



DEPARTMENT OF TRADE AND COMMERCE  
STANDARDS BRANCH

E 18

OTTAWA March 3, 1966.

NOTICE OF APPROVAL

FOR

LEEDS & NORTHRUP TYPE "H" MODEL "S" SINGLE PEN STRIP CHART  
POTENTIOMETER RECORDER

Apparatus

*Inputs	0-10 to 0-1000 millivolts
Record	Single Pen continuous line
Chart Speeds	1 inch to 30 inches per hour
Chart and Scale	6½ inches calibrated width
Pen Speed	1 to 5 seconds for full scale travel
Standardization	Continuous automatic (zener diode)
	(Tube type 101040 Standard amplifier)
Approved amplifiers	(Tube type 101042 Failsafe upscale or downscale)
	(Transistor type 101108)
Maximum External Resistance	2000 ohms
Power Supply	120 volts 60 cycles

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

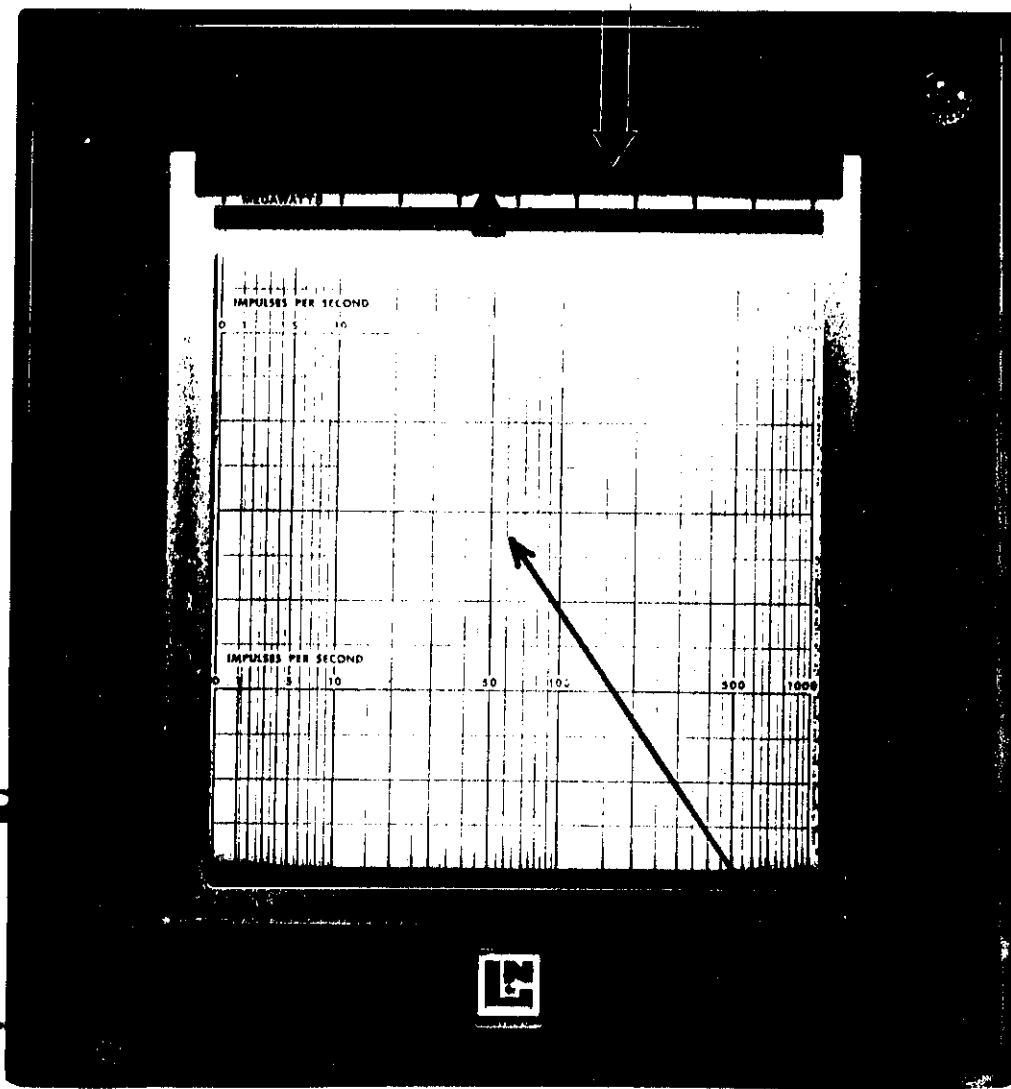
Type Designation: This is essentially the same recorder that received approval under SD-MA.354 and S-MA.446 and can be identified by the numbers 300 - 985 at the beginning of the type designation. The following groups of numbers, all of which are covered by this approval, adequately describe any particular billing application.

