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N° 2



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USE THIS WALLACE and TIERNAN Thermarine Recorder

to measure and record water temperature vs depth.

THERMARINE RECORDER (Bathythermograph)

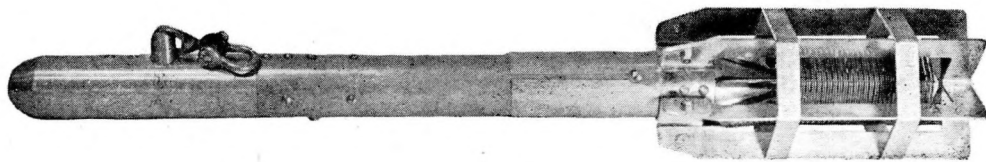
	MODEL No.		
	FA-190011	FA-190021	FA-190031
Depth range	0 to 200 ft.	0 to 450 ft.	0 to 900 ft.
Accuracy	2 ft.	4.5 ft.	9 ft.
Temperature range	+ 30° to + 90° F.	+ 30° to + 90° F.	+ 30° to + 90° F.
Accuracy	± 0.1° F.	± 0.1° F.	± 0.1° F.
Maximum allowable depth	225 ft.	562.5 ft.	1125 ft.
Length	31"	31"	31"
Diameter: Nose	2 1/8"	2 1/8"	2 1/8"
Tail	5"	5"	5"
Weight (pounds)	21 3/4 lb.	21 3/4 lb.	22 lb.
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ACCESSORIES :

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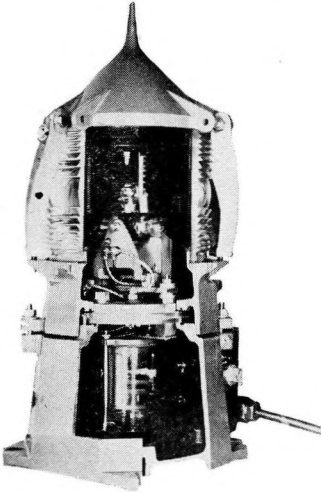
The accessories listed above are the same for models FA-190011, FA-190021 and FA-190031, with the exception that a deep diving rig is included with model FA-190031.

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Wallace and Tiernan
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ELECTRICITY POWERS THE MODERN AID TO NAVIGATION For Lighthouse or Buoy

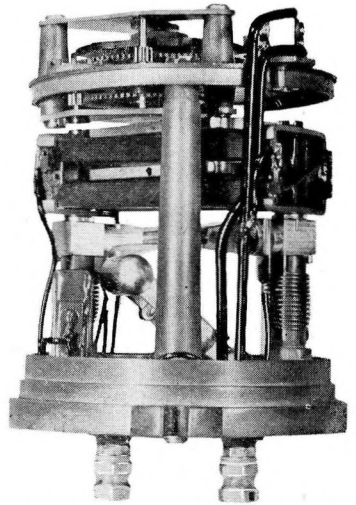


Wallace and Tiernan 200 mm. Lantern cut away to show lamp changer and flasher mechanism

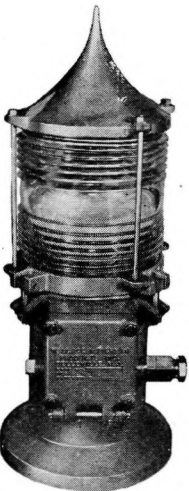
Recognizing the responsibility imposed on marine lights and their accessories, Wallace and Tiernan has, over the years, developed a complete line of modern electrically powered aids to navigation meeting all the requirements of unfailing dependability, low initial cost, negligible maintenance and long unattended service periods.

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- Automatic lamp changers.
- Corrosion resistant, water-tight construction.
- Efficient candlepower output high visibility with low power consumption.
- Low initial cost.
- Continuous, unattended operation for long periods.



Wallace and Tiernan Flasher mechanism



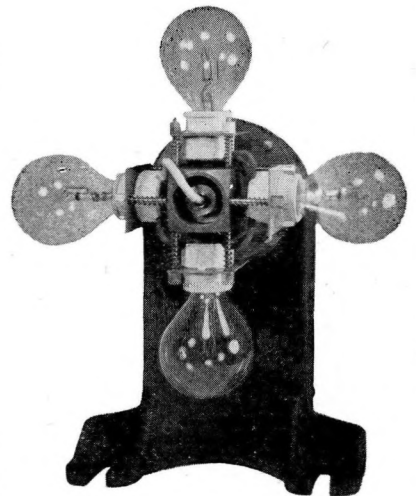
Wallace and Tiernan 150 mm. Lantern

Wallace and Tiernan Specialists on aids to navigation will be glad to make recommendations on your problem without obligation—either on new installations or on the conversion of old gas or oil lights to modern electric operation. Such conversions, utilizing existing optics and structures, are both economical and practical.

