



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

**E-32**

OTTAWA, May 2, 1966.

NOTICE OF APPROVAL

FOR

LEEDS & NORTHRUP "SPEEDOMAX" TYPE G MODEL S SINGLE AND DOUBLE PEN AND TUBE, THREE- AND FOUR POINT CURVE PRINTING POTENTIOMETER RECORDERS

Apparatus

**	Millivolt Input	0-10 to 0.1000 millivolts
	Record	Single or double pen continuous line and coloured dots or symbols
	Standardization	Continuous automatic (Zener diode)
	Chart	9-7/9 and 10 <sup>#</sup> inches calibrated width
	Pen Speed	1 second to 30 seconds
	Printing interval	4 seconds to 60 seconds
	Chart speeds	3/4 inch per hour minimum
	Power supply	120 volts 60 cycles
	Max. external resistance	2000 ohms.
	Approved amplifiers	6327-1, R-32-1-1 and 101108 transistor type

\* The kilowatts, megawatts or other power function which the millivolts represent will be shown on the nameplate, scale and range card.

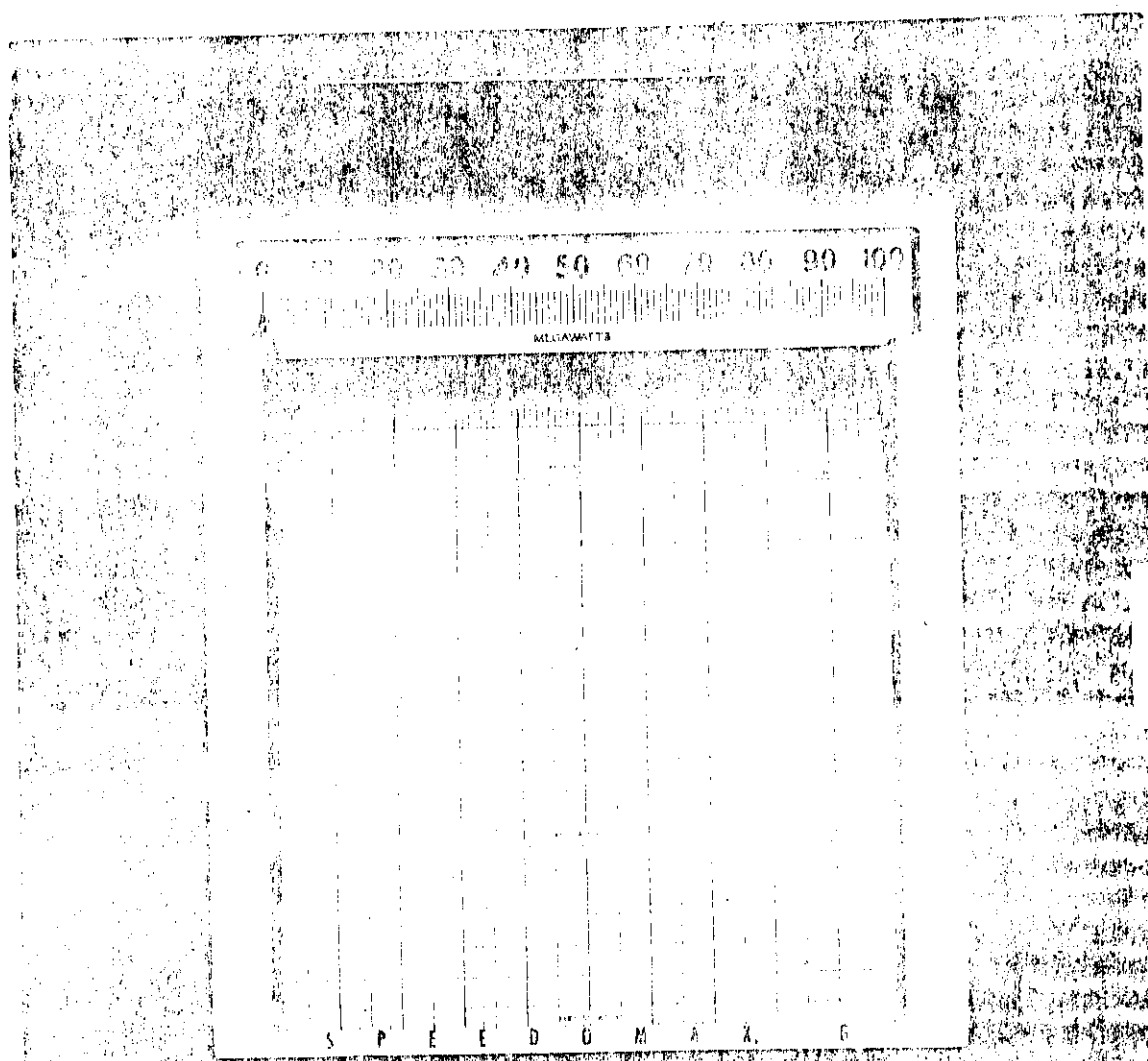
x L.H. zero and raised zero up to half scale is approved except for recorders having a retransmitting function which are not approved with a raised zero.

