

ROBINS & MEYERS MOTOR

Type - Shunt Wound D.C. Motor

Volts - 110      Amps - 1.1

HD - .1          Speed - 1200

There is no external speed control on the model.

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YEARS PRODUCED & QUANTITY: 1918 Production

PRIMARY CUSTOMER(S): Kleinschmidt

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.5B-1

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 4-21120-19

PATENT(S):

LIBRARY REFERENCE(S):



GOVERNOR MOTOR

Rotating drum houses two weights attached to linkage with shaft concentric to motor shaft. Outward motion of weights causes concentric shaft to move axially. External nonrotating contact is actuated by axial motion of shaft opening with higher speed of governor. Motor apparently composed in series and contact in series with motor. Speed adjusted by contact positioning. Kleinschmidt governor with motor originally used on Kleinschmidt single contact tape transmitter distributor and other apparatus.

Name Plate

Kleinschmidt Elec. Co. Inc.  
New York City  
DC Motor  
110 Volts RPM 1100 1900  
.40 Amps Serial No. 319

YEARS PRODUCED & QUANTITY: 1937 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

INTERNAL EQUIPMENT CODES: 9, 7-2

FORMAL RELEASES & AGENCIES:

W. O. NO(S): 37833-11 031111-24

WEIGHT(S):

TYPE OF EXPLOSION(S):



WOUND ROTOR SYNCHRONOUS MOTOR

Apparently 110 60 Cy AC is applied to fixed field. Wound rotor terminated in slip rings probably had low voltage DC applied (brushes and insulation of rings and rotor do not seem adequate for high voltage. Motor frame on this experimental device was apparently adapted from a shaded pole AC motor. One of several attempts to make a single phase synchronous motor before such motors were commercially available.

Motor Name Plate

AC Motor  
Model 5 KY 16A15  
V 110 CY60  
MJ  
General Electric Co., U.S.A.

YEARS PRODUCED & QUANTITY: 1932 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

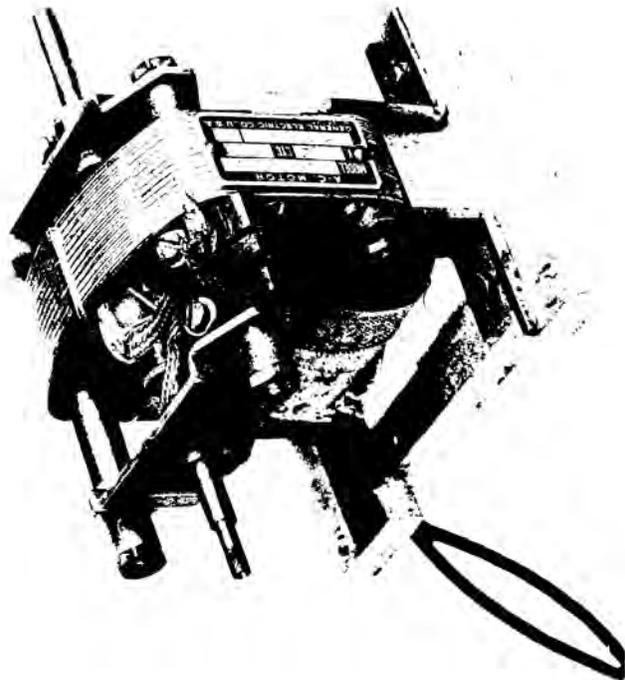
MUSEUM EQUIPMENT CODE: 9.50-1

TECHNICAL BULLETINS & SPECS: Engr. File No. 15-23AAA

PHOTO NO(S): 320309-1 R31111-75

PATENT(S):

LITERARY REFERENCE(S):



SYNCHRONOUS (EXT. SQUIRREL CAGE) MOTOR

A fixed winding is surrounded by a rotating shell consisting of brass end bells and a steel cylinder containing a squirrel cage along its inner surface. Input leads for internal fixed winding are brought in axially through hollow concentric shaft clamped in mounting bracket. Winding of AC armature stators was difficult and expensive. This was an attempt to provide an easy winding method by trading the stator and rotor functions.

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YEARS PRODUCED & QUANTITY: 1932 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.50-2

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 32122-4,6 33120-4,8

PATENT(S):

LIBRARY REFERENCE(S):



D.C. CONVERTER SYNCHRONOUS MOTOR

Name Plate

D.C. Motor  
Model 2731-1 Type S.DA  
FR 305 Wind. Series  
V 110 ITP 1/100  
Amp. .18 RPM 2200

Sync. Motor from Series D.C. Motor Tapped Rotor for A.C.

General Electric Co.

Inverting rotary switch attached to shaft to accomplish phase reversals. Probably started on D.C. One of numerous attempts to develop a synchronous motor for use on single phase AC lines prior to the availability of single phase sync. motors.

YEAS PRODUCED & QUANTITY: 1932 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

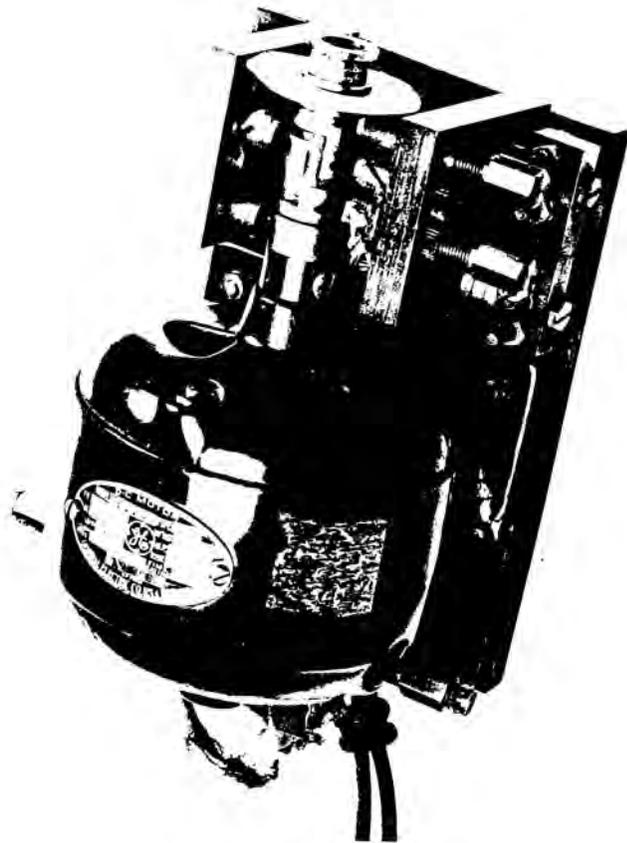
FUSION EQUIPMENT CODE: 9.50-3

TECHNICAL BULLETINS & SPECS: Regr. File No. 15-23 AAA

PHOTO NC(S): 320611-1 431111-74

PATENT(S):

LITERARY REFERENCE(S):



SYNCHRONIZING DAMPER MOTOR

Heavy fly wheel riding on ball bearing. Spider on shaft has friction buttons bearing on outer object fly wheel. Fly wheel and frictional coupling could be used to damp oscillations of shaft to which device is attached. This device is apparently the work of Dr. Potts for us on MUX two-phase extensor equipment for TWX lines.

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YEARS PRODUCED & QUANTITY: 1934 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

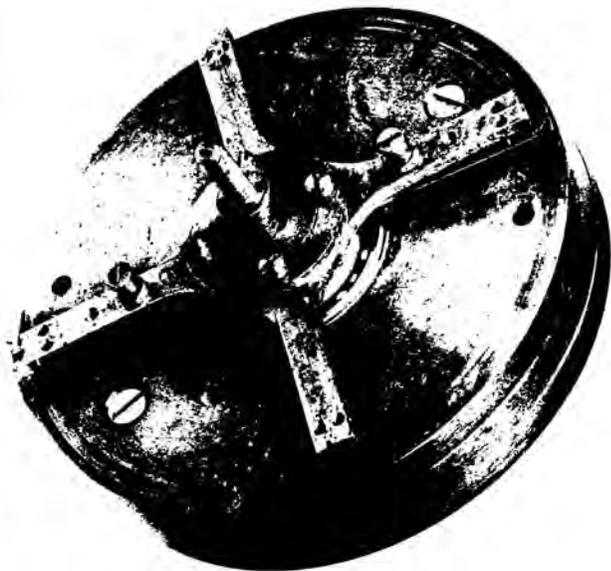
MUSEUM EQUIPMENT CODE: 9.5C-4

TECHNICAL BULLETINS & SPECS: Engr. File No. N-123

PHOTO NO(S): 531120-03

PATENT(S):

LIBRARY REFERENCE(S): Case 20-1



GOVERNOR MOTOR  
(Speed Indicator)

This is a slow-fast speed indicator that indicates the direction of correction of governor speed. Two neon lamps are used for indicator in conjunction with modified peripheral ring governor. Lamps indicate direction to operate manual correction of governor to obtain desired speed. Motor governor contacts wear with usage and the governed speed changes requiring correction direction of correction to be made in the unit when adjustment was required. This experimental unit contained an additional governor contact in the drum which operated the indicator lamps energized to show direction of manual correction of main governor.