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- Range light lanterns.
- Fog signals.
- Batteries of all types.

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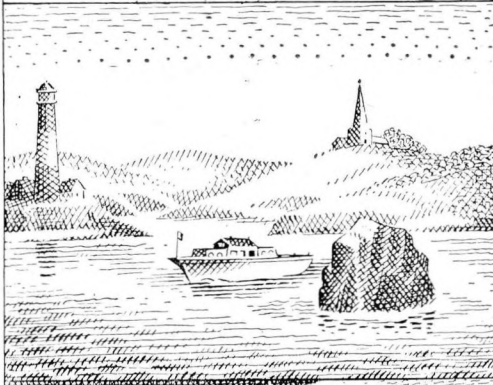
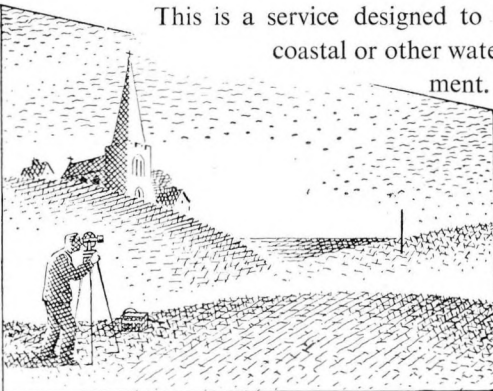
Wallace and Tiernan Lamp changer, for electrifying large optics

