWRITER TT-47E/UG

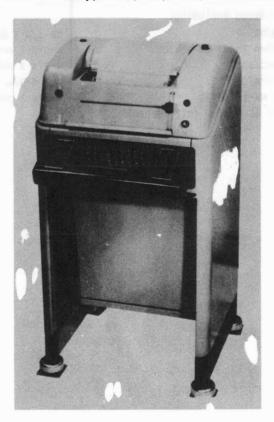
Cog Service: USN Functional Class: FSN: 5815-779-0885

> USA USN USAF

> > Std

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corp., (59433).



Teletypewriter TT-47E/UG

FUNCTIONAL DESCRIPTION:

Teletypewriter TT-47E/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (11 July 1961).

TECHNICAL CHARACTERISTICS:

TYPE OF STATION: Fixed.

TYPE KEYBOARD: Std communication.

TYPE CHARACTERS: English.

CHARACTERS PER LINE: 72.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

TT-47E/UG TELETYPEWRITER

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v porm 10%, 60 cyc, single ph.

RELATION TO OTHER EQUIPMENT:

This equipment is similar to previous models, except for improved design and inclusion of Typing Unit, Teletypewriter MX-2984/U (stunt box) allowing additional functions.

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

(1) Set of tools.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|---|---------------|--------------------------|-----------------|
| 1 | Teletypewriter TT-47E/UG includes: | | | |
| 1 | Cabinet, Electrical Equipment CY-2538/UG | | 18-1/4 × 20-1/2 × 40-1/2 | 81 |
| 1 | Panel, Power Distribution SB-964/UG | | 4-5/8 × 8-1/8 × 15 | 5 |
| 1 | <pre>Keyboard-Transmitter, Tele- typewriter MX-1114C/UG</pre> | | 4-3/4 × 15-1/2 × 17-1/2 | 11 |
| 1 | Typing Unit, Teletypewriter MX-2984/UG | | | |
| 1 | AC Motor PD-17A/U | | 4 × 5-3/4 × 8-1/2 | 9 |
| 1 | Set of Gears (CTT-151060) | | | |

REFERENCE DATA AND LITERATURE:

Technical Manual for Teletypewriter TT-47E/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

| PKGS | VOLUME (CU FT) | WEIGHT (LBS) |
|------|----------------|--------------|

TELETYPEWRITER TT-47/E/UG

PROCUREMENT DATA

PROCURING SERVICE: USN

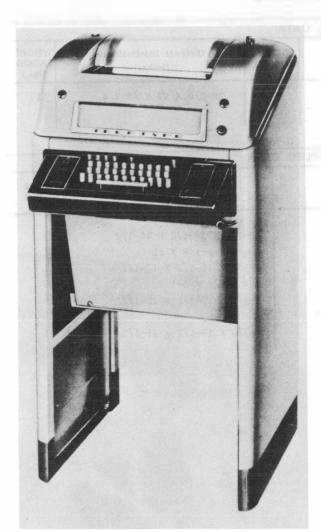
DESIGN COG: USN, BuShips

SPEC &/OR DWG:

| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
|----------------|---------------|--------------------------|----------------------|
| Teletype Corp. | Chicago, 111. | NObsr-75250 | \$1,396.99 |

TT-48/UG

ELECTRICAL AND MECHANICAL CHARACTERISTICS



Teletypewriter TT-48/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-48/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

TYPE OF FEED: Friction.

TYPE OF MOTOR: Series. UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 50 to 60

cy, 1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois

Contract NObsr-42434, dated 28 June 1948.

Contract NObsr-49182, dated 14 June

Contract NObsr-52088, dated 4 December

Contract NObsr-52089, dated 1 December 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91393: Technical Manual for TELE-TYPEWRITERS TT-47/UG, TT-48/UG, TT-69/UG, and TT-70/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

TT-48/UG

TELETYPEWRITER

| SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Teletypewriter TT-48/UG | 24.09 | 22-3/4 X 40 X 45-3/4 | 315 |

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | . NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-48/UG including: | | | | |
| 1 | Cabinet CY-870/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel S8-154/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1115/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | | |
| 1 | Equipment Spares (CTT-151682) | 7-7/8 X 19-1/2 X 21-1/2 | 5 | | |

TT-48A/UG



Teletypewriter TT-48A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-48A/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

TYPE OF FEED: Friction.

TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 50 to 60 cy, 1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 7 December 1950

Contract NObsr-63205, dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91713: Technical Manual for Teletypewriters TT-47A/UG, TT-48A/UG, TT-69A/UG, TT-70A/UG, TT-171/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE SPEC: CS-898 (NAVY)

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|--------------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Teletypewriter TT-48A/UG | 24.09 | 22-3/4 X 40 X 45-3/4 | 315 | | |

TT-48A/UG

TELETYPEWRITER

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-48A/UG including: | | | | |
| 1 | Cabinet CY-870/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel SB-154A/UG | 4-5/B X B-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-18/UG | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1115A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gear for 60 w.p.m. (CTT-151060) | | 5 | | |
| 1 | Equipment Spares (CTT-152731) | 7-7/8 X 19-1/2 X 21-1/2 | 5 | | |

the second secon



Teletypewriter TT-48B/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-48B/U is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.
TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v $\pm 10\%$, 50 to 60

cy, 1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171/UG, and TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

TT-48B/UG

| SHIPPING DATA | | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Automatic Typer MX-1115B/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | |
| 1 | Keyboard MX-1114B/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | |
| 1 | A.C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | |

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-48B/UG Including: | | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114B/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1115B/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | | | |

TT-48C/UG



Teletypewriter TT-48C/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-48C/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (17 November 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.
TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 50 to 60 cy,

1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals Used.