YEARS PRODUCED & QUANTITY: 1937 Prototype

PREPARE SWITCHES(S):

CLASSIFICATION CODE:

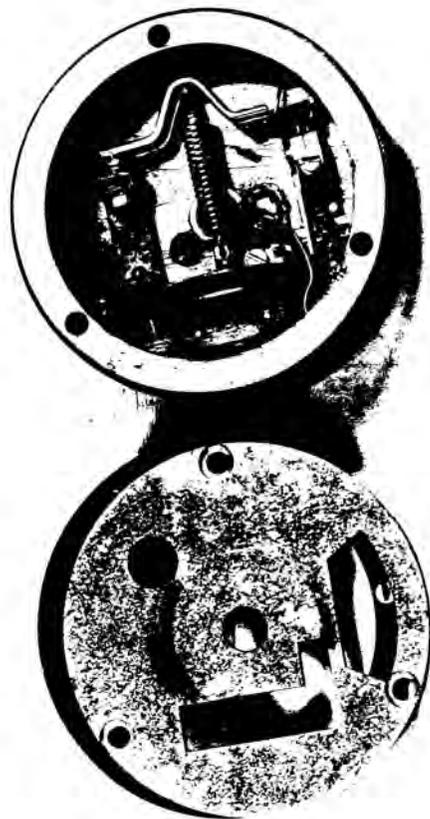
USARMY EQUIPMENT CODE: 9,50-6

AIR FORCE BULLETIN & CIRCULARS:

DOC NO(S): 370823-07 13M 70

REMARKS:

ADDITIONAL REFERENCES:









FRICITION GOVERNOR MOTOR

Motor shaft is geared through a friction clutch to a friction governor consisting of a stationary drum and centrifugally operated brake shoe (shown in photograph, 381028-08, but missing from museum model). Transfer switches are attached to motor shaft and to the shaft of the friction governor. These contacts are wired so their closures will overlap when motor speed and governor speed are the same. When motor slows, overlap becomes less and total contact closure time is longer, supplying more power to motor causing it to speed up. When fast, overlap is greater, total closure time is shorter and motor slows down. Motor governors employing contacts suffer from burnout of contacts. Friction governors do not have this problem, but are capable of only very low power control due to heat developed in friction drums. This experimental device has an attempt to use the friction governor as a speed standard to compare motor speed to it.

Name Plate

Universal Motor  
Model 39095  
Type SDA FR 317  
V 110 CY 60 DC  
HP 1/17 RPM 3600  
General Electric Co.



CENTRIFUGAL CARBON STOCK GOVERNOR MOTOR

Carbon stock rotated on drum and compressed by spring. Centrifugally operated weight relieves spring pressure on stock increasing resistance. Stock apparently connected in series with voltage applied to motor. The response of this experimental device proved inadequate for motor control since the characteristic of the carbon stock was quite nonlinear with respect to pressure and the motor demonstrated tremendous hunting effects.

Name Plate:

Model 5BA65AA29  
Type BA FR 65  
V 95/130 CY 50/60 PH1  
HP 1/25 RPM 2100  
A.8 WD Series  
S 9002 No. VAE 892

DATE PRODUCED & QUANTITY: 1948 Prototype

PRIMARY CUSTOMER(O):

TRANSMISSION CODE:

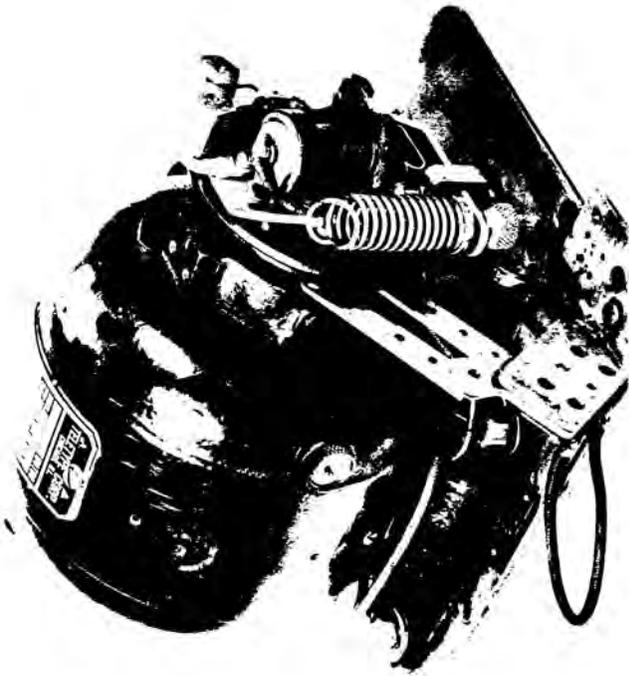
TYPE AND COMPOSITE CODE: 9.50-9

ENGINEER IN CHARGE(S): Gen. Norman Stern

PROJECT NO.: 10017-44 43111-42

PARTS LIST:

REVISIONS:



GOVERNOR MOTOR

Shunt wound DC Motor with drum type governor experimental motor for Type 15 apparatus. Base has motor height adjusting screw to control mast of output gear. Experimental motor unit employing standard peripheral ring governor.

Name Plate

D.C. Motor  
Model 31531  
Type 5D  
Frame 325 Form A  
V 110 Amp. 65  
HP 1/17 Speed 2100  
Shunt Wound  
Gen. Elect. DM



DC SHUNT GOVERNOR MOTOR

This DC shunt motor with a very interesting frequency measuring or controlling device. Two tuned reeds are mounted in vicinity of output shaft. Reeds are surrounded by coil apparently excited by DC to magnetize the reeds. Attached to the shaft is a drum with salient poles which enter the magnetic field of each reed. Motion of drum causes reeds to vibrate. The end of the reed is magnetically coupled to a pickup coil, so that voltage induced in coil will be proportional to the motion of the reed. This output voltage was apparently used in some way to control speed of motor.

Motor Name Plate

DC Motor  
Model 5 by 36A1  
Type 3A Wind Shunt  
V 110 HP 1/30  
Amp .47 RPM 1725  
Temperature rise - time rating  
General Electric Co. U.S.A.



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...  
...  
...  
... 51111- ...

EXTERNAL DRUM TYPE GOVERNOR MOTOR

Motor is equipped with drum type governor with brushes from motor frame contacting angular slip rings on drum. Internal construction of drum not discernable. Thirteen black spots uniformly spaced are placed on outer face of drum. Spots are holes drilled and filled with black material and used to compare motor speed with tuning fork. Lee governor and fly wheel employed.

