TMC SPECIFICATION			NO. S 962
REV: 0 1			
COMPILED: WM W.M.	CHECKED: EEE	APPD: [illegible] 6/2/65	SHEET COVER OF 4
TITLE:			
typed by vab 6/2/65			

LRCB-1

TEST PROCEDURE

TMC SPECIFICATION

NO. S 962

REV: 0

COMPILED: WM | CHECKED: | APPD: | SHEET 1 OF 4

TITLE: LRCB-1 TEST PROCEDURE

typed by vab

FUNCTION:

The LRCB-1 (Control Terminator)is the source of the controlled +28V that drives the ledex motors in the remote tuned receiver. It also provides the control circuitry for the servo amplifier that controls the servo motor in the HFSR-1. The unit contains (A) a +28V power supply, (B) servo amplifier (plug in assembly) and (C) relays and associated components that make up the control circuits for the AFC motor outputs and the servo amplifier.

All switches, fuses and indicators are located on the front panel. The "Main Power" switch is on the left side and the "Remote/Local" switch is on the right side of the front panel. All input and output jacks are located on the rear panel: J4001-AC Input, J4002- Control input from Receiver, J4003- Output to LRCC, J4005-DC error input, J4006-Audio SYNC. tone input.

EQUIPMENT REQUIRED:

To test the LRCB-1 the following equipment is needed:

A. 1 LRCB-1 Test Set
B. 1 A3625-A3624 Gear Assembly
C. 1 Simpson-Model 260

PROCEDURE:

(1) Detailed inspection is not necessary because of previous inspection; however, the unit should be checked for damaged or missing components, proper fuses and shorts to chassis on B+ line and AC input lines.

(2) The following resistance measurements should be made:

A.	C4006+ To Chassis	33 ohms
B.	+4001-1 To Chassis	Infinity
C.	+4001-1 To +4001-3B	4-5 ohms

When these resistance measurements have been made, with the power switch in the off position insert the AC power cord in J4001.

(3) Turn on the "Main Power" switch, the "Power" indicator will light. The "Remote" lamp will light with the "Remote/Local" switch in the up position and the "Local" lamp will light with the switch in the down position.

(4) Leave the "Remote/Local" switch in the "Local" position. Turn R4011 to mid position, Turn off the power switch and remote AC Power Cable.

(5) Insert the servo amplifier and secure with SCBP0832BN8 Screws and lock washers. USE OF SCREWS LONGER THAN RECOMMENDED WILL RESULT IN DAMAGE TO THE PROTECTIVE CAPS ON THE INSERTS IN THE SERVO AMPLIFIER.

(6) Insert the AC Power Cable (J4001) andcables from test set (J4002-J4003). Position all toggle switches on test set to Off or Neutral position, turn continuity switch to position No. 1.

(7) Turn on "Main Power" Switch, a slight hum will be audiable in the servo amplifier. Put "Remote/Local" switch on LRCB-1 to remote position. The contunity lamp on the test set will light. When the "Contunity Switch" is in positions #1 through #5. Return the "Contunity Switch" to position #1.

(8) Turn Off "SYNC" Switch and press the "Reset" Button. Adjust R4011 in the LRCB-1 for maximum time delay (Turn CCW on till Fault lamp lights, this is minimum delay-turn CW for maximum) When the time delay relay activates during the test procedure it will be necessary to press the "Reset" button to reactivate the LRCB-1.

(9) Press the BS Motor" switch; indicators #10 and #11 will light. When the button is released the lights will extinguish.

(10) Move the "Motor Control" switch to the left. Indicators #3 and #5 will light to full brilliance, Indicator #4 will light dimly. More motor control switch to the right. Indicators #4 and #5 will light to full brilliance, indicator #3 will light dimly. When the switch is released there will be a short delay before the lamps extunguish.

(11) Turn the "Ledex Control" knob one position CCW and press the tune button. The Ledex Motor will activate and turn the "Ledex Indicator" Knob to corresponding position. The ledex motor will continue to run until the selected position is reached even after the tune button is released. Test a minimum of four positions with the "Ledex Control" Knob. Make the above check in each of the five positions on the "Contuinity" switch that causes the "Contuinty" lamp to light.

(12) Turn on the "Tune-overide" switch. Turn the "Contuinty" Switch to position #1. When the "Ledex Control" knob is turned, the Ledex Motor will activate <u>without</u> pressing the "Tune" button in position #6 on the "Contuinity" switch. The Ledex Motor will <u>NOT</u> operate.

(13) Turn Off the main power switch of the LRCB-1. Connect the gear assembly to the test set. Turn on the "SYNC" switch, the "SYNC" Lamp will light. Turn on the "servo B+" switch and turn off the "SYNC" switch. The servo motor will start to run and will reverse when the cam arm in the gear assenbly hits the limit switch.

(14) With the Servo motor running turn on the "Servo Direction" switch, The motor will change directions everytime the switch is changed from On to Off or Off to On. With the "Servo Direction" switch <u>either</u> On of Off the motor will reverse when the limit switches in the gear assembly are activated.

(15) When the time delay activates the fault lamp will light and the servo motor will stop. Press the "Reset" button to restart motor with the servo motor running turn on the "SYNC" switch the motor will stop.

(16) Return all switches on the test set to the Off position. Adjust R4011 in the LRCB for a 30 Second delay. To start the timing press the "Reset" button on the test set and start timing when the button is released. The fault lamp on the testset will light when the time delay relay turns Off the LRCB-1.

(17) When all of the previous tests and adjustments have been made the LRCB-1 is operational. Turn Off "Main Power" switch and disconnect the test set.

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TITLE: LRCB-1 TEST PROCEDURE

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LRCB-1

SERIAL NO. _____

MFG. NO. _____

RESISTANCE

A. C4006+ To Chassis _____ ohms

B. +4001-1 To Chassis _____ ohms

C. +4001-1 To +4001-3B _____ ohms

Band Switch Motor _____ OK

Motor Control _____ OK

Contuinity _____ OK

Ledex Control _____ OK

Tune Overide _____ OK

Sync. _____ OK

Servo B+ _____ OK

Servo Direction _____ OK

Fault Lamp _____ OK

Reset _____ OK

Time Delay _____ SEC.

DATE: _____

TESTER: _____

REVISION SHEET

THE TECHNICAL MATERIEL CORP.
MAMARONECK NEW YORK

S-962

LIST NO. 0

DATE	REV.	SHEET	EMN #	DESCRIPTION	APP.
6/3/65		1 of 4		0=ORIGINAL RELEASE FOR PRODUCTION.	