REFERENCE DATA AND LITERATURE

Nomenclature Card for TELETYPEWRITER TT-48C/UG.

NAVSHIPS 93400: Preliminary Data Sheet for TELETYPEWRITER TT-48C/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT, NO.

| SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-11158/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-1114C/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A. C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2538/UG | 15.0 | 22-7/8 X 24-7/8 X 44-3/4 | 178 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |

TT-48C/UG

| | EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---|-----------------------------|---------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | | |
| 1 | Teletypewriter TT-48C/UG | | | | | |
| 1 | Cabinet CY-2538/UG | 18-1/4 X 20-1/2 X 40-1/2 | 81 | | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | | |
| 1 | Keyboard MX-1114C/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | | |
| 1 | A. C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | | |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | | | | |

TT-5/FG,TT-6/FG



Teletypewriter IT-5/FG, TT-6/FG

FUNCTIONAL DESCRIPTION

The TT-5/FG and TT-6/FG are Teletype Corp, Model 15, Type Bar Page Printers designed for interchanging typewritten messages between two or more points connected by telegraph communication channels. They include a rectifier for use at AC stations for local printer circuits, and for adjusting motor voltages to the correct values. A resistor assembly is connected in series with motor power leads at DC stations.

The TT-5/FG and TT-6/FG are identical, except for keyboard symbols. The TT-5/FG has a standard keyboard for use in ordinary message communication service, while the TT-6/FG keyboard incorporates weather symbols for use in weather report service.

No field changes in effect at time of preparation (7 May 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

CHARACTER TYPE: English.

CHARACTERS PER LINE

TT-5/FG: 72.

TT-6/FG: 76.

OPERATIONS PER MINUTE: 368 or 60 wpm.

CODE: 5 unit.

TYPE OF FEED: Friction.

KEYBOARD

TT-5/FG: Standard Communications.

TT-6/FG: Weather Communications.

STATIONS: Fixed.

POWER SOURCE REQUIRED: 110 v, 60 cps, single ph, unregulated; alternate motors may be used for AC or DC regulated and unregulated power supplies.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Sig Corp Order 35431-Phila-43.

Approximate Cost: \$1200.00 with equip-

ment spares (TT-5/FG).

Approximate Cost: \$1225.00 with equip-

ment spares (TT-6/FG).

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals Used.

REFERENCE DATA AND LITERATURE

TM-11-2215: Technical Manual for Teletype writers TT-5/FG and TT-6/FG.

TYPE CLASSIFICATION
DESIGN COGNIZANCE TASSA
PROCUREMENT COGNIZANCE
STOCK NO.

Π-5/FG,Π-6/FG

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|--------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT | |
| 1 | Typing Unit BP-22/210* or | 12 X 14-1/2 X 15-1/4 | 37 | |
| | BP-93/221** | 12 X 14-1/2 X 15-1/4 | 37 | |
| 1 | Base BB-44 | 9 X 15-3/4 X 16 | 21 | |
| 1 | Motor Unit MU-27 | 5-3/4 X 8-1/2 X 5-3/4 | 16 | |
| 1 | Gear 80374 | | | |
| 1 | Keyboard BK-22-JK* | | | |
| | or BK-22-KQ* | | | |
| 1 | Cover C-105 | | | |
| 1 | Cover Plate 91750 | | | |
| 1 | Copyholder 91752 | | | |
| 1 | Relay RY-30 | | | |
| 1 | Table XRT-115 | | | |
| 1 | Rectifier REC-29 | | | |
| 1 | Speed Indicator 103628 | | | |
| 1 | Set of Equipment Spares and Accessories | | | |

^{*}TT-5/FG only

^{**}TT-6/FG only

TRANSMITTER-DISTRIBUTOR TT-57/FG 20 July 1962 5815-409-0430 FSN: 5815-644-4752 W/S Functional Class: Cog Service: USAF USA USN

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.



Transmitter-Distributor TT-57/FG

FUNCTIONAL DESCRIPTION:

Transmitter-Distributor TT-57/FG is a single-channel distributor that translates code perforations recorded on paper tape into electrical impulses and then transmits them as five-unit, start-stop teletypewriter code to one or more receiving stations over dc wire lines, carrier systems, or radio channels. It can communicate with any 7.42-unit code teletypewriter receiving equipment geared for 368 operations per minute. The unit is designed for use at shore stations.

The TT-57/FG is fully automatic. It includes a tape sensing mechanism, a transmitting mechanism, a distributor motor, and a radio filter mounted on a teletypewriter table. It uses either fully perforated or chadless tape.