Motor Name Plate

General Electric Universal Motor  
Model 5BA 36 EAH0  
Type BA Frame 36E  
Volts 110 Cycles 60/DC  
HP - RPM 2400  
NO - JU7

DATE PRODUCED & BY WHOM:      SYNOPSIS:

DATE TESTED & BY WHOM:

TESTING APPARATUS:

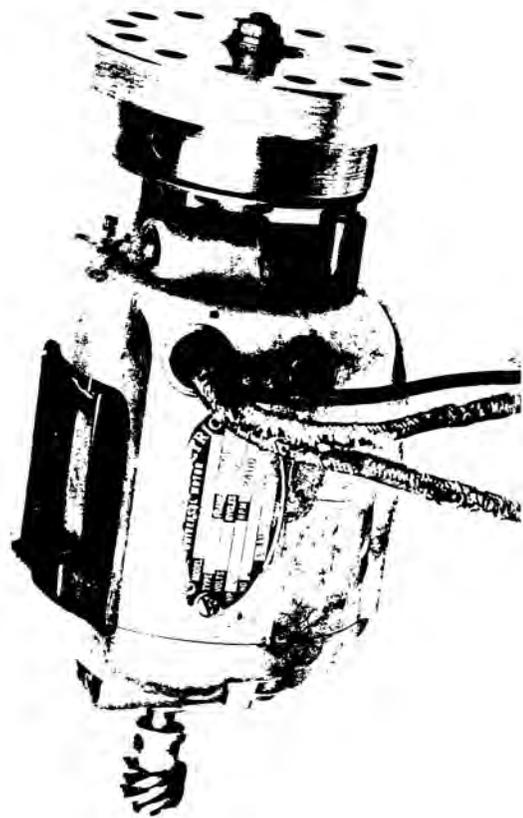
TESTING PROCEDURE:

TESTING RESULTS:

TESTING CONCLUSIONS:

REMARKS:

TESTING LOCATION:



SYNCHRONOUS MOTOR (G.E.)

NAME PLATE

Part #132241

MHP 35 RPM 3600 V115 A.1.6

CY 60 PH 1 Sync.

Temp. Rating 50 degrees C Time Rating Cont. Air Over

YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

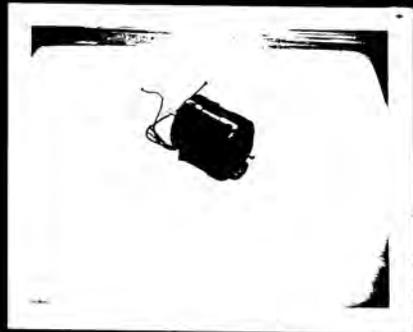
MUSEUM EQUIPMENT CODE: 9.9C-13

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): Polaroid TULOZ

PATENT(S):

LIBRARY REFERENCE(S):



REMOTE CONTROL CODE SENDER

Code generated by contacts riding on circumference of rotating wheel following cutouts in rim. Driven by motor which speed is controlled by fly-ball that varies pressure on friction drag disk.

DATE RECORDED: 1927 Production

RECORD DESCRIPTION:

CLASSIFICATION CODE:

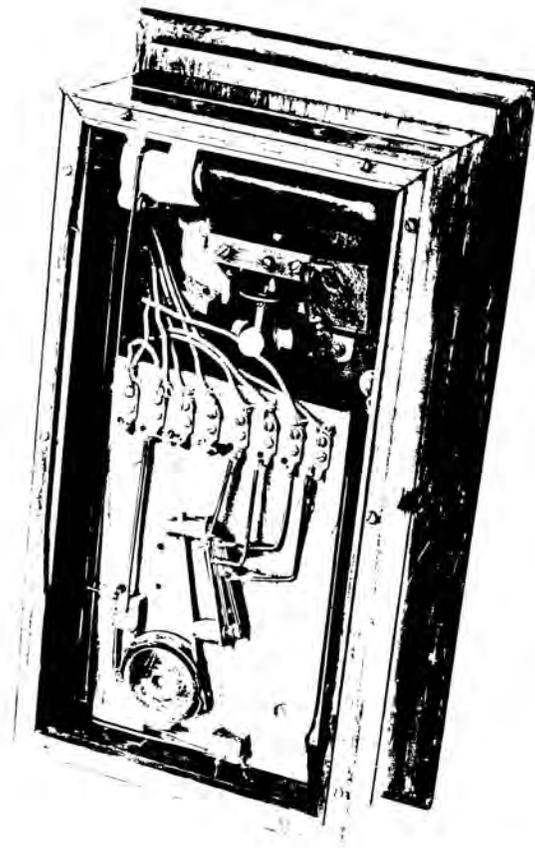
INSTRUMENT EQUIPMENT CODE: 9-9-1

TECHNICAL DESCRIPTION NUMBER:

REF TO G(S): 2110-25 0111-45

REMARKS:

LIBRARY ASSIGNED CODE:



SEMI-AUTO CONTROL SELECTOR

Selector switch mechanism almost identical to Western Electric Type 297 Switch. For details see W.E. card catalog description of 297 Type Switch.

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DATE ACQUIRED BY UNIT: 1927 - unknown

TYPE OF INSTRUMENT:

CLASSIFICATION CODE:

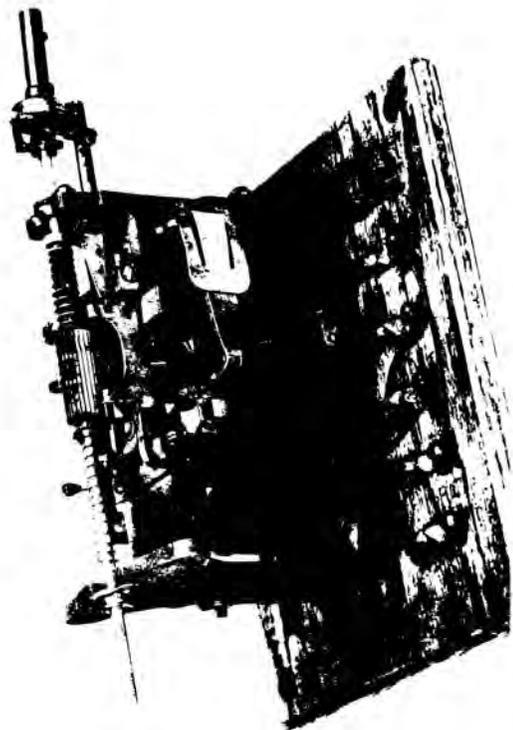
MUSEUM INVENTORY NO.: 8,624

TECHNICAL PUBLICATIONS - CROSS:

PHOTO NO(S): 2405-1-19 631111-15

WARRANTY:

LIBRARY IDENTIFICATION:



AUTOMATIC CONTROLLER 1A

Automatic controller inserted between a tape reader and a Multiplex distributor for sending supervisory signals.

Codings: 1. Start  
2. Rerun  
3. Repunch  
4. Stop  
5. Plant (maintenance)

This unit modified so as to remember if tape being interrupted is sending upper case or lower case signals. (Normal auto. control had no memory and always shifted back to lower case after sending its signals). A model was built but unit was never produced.

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DATE SOLD: 1950 Prototyp

PRIMARY SOURCE: Western Union

MANUFACTURER: IBM

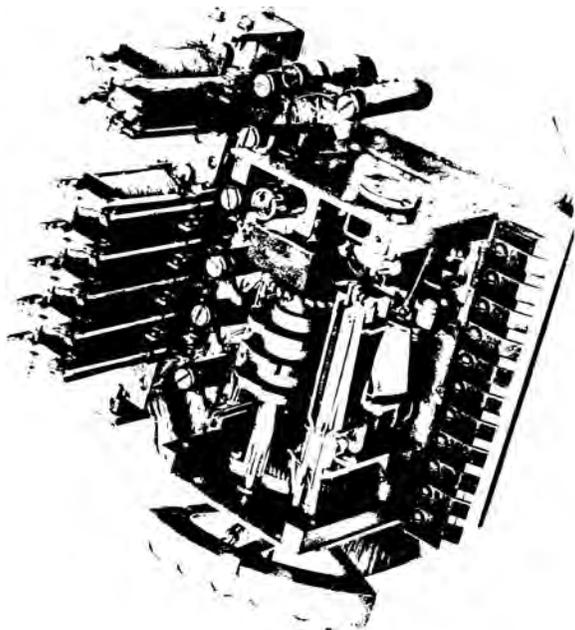
MODEL: 1000-10000

OPERATIONAL: Yes

LOCATION: 1000-10000

STATUS:

REMARKS:



LINE RELAY

This unit keeps a motor running during signal transmission. Two relays are contained in the unit. The first relay follows the signal line. During spacing pulses the relays contacts close the operating circuit of the second relay causing its contacts to close and turn on a motor. Since the second relay is a slow release type, its contacts will remain closed during marking pulses. At the end of signal transmission, the slow release relay will finally drop out and stop the motor.