HYDROSURVEYS TO CONTRACT

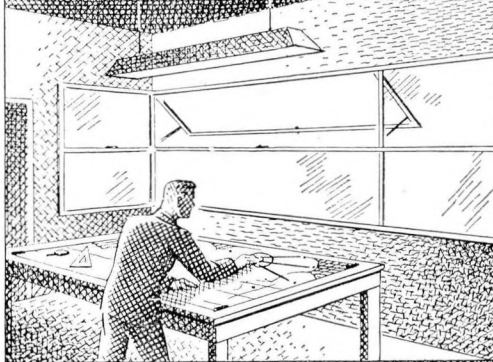
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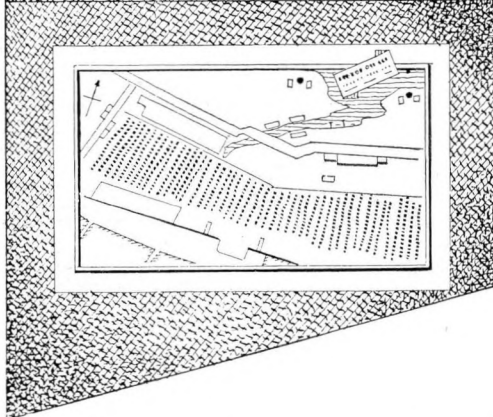
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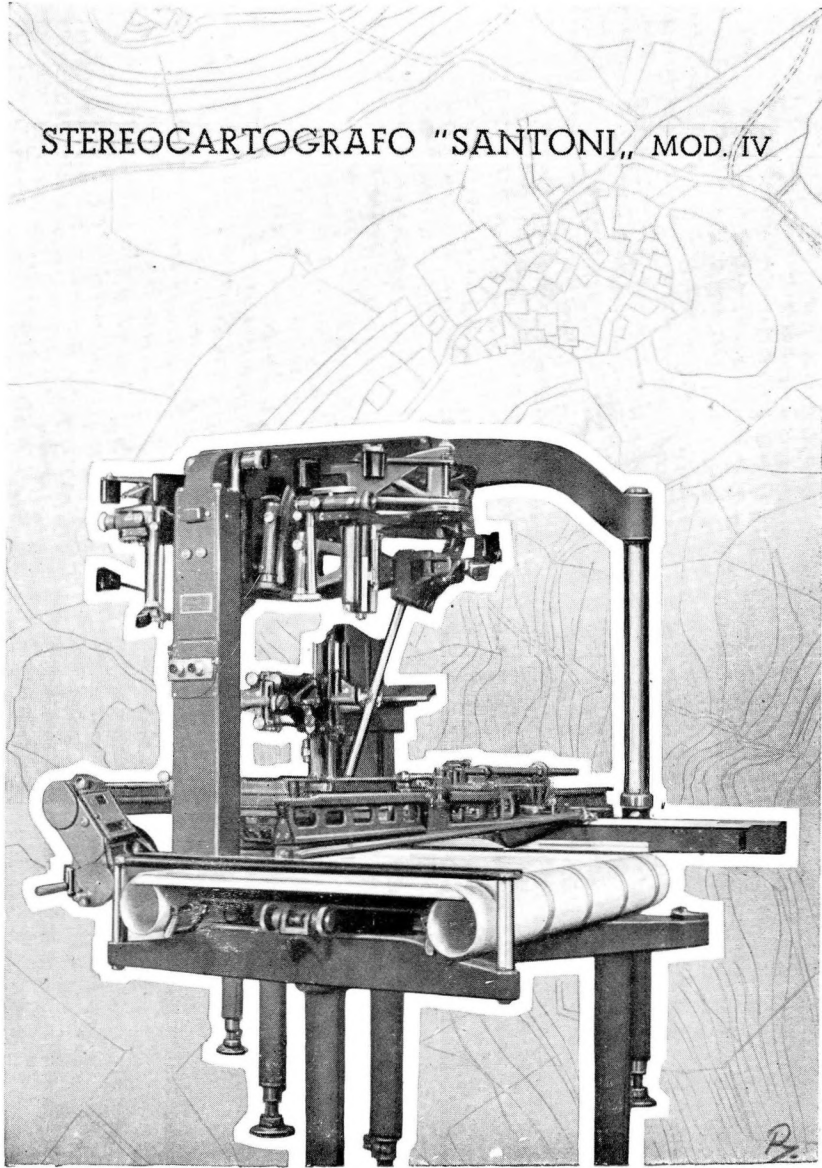
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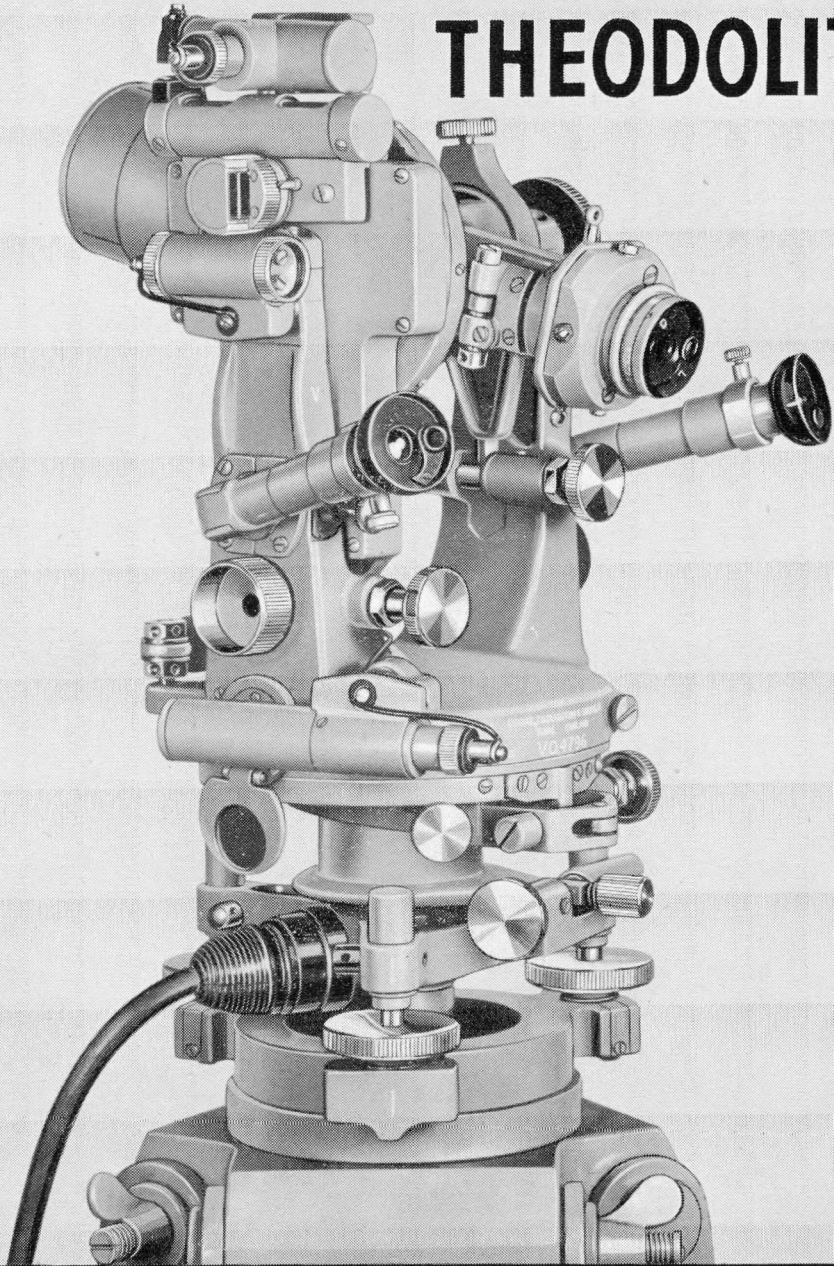
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0,60 m. ou 0,30 m.