No field changes in effect at time of preparation (5 January 1962).

TT-57/FG TRANSMITTER-DISTRIBUTOR

TECHNICAL CHARACTERISTICS:

TRANSMISSION SPEED: 368 opm.

TYPE SIGNAL CODE: 5-unit, start-stop.

TRANSMISSION PATTERN: 7.42-unit.

TYPE MOTOR: Synchronous.

MOTOR SPEED: 1,800 rpm.

POWER REQUIREMENTS: 115 v, 60 cyc, single ph.

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|----------------------------------|---------------|------------------------|-----------------|
| 1 | Transmitter-Distributor TT-57/F(| 3 | | |
| | includes: | | | |
| 1 | Distributor Motor and Base | | | |
| 1 | Feeding and Transmitting | | | |
| | Mechanism | | | |
| 1 | Radio Filter and Cover | | | |
| 1 | Tape Sensing Mechanism | | | |
| 1 | Teletypewriter Table FN-31/FG | 3 | | 40 |
| | | | | |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 92040: Technical Manual for TRANSMITTER-DISTRIBUTOR TT-57/FG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

PKGS VOLUME (CU FT) WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE \$PEC &/OR DWG:

DESIGN COG: USN, BuShips

1.5 TT-57/FG: 2

| | TRANSMITTER-DIS | | TRIBUTOR TT-57/FG |
|----------------------|-------------------|----------------------------|----------------------|
| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
| Teletype Corporation | Chicago, Illinois | NObsr-52189 Nobsr-59583 | |
| | | NObsr-64261 NObsr-75523 | |

TT-69/UG



Teletyperwriter TT-69/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-69/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v $\pm 10\%$, 60 cy, 1

ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-42434, dated 28 June 1948.

Contract NObsr-49182, dated 14 June 1950.

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 1 December 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91393: Technical Manual for TELE-TYPEWRITERS TT-47/UG, TT-48/UG, TT-69/UG, TT-70/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | | |
| 1 | Teletypewriter TT-69/UG | 18.88 | 25 X 29 X 45 | 249 | | |

TT-69/UG

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-69/UG including: | | | | |
| 1 | Cabinet CY-871/UG | 16 X 18-1/4 X 20-1/2 | 70 | | |
| 1 | Power Distribution Panel SB-154/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-17/U | 4 X 4-3/8 X 8 | 8 | | |
| 1 | Automatic Typer MX-1115/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gear for 60 w.p.m. (CTT-151060) | | 5 | | |
| 1 | Equipment Spares (CTT-151681) | 7-7/8 X 19-1/2 X 21-1/2 | 5 | | |

TT-69A/UG



Teletypewriter TI-69A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-69A/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.
TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1 ph, 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-52088, dated 4 December

Contract NObsr-52089, dated 7 December 1950.

Contract NObsr-63205, dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91713: Technical Manual for TELE-TYPEWRITERS TT-47A/UG, TT-48A/UG, TT-69A/ UG, TT-70A/UG, TT-171/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT, NO.

SHIPPING DATA NUMBER WEIGHT VOLUME OVERALL DIMENSIONS OF CONTENTS AND IDENTIFICATION PACKED (Cu.Ft.) (inches) BOXES (lbs.) 249 25 X 29 X 45 Teletypewriter TT-69A/UG 18.88

| | EQUIPMENT SUPPLIED D | DATA | |
|---------------------------------|---|--|------------------------------------|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) |
| 1 1 1 1 1 1 1 | Teletypewriter TT-69A/UG including: Cabinet CY-871/UG Power Distribution Panel SB-154A/UG Keyboard MX-1114A/UG A. C. Motor PD-17A/UG Automatic Keyer MX-1115A/UG Set of Gears for 60 w.p.m. Equipment Spares (CTT-152730) | 16 X 18-1/4 X 20-1/2 4-5/8 X 8-1/8 X 15 4-3/4 X 15-1/2 X 17-1/2 4 X 5-3/4 X 8-1/2 9-3/4 X 10-1/2 X 15-1/2 7-7/8 X 19-1/2 X 21-1/2 | 70 5 11 9 19 5 5 |

TT-69B/UG



Teletypewriter II-69B/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-69B/U is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard. TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v \pm 10%, 60 cy, 1

ph. 65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171A/UG and TT-234/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO

| | SHIPPING DATA | | | |
|-----------------------|------------------------------------|--------------------|--------------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-11158/UG | 4.3 | 16-5/8 X 22-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-11148/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 23-5/8 X 24-5/8 | 100 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |
| | | 1 | | - 1 |

TT-69B/UG

| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (Ibs.) |
|---------------------------|---|-----------------------------|------------------|
| 1 | Teletypewriter TT-698/UG Including: | | |
| 1 | Cabinet CY-2539/UG | 16 X 18-1/4 X 20-1/2 | 70 |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 |
| 1 | Keyboard MX-11148/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 |
| 1 | A.C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 |
| 1 | Automatic Typer MX-11158/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 |