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YEARS PRODUCED & QUANTITY: 1931 Production

PRIMARY PURPOSE(S):

CLASSIFICATION CODE:

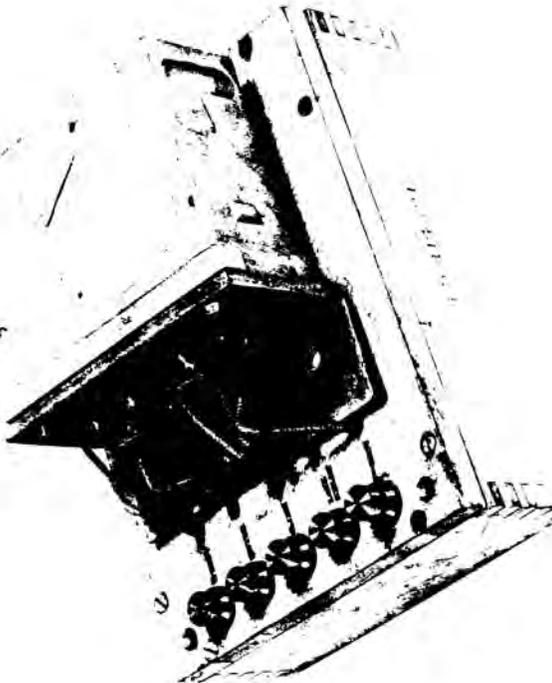
MUSEUM EQUIPMENT CODE: 740-1

TECHNICAL DRAWINGS & DESCS:

RUPO NO(S): 330917-5 - 3310440

PATENT(S):

LITERARY REFERENCE(S):



MOTOR START CONTROL PULSING DISTRIBUTOR

Motor drives a segmented commutator disk past several brushes. Function of this portion is not known. Motor also drives a worm. A magnet, when energized, moves a pawl into engagement with the worm. If the magnet keeps it engaged long enough, the pawl is moved by the worm until it operates a set of contacts. If the magnet releases before the contact is operated the pawl disengages and a spring pulls it back to the starting point.

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YEARS PRODUCED & QUANTITY: 1932 Prototype

PRIMARY ENGINEER(S):

CLASSIFICATION CODE:

DESIGN & DRAWING CODE: 1-000

TECHNICAL SPECIFICATIONS & NOTES:

APPROVAL(S): 1-0502-3.2 - 31-11-4

ATTACH(S):

OPERATIONAL PERFORMANCE(T):



UNIVERSAL CONTROL UNIT

A self contained unit to turn on another unit's motor in response to a break and/or spacing line signal. A signal line following relay is incorporated. When a line break or spacing signal is received the line relay contacts operate a magnet. When operated the magnet pulls a gear segment out of engagement with a pinion driven, thru speed reducing gears, by the small motor contained in the unit. When disengaged the spring loaded gear segment swings to a reset position and allows a toggle switch to complete the AC circuit to an electrical outlet into which a receiving set motor can be plugged. When the signal line goes marking the gear segment engages the pinion causing the gear segment to rotate. If the marking pulse is long enough (i.e. end of transmission) the gear segment will turn far enough to trip the toggle switch and turn off the external motor.

REARS PRODUCED

REAR CASE

CLASSIFICATION CODE

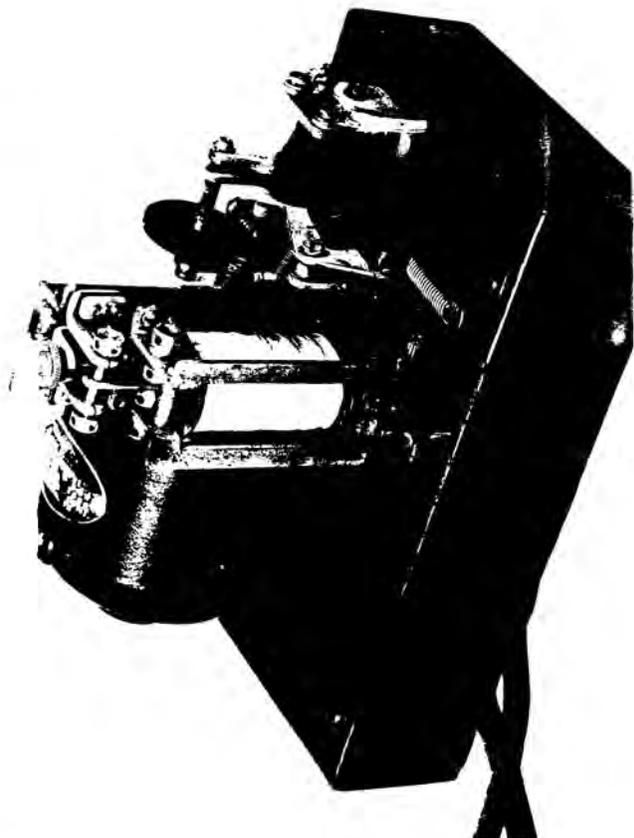
LOWRY INSTRUMENT CO. INC.

UNIVERSAL ELECTRIC CO.

UNIVERSAL ELECTRIC CO.

UNIVERSAL ELECTRIC CO.

UNIVERSAL ELECTRIC CO.



TOLL REGISTER UNIT

Part of an automatic toll register accounting system.

PLANS DEVELOPED & QUANTITY: 1637 Prototype.

PRIMARY CENTER(S):

CLASSIFICATION CODE:

SECRET & CONTROL CODE: S-100-0

TECHNICAL DRAWINGS & SPEC: Engr. File No. S-121 Letter of 3/10/39

UNIT NO(S): 380910-100 380210-96,97 380202-80 381111-36

PATENT(S): No. 2,339,703 File No. S-917A

LITRARY REFERENCE(S): Patts Case - 101



MOTOR SPEED INDICATOR CIRCUIT (14 AND 15 TYPE)

Used on old unattended TWX sets to indicate when receiving unit is up to speed. When a motor start signal turns on an unattended set the motor must come up to speed before centrifugal force can allow an axially mounted pin, in the mechanism attached to the motor pinion, to retract. When this pin does move, it allows a set of contacts to operate and generate a signal indicating readiness to receive.

YEARS PRODUCED & QUANTITY: 1940 Prototype

PRIMARY DESIGNER(S):

CLASSIFICATION CODE:

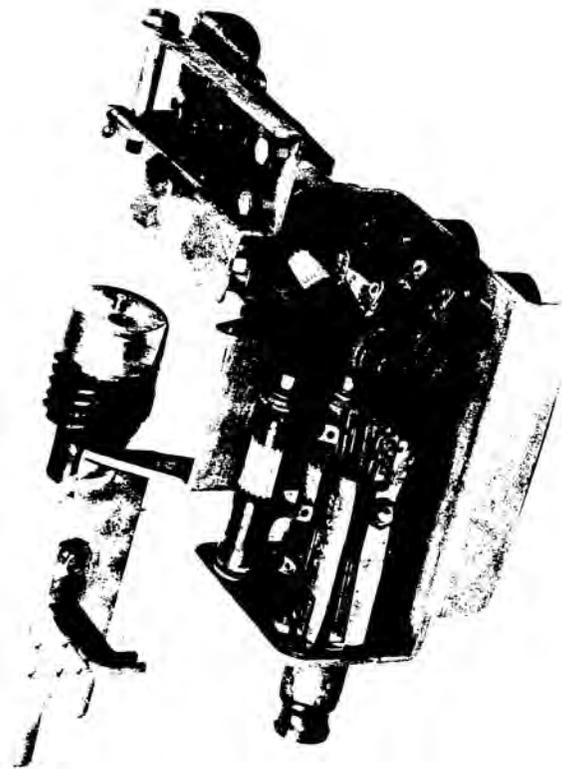
WESCAM EQUIPMENT CODE: 940-5

TECHNICAL DRAWINGS & SPECS:

WITT NO(S): 14031-2, 63 1111-2

PATENT(S):

LITERATURE REFERENCE(S): Case 1704-24 7/10/41



AUTOMATIC MESSAGE NUMBERING UNIT TYPE 7-A

A magnet steps a shaft which has lobes to position a set of code contacts. Every complete rotation of the shaft (ten steps) causes a Geneva mechanism to step a second shaft which in turn steps a third shaft once per revolution. A fourth shaft is positioned manually. An external distributor is used to generate the four numbers set up on the code contacts by the lobes on the shafts.