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Type portatif pour embarcation



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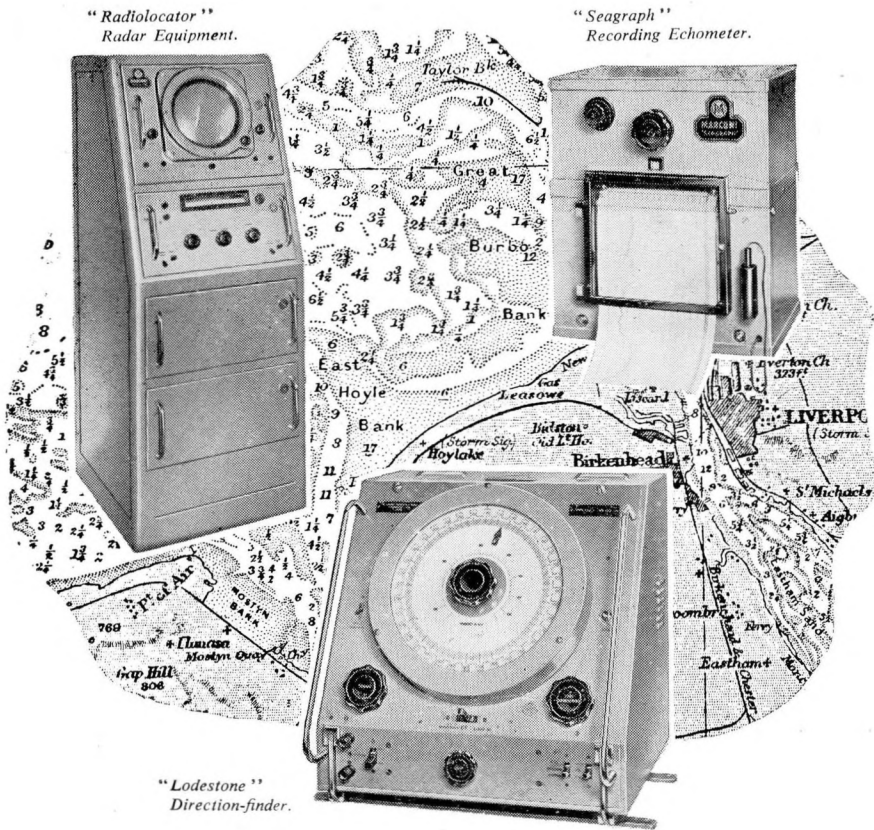
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The Directing Committee of the INTERNATIONAL HYDROGRAPHIC BUREAU will be pleased to consider articles for insertion in the *International Hydrographic Review*. Such articles should be addressed to

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PRINCIPALITY



NOVEMBER 1949

IMPRIMERIE MONEGASQUE
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ERRATUM

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THE DECCA NAVIGATOR AS AN AID TO HYDROGRAPHIC SURVEY

PAGE 17. The formula should read :

$$d_{\text{rms}}^2 = \sigma_L^2 \operatorname{cosec}^3 \frac{\gamma L}{2} \operatorname{cosec}^2 \beta + 2 r \sigma_L \sigma_M \operatorname{cosec} \frac{\gamma L}{2} \operatorname{cosec} \frac{\gamma M}{2} \operatorname{cosec}^2 \beta \cos \beta + \sigma_M^2 \operatorname{cosec}^3 \frac{\gamma M}{2} \operatorname{cosec}^2 \beta \quad \dots\dots(1)$$