TT-69C/UG



Teletypewriter TT-69C/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-69C/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (17 November 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Synchronous.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: 115 v ±10%, 60 cy, 1 ph,

65 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Nomenclature Card for TELETYPEWRITER TT-69C/ UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT, NO.

| | SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|--------------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Automatic Typer MX-1115B/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | |
| 1 | Keyboard MX-1114C/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | |
| 1 | A. C. Motor PD-17A/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 15 | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 25-3/8 X 24-5/8 | 100 | |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | |

TT-69C/UG

| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT |
|---------------------------|--|-----------------------------|--------|
| 1 | Teletypewriter TT-69C/UG including: | | |
| 1 | Cabinet CY-2539/UG | 16 X 18-1/4 X 20-1/2 | 70 |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 |
| 1 | Keyboard MX-1114C/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 |
| 1 | A. C. Motor PD-17A/U | 4 X 5-3/4 X 8-1/2 | 9 |
| 1 | Automatic Typer MX-1115B/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 |
| 1 | Set of Gears of 60 w.p.m. (CTT-151060) | | 5 |

TT-7/FG



Teletypewriter TI-7/FG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-7/FG is a standard communication, page-printing, tape-perforating and transmitting, fixed station sending and receiving teletypewriter equipment.

This equipment consists essentially of a commercial (Teletype Corp Model 19) teletypewriter and includes an operating table and base, a transmitter-distributor, rectifier and associated components.

It can be used for neutral half-duplex or full-duplex operation with or without simultaneous production of (or automatic transmission from) perforated paper tape. It can be arranged, by the addition of supplementary components, to operate in polar or polarential facilities, and can be used in a tape-relay station.

No field changes in effect at time of preparation (31 August 1960).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation; tape

perforation; tape transmission; remote motorstop control.

TYPE KEYBOARD: Standard communications.

CHARACTERS PER LINE: 72.

OPERATING SPEED: 368.1 opm (60 wpm), or 404 opm (66 wpm).

CODE: 5 unit.

TYPE MOTOR: AC series-governed.

MOTOR POWER-REQUIREMENTS: 110 v, 50 to 60

cyc, AC.

POWER REQUIREMENTS: 92 to 125 v and 190 to 250 v, 50 to 60 cyc, AC.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, III.

Model 19, part no. 4.15A-1.

Order No. 10673-P-54-33.

Approximate Cost \$2,127.06.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

TM11-2216: Technical Manual for TELETYPE-WRITERS TT-7/FG and TT-8/FG.

TYPE CLASSIFICATION STD
DESIGN COGNIZANCE USA, SIG C
PROCUREMENT COGNIZANCE
STOCK NO.
R.D.B. IDENT. NO.

TT-7/FG

| | SHIPPING DATA | | | | |
|-----------------------|----------------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Rectifier | 7.9 | 16 x 26 x 33 | 193 | |
| 1 | Teletypewriter Table FN-89/FG | 31.9 | 32-1/4 × 36 × 47 | 363 | |
| 1 | Typing Unit | 10.9 | 28 x 30-1/4 x 30-1/2 | 159 | |
| 1 | Perforator Transmitter Cover | 17.5 | 20 x 30-3/8 x 48-3/4 | 212 | |
| 1 | Motor Unit PU-109/GG Base | 15.7 | 23 × 27 × 44 | 190 | |
| 801 11 | Relay RE-163/G | | | | |
| 1 | Transmitter-Distributor TT-52/FG | 10.3 | 22 × 27 × 30 | 151 | |
| 1 | Teletypewriter Paper | 3.2 | 12 × 20-1/4 × 22 | 85 | |

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|--|-----------------------------|------------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter TT-7/FG including: | | | |
| 1 | Cover | 15-3/8 x 16-9/16 x 16-13/16 | 38 | |
| 1 | Motor Unit PU-109/GG | | 14 | |
| 1 | Perforator-Transmitter | 6-1/4 × 12 × 18 | 24 | |
| 1 | Power Supply PP-315/GGA-1 | 8 x 11 x 25 | | |
| 1 | Distributor-Transmitter, Teletypewriter TT-52/FG | | 30 | |
| 1 | Teletypewriter Subassembly | 12 × 14 × 15-1/2 | | |
| 1 | Teletypewriter Subassembly | 9 x 16 x 16 | 10 | |
| 1 | Teletypewriter Table FN-89/FG | 23 x 27 x 36 | 112 | |
| 1 | Typing Unit | | 49 | |

TT-70/UG



Teletypewriter TT-70/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-70/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: $115 \text{ v} \pm 10\%$, 50 to 60 cy,

1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois.