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YEARS PRODUCTION & ACTIVITY: Production

PRIMARY DISPOSITION:

CLASSIFICATION CODE:

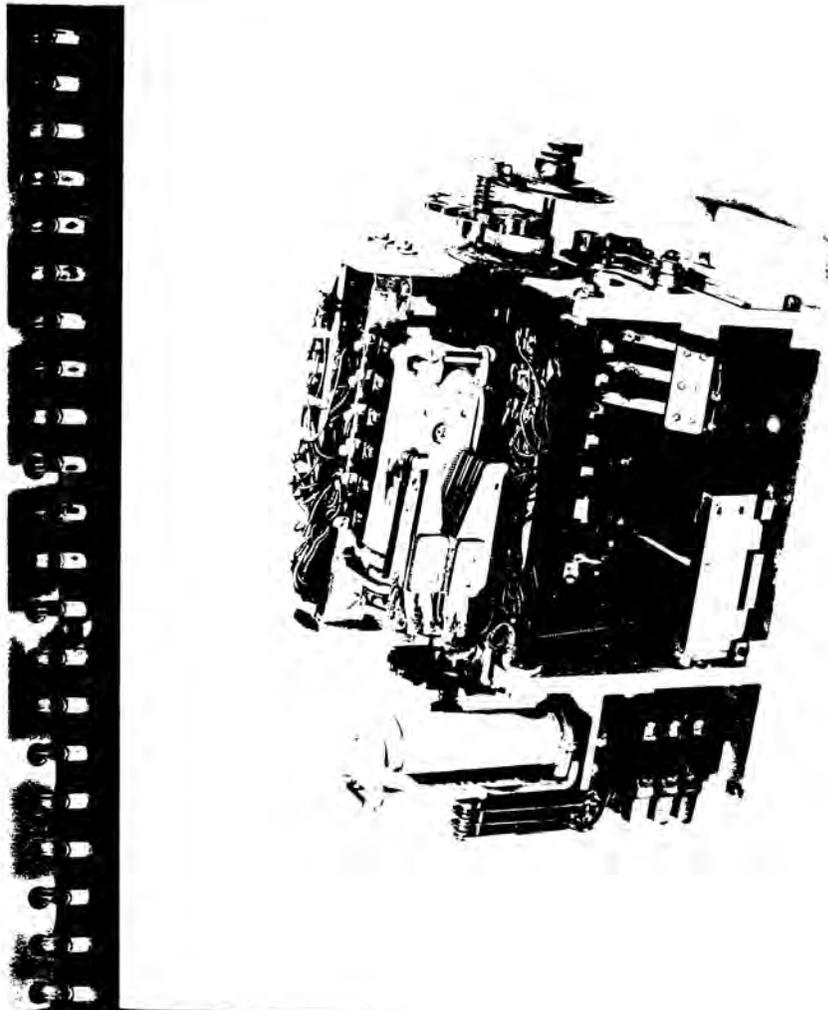
ISSUE DATES: 1942-1943

TECHNICAL DRAWINGS: 100%

PRODUCTION: 1000-10000

REMARKS:

LIBRARY REFERENCE:



MOTOR STOP

Designed to stop motor within a close controlled time.  
Differed from conventional motor stop which operated with a range  
of 5 to 120 seconds. This motor stop would operate in precisely  
90 seconds plus or minus 5 seconds. The Navy was originally  
interested in this feature, and the principle was adopted in  
the lightweight printer - Models TT242 (Navy) and TT190 (Army).  
A patent was granted for the design.

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DEVELOPER & COMPANY: 1850 Pretotype

PRIMARY INSTANTIATOR(S): Navy

CLASSIFICATION CODE:

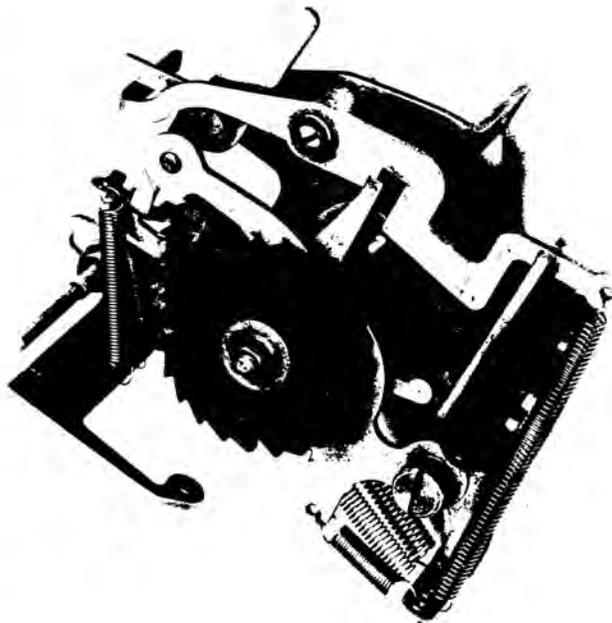
TECHNICAL BULLETINS & NOTES: Charr. P. Noebus

WORKING DRAWINGS CODE: 24-44

PHOTO IN(S): 611124-3

PLATE(S):

EXPLANATORY DRAWING(S):





CONVERTER (CODE 5-12)

A 32-level mechanical input to a 5-level signal output.

VALUE PROPOSED & QUANTITY: 1000 Prototoms

APPROVAL AUTHORITY(S):

CLASSIFICATION CODE:

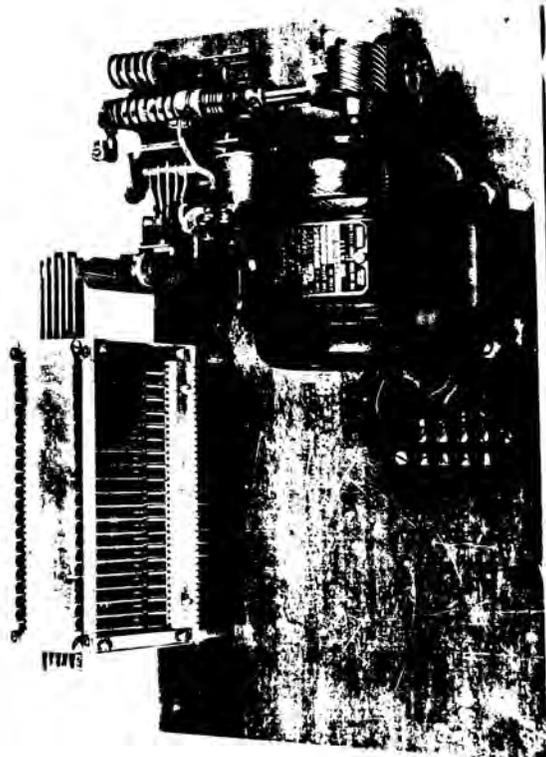
FORM NUMBER CODE: 4-740

PROVIDER, CONTRACT & ORDER: Ctr. Helverson Case 16, 201-1

INSTR AC(S): 500819-07, 81 031111-31

PATENT(S):

LIBRARY REFERENCE(S):



CONVERTER (CODE 5-32)

Information received on a parallel wire basis operates magnets for each signal level. The magnets position code bars to marking or spacing positions. The five code bars position 16 balls. The mechanism is designed in such a way that only 5 of the balls can be positioned opposite the contacts corresponding to the input character. As a result, it then becomes possible to operate the appropriate contact levers. For sketches of parts see File N-123.