300 - 985 - 041 - 0087 - 6 - 002 - 006  
(a) (b) (c) (d) (e) (f) (g)

- (a) 300 This stands for Speedomax "H" Strip Chart recorder with range card.
- (b) 985 Signifies a thermal converter application using a zener diode regulated power supply delivering current to the measuring circuit.

LEEDS & NORTHRUP TYPE "H" MODEL "S" SINGLE PEN STRIP CHART  
POTENTIOMETER RECORDER

S1



INCORRECT CHART

Apparatus (Con'd)

(c) Control features

- 041 2 S.P.D.T. switches operated by front setter
- 051 3 S.P.D.T. switches operated by front setter
- 081 1 S.P.D.T. switch independently set
- 082 2 S.P.D.T. switches independently set
- 083 3 S.P.D.T. switches independently set
- #C75 One retransmitting slide wire with power supply

(d) Range

- 0087 Input 0-25 mv. scale graduated 0-10 kw
- 0088 " 0-25 mv. " " 0-25 "
- 0089 " 0-25 mv. " " 0-50 "
- 0090 " 0-25 mv. " " 0-10 Mw
- 0091 " 0-25 mv. " " 0-25 "
- 0092 " 0-25 mv. " " 0-50 "
- 0093 " -25-0-25 mv. " " 10-0-10 "
- 0094 " -25-0-25 mv. " " 25-0-25 "
- 0999 Any millivolt input from 10 to 1000 millivolts and the primary units of kw, Mw, etc., will be marked on the scale and on the range card nameplate

(e) Power supply

- 6 Denotes 120 volt 60 cycle power to instrument.

(f) Chart Speeds

- 001 Signifies 1 inch per hour chart speed
- 002 " 2 inches " " " "
- 003 " 3 " " " " "
- 004 " 4 " " " " "
- 006 " 6 " " " " "

(g) Optional Features

- \* 036 Door lock
  - 01 Input failsafe upscale
  - 02 Input failsafe downscale
  - 03 Amplifier failsafe upscale
  - 04 Amplifier failsafe downscale
- 023 Transistor amplifier, 101108, in place of standard amplifier
- 027 Offscale limiting at low end of scale. Cam operated switch to provide reduced torque to the balancing motor.
- 032 Legend plate on door
- 037 Signal light to indicate power or fuse failure
- 038 Fluorescent illumination
- 128 Black case instead of standard grey case
- \* S1 Maximum demand indicator

- \* 075 Instruments having this code number in the model designation are provided with a single retransmitting slidewire and power supply in which case the output millivolts will be indicated on an auxiliary nameplate 032.
  - \* 036 This code number denotes a door lock for use by the utility to prevent unauthorized access. It will appear on all instruments intended for billing applications and only instruments bearing this code number may be verified.
  - \* S1 This code number indicates that a maximum demand indicator is installed. This indicator is a red pointer attached to a metal bracket which slides along a rod behind the scale. This indicator is pushed upscale by the indicating pointer and left at the highest position from where it may be lowered manually. The illustration on the back of this circular shows the position of the maximum demand indicator .S1, and the signal light 037.
- Note 1 The chart also illustrated may not be used for billing. It was sent to the Laboratory for test purposes only.
- Note 2 Code number C6 denoting  $\frac{1}{2}$  inch per hour is not approved.
- Note 3 Following the "6" in position "e" denoting the power supply, the model code may include any number of compatible optional features.
- Note 4 Instruments with a retransmitting slide wire must be equipped with "02 input failsafe downscale" and "04 amplifier failsafe downscale".

Approval granted to

Leeds & Northrup, Canada, Limited,  
61 Industry Street,  
Toronto 15, Ontario.

*W. J. S. Fraser*

W.J.S. Fraser,  
Chief, Standards Laboratory,  
Standards Branch.

*K. Cryer*

K. Cryer,  
Chief, Electricity & Gas Division,  
Standards Branch.

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