Contract NObsr-42434, dated 28 June

Contract NObsr-49182, dated 14 June

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 1 December 1950.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91393: Technical Manual for TELE-TYPEWRITERS TT-47/UG, TT-48/UG, TT-69/UG, and TT-70/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

| | SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|-----------------------------|----------------------------|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) | |
| 1 | Teletypewriter TT-70/UG | 18.88 | 25 X 29 X 45 | 250 | |

TT-70/UG

| 1 Teletypewriter TT-70/UG Including: | | |
|---|-------------------------|----|
| 0.11.1.00.000.000 | | |
| 1 Cabinet CY-871/UG | 16 X 18-1/4 X 20-1/2 | 70 |
| 1 Power Distribution Panel SB-154/UG | 4-5/8 X 8-1/8 X 15 | 5 |
| 1 Keyboard MX-1114/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 |
| 1 A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 |
| 1 Automatic Typer MX-1115/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 |
| 1 Set of Gears for 60 w.p.m. (CTT-151060) | | 5 |
| 1 Equipment Spares (CTT-151682) | 7-7/8 X 19-1/2 X 21-1/2 | 5 |

TT-70A/UG



Teletypewriter TI-70A/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-70A/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication key-

board.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 o.p.m.

POWER REQUIREMENTS: $115 \text{ v} \pm 10\%$, 50 to 60

cy, 1 ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois

Contract NObsr-52088, dated 4 December 1950.

Contract NObsr-52089, dated 7 December 1950.

Contract NObsr-63205, dated 25 February 1953.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 91713: Technical Manual for TELE-TYPEWRITERS TT-47A/UG, TT-48A/UG, TT-69A/ UG, TT-70A/UG, TT-171/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| SHIPPING DATA | | | | |
|-----------------------|-----------------------------|--------------------|--------------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Teletypewriter TT-70A/UG | 18.88 | 25 X 29 X 45 | 250 |

TT-70A/UG

| EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|---------------|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | |
| 1 | Teletypewriter TT-70A/UG including: | | | |
| 1 | Cabinet CY-871/UG | 16 X 18-1/4 X 20-1/2 | 70 | |
| 1 | Power Distribution Panel SB-154A/UG | 4-5/8 X 8-1/8 X 15 | 5 | |
| 1 | Keyboard MX-1114A/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | |
| 1 | A.C. Motor PD-18/UG | 4 X 5-3/4 X 8-1/2 | 10 | |
| 1 | Automatic Typer MX-1115A/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | |
| 1 | Equipment Spares (CTT-152731) | 7-7/8 X 19-1/2 X 21-1/2 | 5 | |

TT-70C/UG



Teletypewriter TT-70C/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-70C/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (14 September 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of Tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per line.

TYPE OF FEED: Friction.
TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: 115 v ±10%, 50 to 60 cy, 1 ph. 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois. Contract NObsr-71788. Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

NAVSHIPS 93241: Technical Manual for TELE-TYPEWRITERS TT-47C/UG, TT-48B/UG, TT-69B/ UG, TT-70C/UG, TT-128A/UG, TT-129A/UG, TT-130A/UG, TT-131A/UG, TT-171A/UG and TT-234/SGA-3.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN, BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| SHIPPING DATA | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Automatic Typer MX-11158/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 |
| 1 | Keyboard MX-11148/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 |
| 1 | A.C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 23-5/8 X 24-5/8 | 100 |
| 1 | Gears and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 |

TT-70C/UG

| | EQUIPMENT SUPPLIED DATA | | | | |
|---------------------------|---|-----------------------------|------------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter 77-700/46 Including: | | | | |
| 1 | Cabinet C1-2539/86 | 16 X 18-1/4 X 20-1/2 | 70 | | |
| Í | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-11148/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A.C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1115B/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | The second second | 5 | | |

TT-70D/UG



Teletypewriter II-70D/UG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-70D/UG is used to exchange typewritten page messages between two or more ships or stations connected to a radio or wire telegraph channel.

No field changes in effect at time of preparation (17 November 1959).

EQUIPMENT REQUIRED BUT NOT SUPPLIED

(1) Set of tools.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF STATION: Fixed.

TYPE OF KEYBOARD: Std.communication keyboard.

TYPE OF CHARACTERS: English.

QUANTITY OF CHARACTERS: 72 characters per

line.

TYPE OF FEED: Friction.

TYPE OF MOTOR: Series.

UNIT CODE: 7.42.

SPEED OF OPERATION: 368 opm.

POWER REQUIREMENTS: $116 \text{ v} \pm 10\%$, 50 to 60 cy,

l ph, 95 W.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp., Chicago, Illinois Contract NObsr-75250.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

Nomenclature Card for Teletypewriter TT-70C/UG.

TYPE CLASSIFICATION (NAVY)

DESIGN COGNIZANCE USN. BUSHIPS

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

| | SHIPPING DATA | | | | | |
|-----------------------|------------------------------------|--------------------|-----------------------------|----------------------------|--|--|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (Ibs.) | | |
| 1 | Automatic Typer MX-1115B/UG | 4.3 | 16-5/8 X 21-3/4 X 22-5/8 | 54 | | |
| 1 | Keyboard MX-1114C/UG | 2.3 | 9-3/8 X 20-7/8 X 23-1/2 | 40 | | |
| 1 | A. C. Motor PD-18/U | 0.6 | 7 X 9-3/4 X 13-3/4 | 16 | | |
| 1 | Power Distribution Panel SB-964/UG | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 12 | | |
| 1 | Cabinet CY-2539/UG | 8.0 | 22-3/8 X 23-5/8 X 24-5/8 | 100 | | |
| 1 | Gear and Technical Manuals | 0.8 | 6-5/8 X 11-3/8 X 19-5/8 | 16 | | |