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YEARS PRODUCED & QUANTITY: 1953 Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

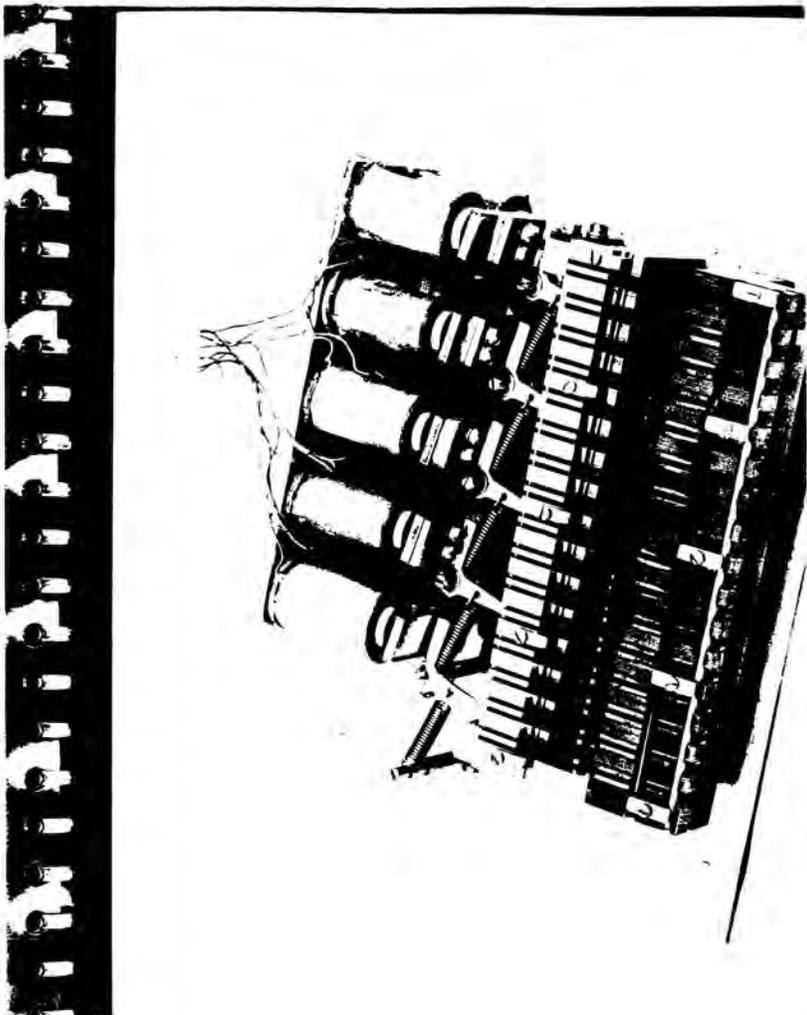
MUSEUM EQUIPMENT CODE: 9-AC-10

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): SLOWP1-77,86, 531111-37

PATENT(S):

LIBRARY REFERENCE(S):



START-STOP TUNING FORK

Tuning fork Start-Stop Bit Timer. Electrically controlled oscillator to work in a start-stop mode. A pair of control magnets set the tuning fork timer in motion. The shutter at the ends of the timer modulates a light beam, which detected, simplified and shaped to produce timing.

YEARS PRODUCED & QUANTITY: 1966 Prototype

REGISTRY NUMBER(S):

MUSEUM EQUIPMENT CODE: 9-10-11

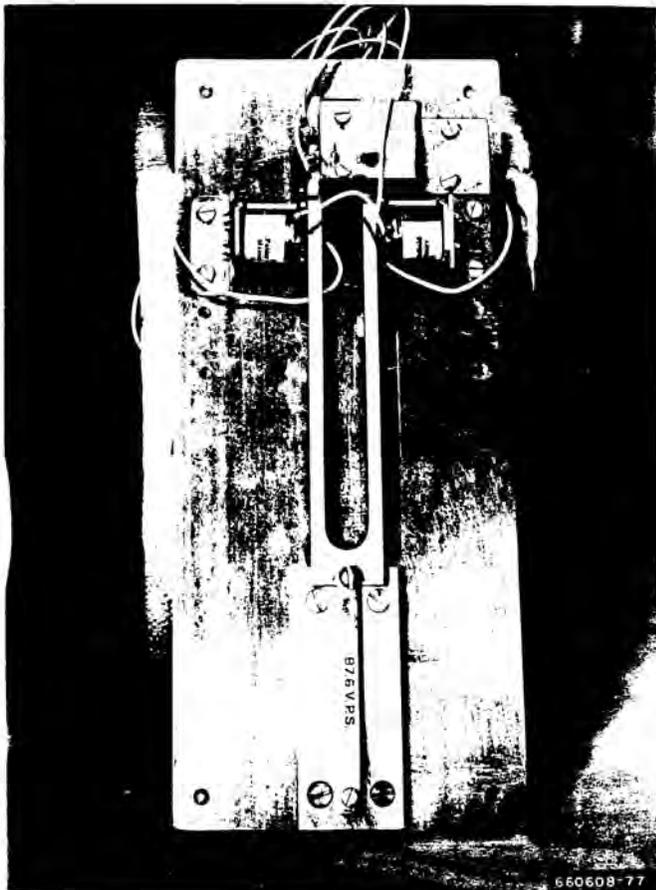
TECHNICAL BULLETINS & SPREAD: Eng. File No. 2-103-111AA

PHOTO NO(S): 66068-77

PATENT(S):

LIBRARY REFERENCE(S):

CLASSIFICATION CODE:



66068-77

CODE CONVERTER (LXCC 800)

This particular unit is the first of an experimental model of an eight to five level code converter. It consists of an eight level tape reader, a code bar assembly where the conversion is made, a five level signal generator used to transmit the message over the line, and a motor to drive the apparatus.

YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE: LXCC 800 (Exp. 1)

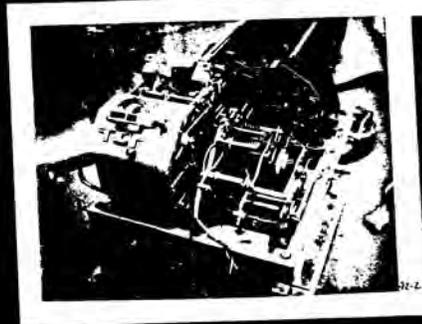
MUSEUM EQUIPMENT CODE: 9.6C-12

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 9.6C-12-1, 2, 3

PATENT(S):

LITERARY REFERENCE(S):



CONVERTER/REPEATER

A stock ticker (CP), modified to be a converter/repeater.  
The typewheel was replaced by cams and contacts.

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YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.6C-13

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): Polaroid T061

PATENT(S):

LIBRARY REFERENCE(S):



ROTARY ENCODER

The basic purpose of this device was to produce, at low cost, feedback signals (position and velocity) for the Linear Motor Printer servo mechanism. It consisted of a printed circuit board with a segment for each printer column and a moving single segment that had a capacitance effect. Signals were generated to determine position and velocity.

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YEARS PRODUCED & QUANTITY: C. 1970 Experimental

PRIMARY CUSTOMER(S): None

CLASSIFICATION CODE: None

SYSTEM REQUIREMENT CODE: 9.60-15

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S):

PATENT(S):

LIBRARY REFERENCES(S):



LINEAR ENCODER

This was basically the same as the Rotary Encoder except that it was capable of horizontal and vertical positioning. It consisted of a printed circuit board with a segment for each printer column and a moving single segment that had a capacitance effect. Signals were generated to determine position and velocity.

YEARS PRODUCED & QUANTITY: C. 1970 Experimental

PRIMARY CUSTOMER(S): None

CLASSIFICATION CODE: None

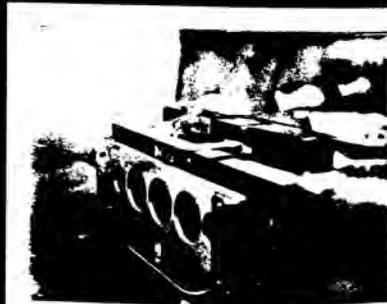
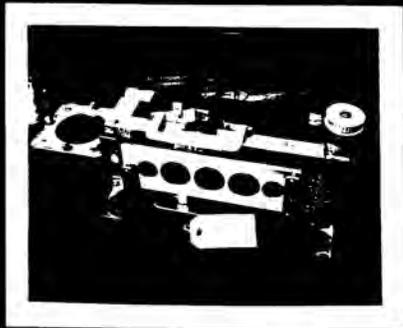
MUSEUM EQUIPMENT CODE: 9.60-16

TECHNICAL BULLETIN & SPECS:

PHOTO CO(S):

PATENT(S):

LIBRARY REFERENCE(S):



Donated to Smithsonian Institution

CODE CONVERTER

Crypto device.

