

21 July 1964

Cog Service: USN FSN:

RECORDER-REPRODUCER SET, SOUND AN/UNQ-7C

Functional Class:

USA

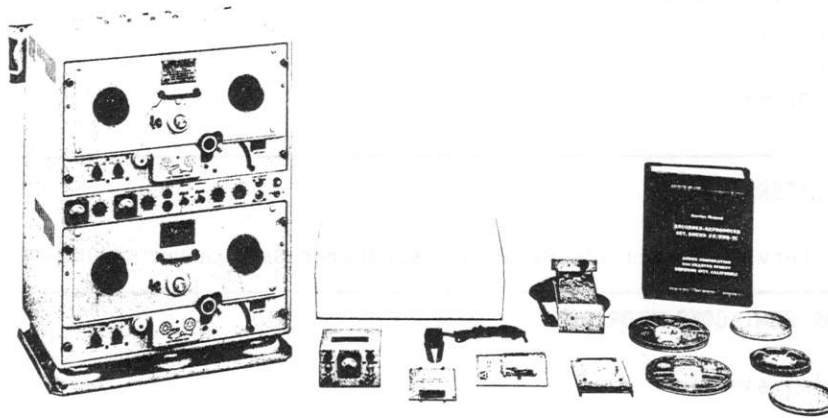
USN

USAF

TYPE CLASS:

Used by

MANUFACTURER'S NAME/CODE NUMBER: Ampex Corporation, (92739).



RECORDER-REPRODUCER SET, SOUND AN/UNQ-7C.

FUNCTIONAL DESCRIPTION:

Recorder-Reproducer Set, Sound AN/UNQ-7C is a dual-track, magnetic tape recorder and re-producer which can be operated at any one of three linear tape speeds of 15, 7.5, and 3.75 in. per sec. Electrical signals which fall within the audio frequency spectrum can be re-corded on this equipment and this information can be either reproduced immediately or, under proper conditions, stored indefinitely.

No field changes in effect at time of preparation (1 July 1964).

RELATION TO OTHER EQUIPMENT:

EQUIPMENT REQUIRED BUT NOT SUPPLIED:

AN/UNQ-7C RECORDER-REPRODUCER SET, SOUND

TECHNICAL CHARACTERISTICS:

INPUTS

CHANNEL A (VOICE)

MICROPHONE: 150 ohms impedance; - 25 dbm max input level, - 60 dbm min input level.

BRIDGING: 200,000 ohms impedance; 15 v max input level, 0.3 v min input level.

LINE: 600 ohms impedance; + 20 dbm max input level, - 15 dbm min input level.

CHANNEL B (SONAR)

BRIDGING: 30,000 ohms impedance, 1.0 v max input level, 0.02 v min input level.

LINE: 600 ohms impedance; 0.0 dbm max input level, - 35 dbm min input level.

FREQUENCY RESPONSE

TAPE SPEED

15 INCHES PER SECOND: ± 2 db, 50 to 20,000 cps freq range.

7.5 INCHES PER SECOND: ± 2 db, 50 to 10,000 cps freq range.

3.75 INCHES PER SECOND: ± 2 db, 50 to 5,000 cps freq range.

NOISE-TO-NOISE RATIO: Exceeds 40 db.

HARMONIC DISTORTION: Less than 2% total at optimum record level.

INTER-CHANNEL CROSSTALK: - 35 db.

FLUTTER: Does not exceed 0.3% rms at 7.5 in. per sec under vibration requirements.

OUTPUTS: 1 output from ea channel, ea delivering 1.0 W into 8 ohm load.

NUMBER OF TRACKS: 2.

RECORDING/REPRODUCING MEDIUM: 1/4 in. W, magnetic oxide-coated, plastic or polyester film base tape, wound on 7 in. dia reel.

RECORDING/REPRODUCING LINEAR TAPE SPEEDS: 15 ± 0.2 , 7.5 ± 0.1 , 3.75 ± 0.05 in. per sec.

FAST FORWARD/REWIND TAPE SPEED: 300 in. per sec avg min.

TIME RATING: Capable of continuous operation.

POWER REQUIREMENTS: 108 to 122 v, 57 to 63 cyc, single ph.

POWER DISSIPATION: 175 W (standby), 400 W (record and reproduce).

MAJOR COMPONENTS

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Recorder-Reproducer Set, Sound AN/UNQ-7C includes:	S5835-829-0671		
2	Recorder-Reproducer, Sound RD-247/UNQ-7C			45
1	Cabinet, Electrical Equipment CY-3497/UNQ-7C		21 x 21-3/16 x 27	124
1	Control, Sound, Recorder-Repro- ducer C-4056/UNQ-7C		3-5/32 x 4-31/32 x 5-7/16	2
1	Container, Maintenance Kit consisting of:			
1	Container, Polystyrene			
1	Service Assy, Electrical Equipment Cabinet			
1	Service Assy, Record Preamp- fier Channel A			

RECORDER-REPRODUCER SET, SOUND AN/UNQ-7C

QTY	ITEM	STOCK NUMBERS	DIMENSIONS (INCHES)	WEIGHT (LBS)
1	Service Assy, Record Pre-amplifier Channel B			
1	Tape, Alignment			
2	Reel, Empty		7 dia	
1	Demagnetizer, Head			
1	Splicer, Tape			
1	Technical Manual NAVSHIPS 365-2769			

REFERENCE DATA AND LITERATURE:

NAVSHIPS 365-2769: Service Manual for Recorder-Reproducer Set, Sound AN/UNQ-7C.

TUBE, CRYSTAL AND/OR SEMI-CONDUCTOR DATA:

TUBES: None used.

CRYSTALS: None used.

SEMI-CONDUCTORS: (2) 1N93 (2) 1N1390 (9) 1N276 (2) 1N1391 (3) 1N277 (1) 1N2995B
 (12) 1N526 (1) 1N3070 (12) 1N538 (1) 2N297A (4) 1N540 (1) 2N335
 (8) 1N645 (2) 2N338 (1) 1N649 (20) 2N404 (1) 1N751A (5) 2N697B
 (1) 1N752A (10) 2N1039 (2) 1N963B (2) 2N1308 (2) 2N1711

SHIPPING DATA

PKGS	VOLUME (CU FT)	WEIGHT (LBS)

PROCUREMENT DATA

PROCURING SERVICE: USN DESIGN COG: USN, BuShips
 SPEC &/OR DWG: MIL-D-21091D(SHIPS)

CONTRACTOR	LOCATION	CONTRACT OR ORDER NO.	APPROX. UNIT COST
Ampex Corporation	Redwood City, California	NObs (24-126)-84733 (FBM)	\$33435.00
		NObs (24-126)-86797 (FBM)	\$ 9676.00