Π-70D/UG

| EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|---|-----------------------------|---------------|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | |
| 1 | Teletypewriter TT-70D/UG including: | | | | |
| 1 | Cabinet CY-2539/UG | 16 X 18-1/4 X 20-1/2 | 70 | | |
| 1 | Power Distribution Panel SB-964/UG | 4-5/8 X 8-1/8 X 15 | 5 | | |
| 1 | Keyboard MX-1114C/UG | 4-3/4 X 15-1/2 X 17-1/2 | 11 | | |
| 1 | A. C. Motor PD-18/U | 4 X 5-3/4 X 8-1/2 | 10 | | |
| 1 | Automatic Typer MX-1115B/UG | 9-3/4 X 10-1/2 X 15-1/2 | 19 | | |
| 1 | Set of Gears for 60 w.p.m. (CTT-151060) | | 5 | | |

4 January 1962 Cog Service:

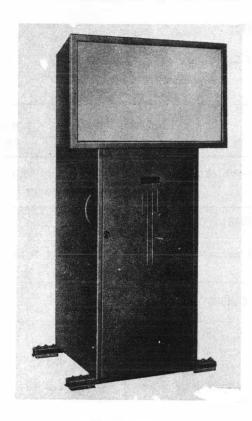
TYPE CLASS:

5815-356-3163 FSN: 5815-519-4048 W/S TELETYPEWRITER PRINTER-PROJECTOR TT-71/UG

USA

Functional Class:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.



USN

Teletypewriter Printer-Projector II-71/0G

FUNCTIONAL DESCRIPTION:

Teletypewriter Printer-Projector TT-71/UG is a fixed station receiving-only equipment. It projects its received Messages on a translucent screen and is used for teletypewriter conference communications, group orientation and instruction, and similar applications.

This equipment consists of a single cabinet containing two receiving units and the projection and illumination systems. One of the receiving units (essentially a commercial Teletype Corp. Model 14) is a page-printing teletypewriter. This unit prints the message in page form on a transparent web from which the message is projected on the 3 by 2 foot screen. The other receiving unit (commercial Teletype Corp. Model 14, modified, or equivalent) is a type-bar tape printer. This unit prints the message on a continuous strip of paper tape, which may be used for reference purposes.

No field changes in effect at time of preparation (14 June 1961).

TT-71/UG TELETYPEWRITER PRINTER-PROJECTOR

TECHNICAL CHARACTERISTICS:

OPERATING FUNCTIONS: Std communications type pallet arrangements; 5-unit start-stop code.

LIGHTING SYSTEM: 500 W lamp.

OPERATING SPEED: 368.1 opm (60 wpm).

MOTOR CHARACTERISTICS: Synchronous; 10 amp start, 2 amp running load.

POWER REQUIREMENTS: 1 KW, 110 v, 60 cyc, single ph.

RELATION TO OTHER EQUIPMENT: None.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|----------------------------------|---------------|------------------------|-----------------|
| 1 | Teletypewriter Printer-Projector | | 33 × 37 × 81 | 621 |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 91220: Technical Manual for Printer-Projector, Teletypewriter TT-71/UG and TT-90/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

VOLUME (CU FT) WEIGHT (LBS) PKGS

8.6

PROCUREMENT DATA

PROCURING SERVICE:

DESIGN COG: USA, Sig C.

SPEC &/OR DWG:

| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
|----------------------|-------------------|---------------------------------|----------------------|
| Teletype Corporation | Chicago, Illinois | NObsr-52224, 17 January 1951 | \$2,691.80 |

TELETYPEWRITER PRINTER-PROJECTOR TT-71/UG

| CONTRACTOR | LOCATION | CONTRACT OR ORDER NO. | APPROX. UNIT COST |
|------------|----------|-----------------------|----------------------|
| | | NObsr-64830, | \$2,905.40 |
| | | 24 June 1955 | |
| | | NObsr-75315, | \$3,248.61 |
| | | 27 June 1958 | |

TT-8/FG



Teletypewriter II-8/FG

FUNCTIONAL DESCRIPTION

Teletypewriter TT-8/FG (the weather communication version of Teletypewriter TT-7/FG) is a page-printing, tape-perforating and tape-transmitting, sending and receiving teletypewriter station equipment used for weather data communication at fixed plant installations.

This equipment consists essentially of a teletypewriter equipped with a perforator-transmitter and weather keyboard and type pallets, plus a transmitter-distributor, a rectifier, and operating table and accessories.

It operates on a half-duplex basis. A line selector switch is provided and the equipment can function as a teletypewriter relay station. Wiring includes an integral testing circuit and connection terminals for a reperforator.

No field changes in effect at time of preparation (31 August 1960).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation or tape transmission; page printing and/or tape perforation.

TYPE KEYBOARD: Weather communications.

CHARACTERS PER LINE: 76.

OPERATING SPEED: 368.1 opm (60 wpm) or 404 opm (66 wpm).