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YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S): U. S. Government

CLASSIFICATION CODE: CSP 5000 Model No.1

MUSEUM EQUIPMENT CODE: 9.6C-17

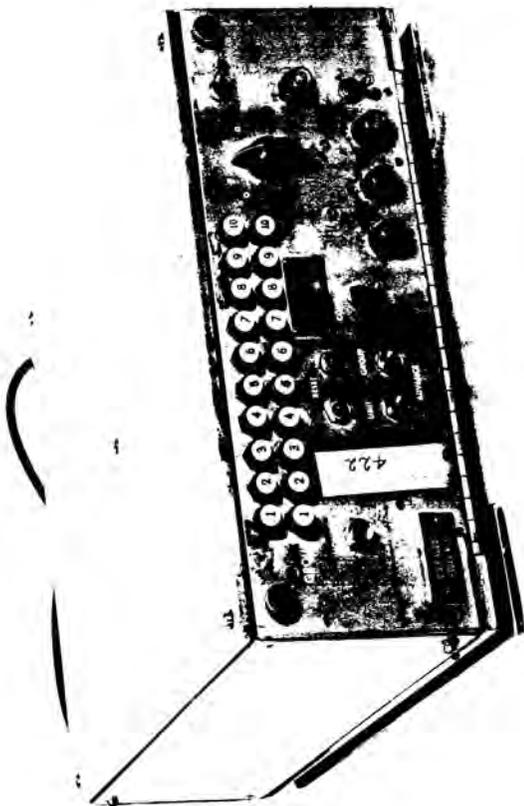
TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 710817-40

PATENT(S):

LIBRARY REFERENCE(S):

35



MOTOR CONTROL UNIT  
(Carpentier)

An early equivalent of an electrical service unit.  
Described on Teletype photo #310917 as a "motor control unit."  
Contains relays, arc suppressors, a switch, jacks, and a lamp.  
An 80-0-80 millimeter was once mounted in the cover.

YEARS PRODUCED & QUANTITY: 1920 Production

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.6D-1

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 310917-3 631111-32,33

PATENT(S):

LITERARY REFERENCE(S):



MOTOR CONTROL UNIT  
(Carpentier)

An early equivalent of an electrical service unit.  
Described on Teletype photo #310917 as a "motor control unit".  
Contains a hand cranked magnets, cam, switch, relay, fuses, arc  
suppressors, and 4-wire socket. An 80-0-80 millimeter was once  
mounted in the cover.

---

YEARS PRODUCED & QUANTITY: 1920

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

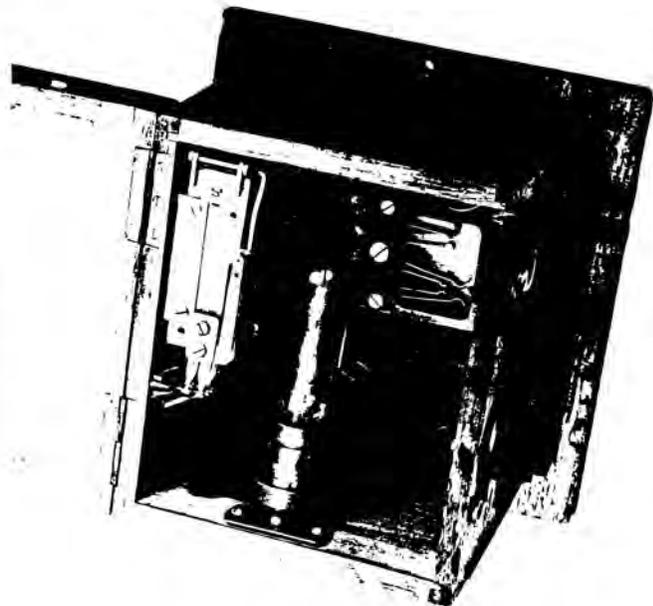
MUSEUM EQUIPMENT CODE: 9.50-2

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 310917-5,6 681114-30,31

PATENT(S):

LITERARY REFERENCE(S):



CALL BOX SELECTOR(MODEL 85)  
(Railway Electric Mfg.)

Externally the unit has a disk with a series of holes around part of the circumference. A pivoted handle has a pin that can be inserted into a selected hole. Apparently the pin is inserted in the desired hole and the disc turned until the handle lines up with some index. Internally is a motor and gear train that can drive the disk back to a home position at which point a lip on the disk can trip a switch. The gear train also pulses a switch with apparently one pulse generated for each hole in the disk passed while returning to the home position.

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YEARS PRODUCED & QUANTITY: 1927 Production (Railway Electric Mfg. Co.)

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

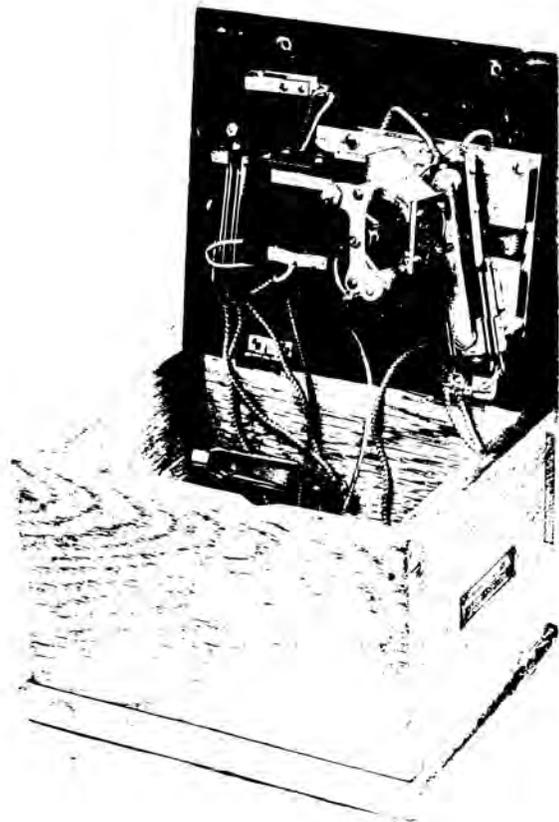
MUSEUM EQUIPMENT CODE: 9.0-3

TECHNICAL BULLETINS & REFC:

WTO NO(S): 29501-39 (31111-1), 11

PATENT(S):

LITERATURE REFERENCES:



TIME DELAY SWITCH

This time delay switch operates by means of a solenoid that rotates a disk which stretches a spring. The rate of return of the disk under spring tension is controlled by a clock type escapement mechanism. When the disk finally returns to its start position it allows a mercury switch to tip back to a position from which it was displaced by the initial movement of the disk. The result is a timed opening or losing of the mercury switch.

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YEARS PRODUCED & QUANTITY: 1930 Production.

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.6D-J

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 301010-12 631111-29

PATENT(S):

LITERARY REFERENCES(S):



ROTARY REGENERATIVE REPEATER (MORKRUM)

This is a rotary regenerator repeater for a 3 channel multiplex.

---

YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9-78-1

TECHNICAL BULLETINS & SPRCS:

PHOTO NO(S): 341022-2 (3)1120-36

PATENT(S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This unit is self contained. It has a range scale and a mechanical assist for the magnet armature. It features a flexible reed with wiping contact mechanism.

NOTE: Regenerative repeaters (9.7C - 1 thru 7) are listed in their order of development.

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YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.7C-1

TECHNICAL BULLETINS & SPFCB:

PHOTO NO(S): 34120-2 34120-28

PATENT(S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This model has a 14 type magnet and range scale with flexible reed and wiping contacts.

NOTE: Regenerative repeaters (9.7C 1 thru 7) are listed in their order of development.

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FILES RECOMMENDED FOR QUANTITIES:

INDUSTRY CATALOGUES:

CLASSIFICATION CODES:

MOSBY'S EQUIPMENT CODES: 9.7C-2

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 330124-1 - 33120-29,30

PATENT (S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This unit features compression springs on the contact swinger.

NOTE: Regenerative repeaters (9.7C 1 thru 7) are listed in their order of development.