o Pen speed is the time taken for the pen or printing mechanism to travel the full length of the scale with a step load change equal to full scale.

# When a 10 inch calibrated width chart is used, the pen or printing mechanism must be adjusted for a live zero, the pen or print is then prevented by a mechanical stop from reaching full scale.

♠ Printing interval is the time between successive prints.

UNITED STATES BUREAU OF AERONAUTICS  
ADDITIONAL FORMS - ADD FORM EIGHT CURVE TEMPLATE TO TEMPLATE SET OF FORMS



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Catalyzed members of part II approved

- 69221- Single Pen D.C. Potentiometer Recorder
- 69222- Two Pen D.C. Potentiometer Recorder
- 69252- Two Joint Curve Plotting Recorder
- 69253- Three Joint Curve Plotting Recorder
- 69254- Four Joint Curve Plotting Recorder

Approved suffix Designations

- 021 D.C. re-transmitting slidewire with manual standardization
- 092 D.C. re-transmitting slidewire Zener diode regulated power supply  
max. loop resistance for above two suffixes in 2000 ohms.
- A48 Overdrive type
- W9 Underdrive type
- 3 Special marker, characters or symbols on print wheel
- S1 Pen case pencil switch, shorts input to cause pen to read zero input.
- K1 Multicolor plotting
- W2 Multicolor scale only
- H15 Ball point pen
- H1 Unconcealed illumination
- P2 Fluorescent illumination
- W7 Amplifier full-scale upscale
- # W25 Amplifier full-scale downscale
- W26 Amplifier full-scale and balancing motor failure upscale with neon light
- K W27 The scale is downscale with neon light
- 036 Door lock
- 22 Ramp/steer for output millivolts
- 4 Rectifiers with 021 or 092 re-transmitting slide wires must be equipped with key to W7 downscale burnout protection and will have a plate S2 on the door showing the value of the output millivolts.
- P3 Gearolt device with indices
- P4 Gearolt device without indices
- P5 Check supply indicator
- W4 Insulated amplifier

A notation on the range card for changing L.H. zero to centre zero is deleted by W3H is not approved.

An "O" incorporated as an additional suffix denotes a front or back set switch. If incorporated, it will be of no concern during verification.

- 04 Switch requires torque on the balancing motor at top of the scale
- 05 Switch reduces torque on the balancing motor at bottom of the scale
- 06 Switch reduces torque on the balancing motor at both ends of the scale

Description

This circular supersedes and consolidates previous circulars SD-EA.182, SD-EA.402, SD-EA.407, S-EA.430, S-EA.445, S-EA.592 and S-EA.633. It includes a number of optional features and their identifying suffices, all of which covered by this approval.

The suffix "036" indicates that a door lock for use by the Utility has been provided to eliminate the need for sealing the adjustments. Door locks are standard equipment on all Speedomax G recorders.

The suffix "SL" indicates a zero checking switch. This shorts the input allowing the pen to return to zero.

Approval granted to:           Leeds & Northrup Canada, Limited,  
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