CODE: 5 unit.

TYPE MOTOR: AC series-governed.

MOTOR POWER REQUIREMENTS: 110 v, 50 to 60 cyc,

AC.

POWER REQUIREMENTS: 92 to 125 v, and 190 to

250 v, 50 to 60 cyc, AC.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Illinois.

Model No. 19, part no. 4.13A-1.

Order No. 3281-P-52-09.

Approximate Cost \$2,128.98.

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

REFERENCE DATA AND LITERATURE

TM11-2216: Technical Manual for TELETYPE-WRITERS TT-7/FG and TT-8/FG.

TYPE CLASSIFICATION STD

DESIGN COGNIZANCE USA, SIG C

PROCUREMENT COGNIZANCE

STOCK NO.

R.D.B. IDENT. NO.

TT-8/FG

| SHIPPING DATA | | | | |
|-----------------------|--|------------------|-----------------------------|----------------------------|
| NUMBER OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (CAPL) | OVERALL DIMENSIONS (inches) | WEIGHT PACKED (lbs.) |
| 1 | Rectifler | 7.9 | 16 x 26 x 33 | 193 |
| 1 | Teletypewriter Table FN-89/FG | 31.9 | 32-1/4 × 36 × 47 | 363 |
| 1 | Typing Unit BP-22/210 | 10.9 | 28 x 30-1/4 x 30-1/2 | 159 |
| 1 | Perforator Transmitter PEX25JX Cover PEXC200AA | 17.5 | 20 x 30-3/8 x 48-3/4 | 212 |
| 1 | Motor Unit PU-109/GG Base 88 44 Relay RE-163/G | 15.7 | 23 × ∠7 × 44 | 190 |
| 1 | Transmitter-Distributor TT-52/FG | 10.3 | 22 × 27 × 30 | 151 |
| 1 | Teletypewriter Paper | 3.2 | 12 × 20-1/4 × 22 | 85 |

| | EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|--|--------------------------------|---------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (Ros.) | | | |
| 1 | Teletypewriter TT-8/FG including: | | | | | |
| 1 | Cover | 15-3/8 x 16-9/16 x 16-13/16 | 38 | | | |
| 1 | Distributor-Transmitter, Teletypewriter TT-52/FG | | 30 | | | |
| 1 | Motor Unit PU-109/GG | | 14 | | | |
| 1 | Perforator-Transmitter | | 24 | | | |
| 1 | Power Supply PP-315/GGA-1 | 8 x 11 x 25 | | | | |
| 1 | Teletypewriter Table FN-89/FG | 18 x 21-5/16 x 26-1/2 | 112 | | | |
| 1 | Teletypewriter | 12 x 14 x 15-1/2 | | | | |

18 September 1962

TELETYPEWRITER TT-90/UG

Cog Service:

FSN: 5815-665-1807 Functional Class:

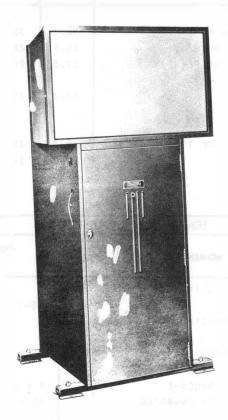
USA

USN

USAF

TYPE CLASS:

MANUFACTURER'S NAME/CODE NUMBER: Teletype Corporation.



Teletypewriter TT-90/UG

FUNCTIONAL DESCRIPTION:

.The Teletypewriter TT-90/UG system provides a means of transmitting typewritten information by printing telegraph from a sending station to one (1) or more receiver-projector stations. Messages are transmitted from a Teletype Model 15 page printer at the sending station and are recorded simultaneously at all receiver-projector stations connected to the system.

Each receiver-projector station utilizes a projector cabinet which encloses two (2) receiving units as follows: A Model 15 Page Typing Unit which typewrites the message in successive lines on a continuous transparent web, from which it is projected on to a screen approximately three (3) feet wide and two (2) feet high; and a Model 14 Tape Printer which typewrites the message on a continuous narrow strip of paper tape which may be used for

No field changes in effect at time of preparation (26 May 1961).

TT-90/UG TELETYPEWRITER

TECHNICAL CHARACTERISTICS:

TYPE OF INSTALLATION: Fixed station.

OPERATING FUNCTIONS

TYPE OF KEYBOARD: Standard communication type.

TYPE OF CODE: Five-unit start-stop code.

TYPE OF CHARACTERS: Marray style.

NUMBER OF CHARACTERS PER LINE: 45 or 47.

TYPE OF FEED: Friction feed.

OPERATING SPEED: 36B.1 opm (60 WPM).

MOTOR CHARACTERISTICS

TYPE: Synchronous motor.

START: 10-amps.

RUNNING LOAD: 2-amps.

OPERATING POWER ROMT: 110 v ac, 60 cps, single ph, 1 kw.

RELATION TO OTHER EQUIPMENT:

The TT-90/UG is designed to be used with, but not part of the Printer-Projector, Teletypewriter TT-71()/UG.

EQUIPMENT REQUIRED BUT NOT SUPPLIED: None.