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PLANS NUMBER & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.7C-3

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 330126-1 331120-31

PATENT(S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This unit features flat springs on swinger contacts.

NOTE: Regenerative repeaters (9.7C 1 thru 7) are listed in their order of development.

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YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

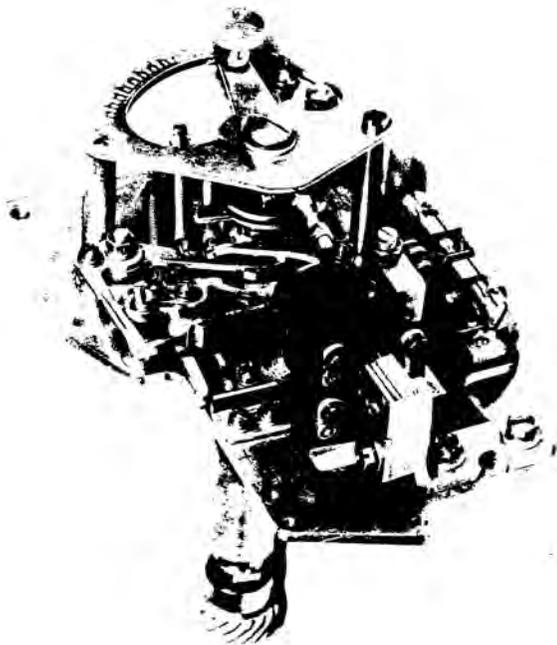
MUSEUM EQUIPMENT CODE: 9.7C-4

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 3402-1 - 31120-32

PATENT(S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This unit features flat springs on swinger contacts but of a different slope than Model K.

NOTE: Regenerative repeaters (9.7C - 1 thru 7) are listed in their order of development.

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YEARS PRODUCED:     UNTESTED:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

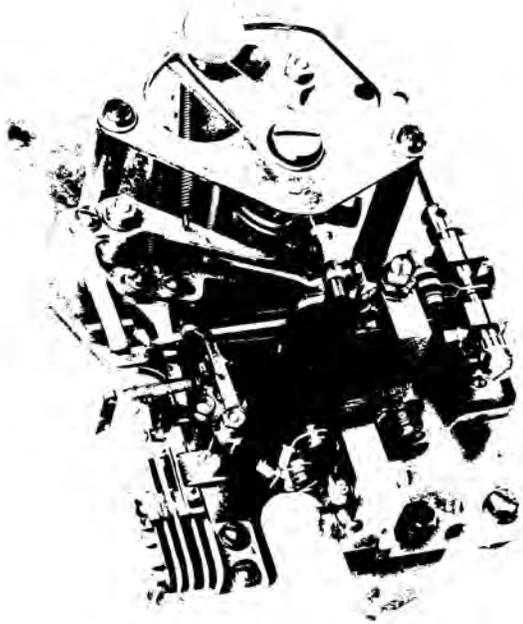
MIL-STD EQUIPMENT CODE: 9.7C-5

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): 631120-34,35

PATENT(S):

LITERARY REFERENCE(S):



REGENERATIVE REPEATER

This unit features wire springs on contact swinger.

NOTE: Regenerative repeaters (9.7C 1 thru 7) are listed in their order of development.

YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.7C-6

TECHNICAL PULLETINS & SPECS:

PHOTO NO(S): 631120-34, 35

PATENT(S):

LIBRARY REFERENCE(S):



REGENERATIVE REPEATER

This unit is the latest in this series of models.  
It features a mechanical detent and lock-on magnet armature.

NOTE: Regenerative repeaters (9.7C 1 thru 7) are  
listed in their order of development.

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YEARS PRODUCED & QUANTITY:

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

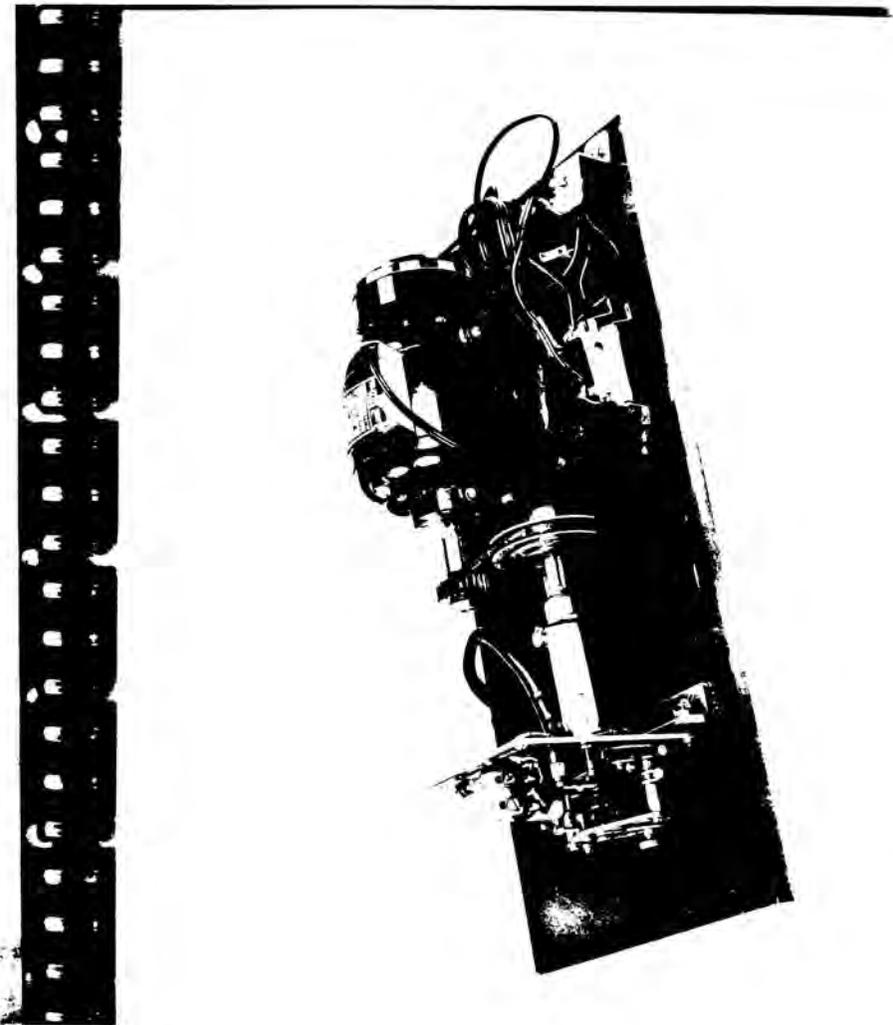
MUSEUM EQUIPMENT CODE: 9.7C-7

TECHNICAL BULLETINS & SPECS:

PHOTO NO(S): #50376-68

PATENT(S):

LIBRARY REFERENCE(S):



MECHANICAL PULSE STRETCHER

Motor driven mechanical "pulse stretcher" for generating long pulses from short inputs from four sets of contacts. Designed to mount on panel similar to regenerative repeater.

MANUFACTURED BY COMPANY:

BUYER'S CUSTOMER(S):

COMMERCIAL CODE:

ORIGINAL EQUIPMENT CODE: 9.70-B

TECHNICAL BULLETINS & SPECS:

PROFORMA(S): 411209-46 431120-2\*

PART(S):

STANDARD DRAWING(S):



Donated to Chicago Museum of  
Science and Industry

PHOTOELECTRIC REGENERATIVE REPEATER

Regenerative repeater similar to Teletype code "Red"  
mechanical unit for highspeed signals. Has signal responsive  
shutter which modulates light beam, regenerating the signal.  
The motion of the shutter is accurately timed by a cam mechanism,  
and positioned in accordance with input signal. The object is  
to eliminate transit time of a mechanical contact, and generate  
accurate signals.

YEARS PRODUCED & QUANTITY: Prototype

PRIMARY CUSTOMER(S):

CLASSIFICATION CODE:

MUSEUM EQUIPMENT CODE: 9.70-9

TECHNICAL BULLETINS & SPECS: Engr. Potts

PHOTO NO(S): 360913-1,2 631111-60

PATENT(S): No. 2,214,910

LIBRARY REFERENCE(S):