MAJOR COMPONENTS

| QTY | ITEM | STOCK NUMBERS | DIMENSIONS (INCHES) | WEIGHT (LBS) |
|-----|------------------------------|---------------|------------------------|-----------------|
| 1 | Teletypewriter TT-90/UG | | | 156 |
| | consists of: | | | |
| 1 | Typing Unit Type BP91/97 | | | 37 |
| 1 | Base Type BB4B | | | 21 |
| 1 | Keyboard Type BK26FK | | | 9 |
| 1 | Motor Unit Type MU15 | | | 16 |
| 1 | Copyholder Type no. 115700BD | | | |
| 1 | Table Type XRT111 | | | 40 |
| 1 | Front Plate Type no. 102347 | | | 2 |
| 1 | Cover Type BPC206BD | | | |
| 1 | Set of Gears Type 80437 | | | 1 |
| | | | | |

REFERENCE DATA AND LITERATURE:

NAVSHIPS 91220: Technical Manual for Printer-Projector, Teletypewriter TT-71/UG and TT-90/UG.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

1.5 TT-90/UG: 2

TELETYPEWRITER TT-90/UG

CRYSTALS: None used.

SEMI-CONDUCTORS: None used.

SHIPPING DATA

VOLUME (CU FT) PKGS WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE:

SPEC &/OR DWG:

DESIGN COG: USN, BuShips

CONTRACTOR LOCATION CONTRACT OR APPROX. ORDER NO. UNIT COST Teletype Corporation Chicago 1, Ill. NObsr-64830, \$1,191.96 24 June 1955 NObsr-75315, \$1,165.55 27 June 1958

April 1958

REPERFORATOR, TELETYPEWRITER

TT-92/FG



Reperforator, Teletypewriter TT-92/FG

FUNCTIONAL DESCRIPTION

The TT-92/FG is a (Teletype Model 14) receive-only typing reperforator that provides means for receiving messages on standard width (11/16 in.) perforator tape on which both the printed characters and the corresponding chadless code perforations are automatically recorded in the same operation.

The TT-92/FG is used as fixed plant (signal center) equipment and is particularly useful in message and signal centers where large amounts of traffic (both relay and originating) must be handled without delay.

No field changes in effect at time of preparation (18 March 1958).

RELATION TO OTHER EQUIPMENT

The TT-92/FG is the same as TT-53/FG except uses synchronous motor instead of series governed motor.

ELECTRICAL AND MECHANICAL CHARACTERISTICS

POWER SOURCE REQUIRED: 115 v, 1 ph,60 cps , AC for motor unit; DC required for selector magnets.

OPERATING POWER REQUIREMENTS: 160 W at 115 v, 60 cps when using and including a rectifier.

UNIT CODE: 7.42.

TYPE OF MOTOR: 110 v, 60 cps, sync. motor, geared for 368 opm at 1800 rpm.

SPEED: 60 wpm.

MANUFACTURER'S OR CONTRACTOR'S DATA

Teletype Corp, Chicago, Ill.

Contract NObsr 59583, dated 15 Dec. 1952.

Approximate Cost: \$648.00 with equipment spares.

UNCLASSIFIED 1.5 TT-92/FG: 1

TT-92/FG

REPERFORATOR, TELETYPEWRITER

April 1958

TUBE AND/OR CRYSTAL COMPLEMENT

No Electron Tubes or Crystals used.

TYPE CLASSIFICATION
DESIGN COGNIZANCE
PROCUREMENT COGNIZANCE
STOCK NO.

REFERENCE DATA AND LITERATURE

Instruction Book, Teletype Corp Manual 96MA.

| SHIPPING DATA | | | | |
|---------------|--|--------------------|-----------------------------|----------------------------|
| OF BOXES | CONTENTS AND IDENTIFICATION | VOLUME (Cu.Ft.) | OVERALL DIMENSIONS (inches) | WEIGHT PACKEE (lbs.) |
| 1 | Typing Reperforator FPR23H246 consits of: Base FB47/15 Cover FPRC200AA Relay RY-30 Felt Pad 8170 Tape Container 115702AA | 13.0 | 21-1/2 X 31-1/4 X 50 | 180 |

| | EQUIPMENT SUPPLIED DATA | | | | | |
|---------------------------|-------------------------------|-----------------------------|---------------|--|--|--|
| QUANTITY PER EQUIPT | NAME AND NOMENCLATURE | OVERALL DIMENSIONS (inches) | WEIGHT (lbs.) | | | |
| 1 | Typing Reperforator FPR23H246 | 7-1/2 X 11-1/2 X 12 | 33 | | | |
| 1 | Base FB47/15 | 1-15/16 X 12-9/16 X 13-9/16 | 17 | | | |
| 1 | Relay RY-30 | | 1 | | | |
| 1 | Cover FPRC200AA | 10-3/8 X 13-1/16 X 14 | 12 | | | |
| 1 | Tape Container 115702AA | | 4 | | | |
| 1 | Felt Pad 8170 | 3/8 X 15 X 17 | 0.5 | | | |

UNCLASSIFIED

1.5 TT-92/FG: 2