

**WIRELESS**  
*for the*  
**WARRIOR**

**Pamphlet Series**

No. 2 'Lamps, Operator'

Cover and layout: Louis Meulstee.

Cover illustration: Lamps Operator No. 4. ZA 1906. Photo by Mike R. Willenbroek.

The cover artwork and layout of this overview was prepared in Serif Pageplus X8 using Arial and Poppl-Laudatio fonts. The scanned illustrations and photos were enhanced and prepared with the use of Adobe Photoshop. The finished publication was directly converted into PDF format.

First published as an Internet download. April 2013.

Amended January 2014.

Fully revised publication in the Pamphlet Series. Dec. 2018.

Version 1.00.

© Louis Meulstee

Ottersum

The Netherlands

info@wftw.nl

www.wftw.nl

### **About this publication.**

Small operator lamps were issued with most British (and Commonwealth) Army vehicle and ground radio stations, normally powered directly from a socket fitted on the front panel of the set. This Pamphlet shows the presently known versions and variations, in addition to Lighting Attachments issued with Signalling Lamps.

This publication was stimulated by Chris Bisaillon VE3CBK in 2012 who asked me to identify a couple of early 'Lamps Operator' from his collection. Remembering that these lamps were in my modest collection, and in spite of the bitter coldness in the garage where I had these stored, I managed to locate the box, and thus able to give a positive reply. Noticing all the variations in the box and knowing that Chris had also a good selection in his collection, we decided to compile a small illustrated list, just for our personal use. This became the main core of this Pamphlet, previously named 'Overview'.

Eventually others contributed to the list, and at that stage it was thought to compile a free printable document for the benefit of anyone interested in this subject.

We are grateful to the contribution of photos, scans and support from Tony Bell, Australia, Jan Poortman and Mike Willenbroek, both in Holland, and the Royal Signals Museum, U.K.

### **The Pamphlet Series.**

This new series of publications replaced the 'Goldstone' and 'Overview' papers. The Pamphlet Series was created to accommodate a future range of reprints and articles of historical importance, hitherto not published documents, and reports on Army signalling. These can be downloaded from [www.wftw.nl](http://www.wftw.nl), freely copied and distributed, but only in the current form.

Note that the page layout of the Pamphlet Series was setup with mirrored pages, primarily intended for double sided (colour) printing, preferably on good quality class A paper.

Any additions and comments to this Pamphlet are appreciated.  
louis@wftw.nl



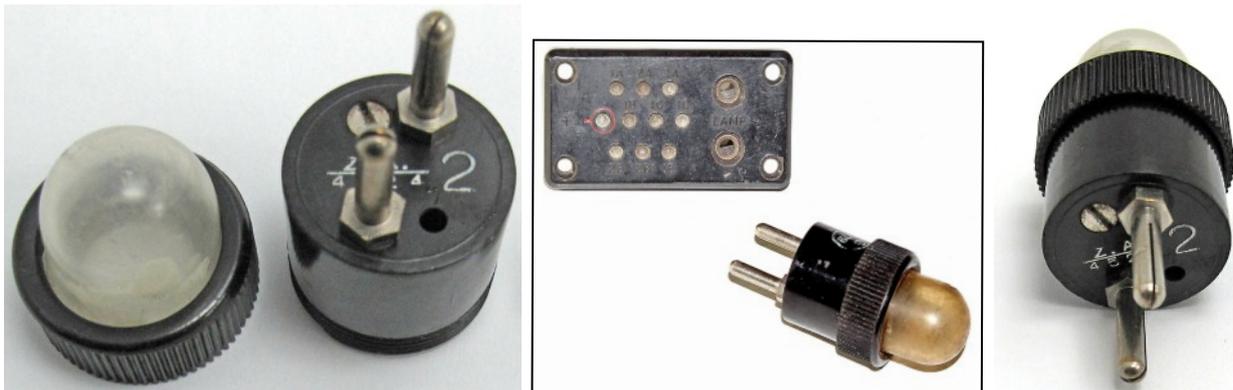
December 2018



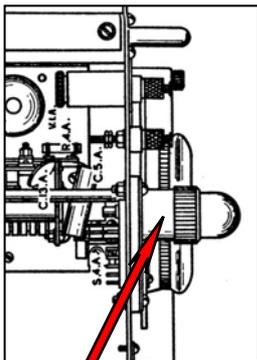
### Lamps Operator No. 1 ZA 4523

Used with Wireless Set No. 9. Required a Bulb 12V F. The lamp assembly plugs in the top of the socket of Connector Twin No. 17.

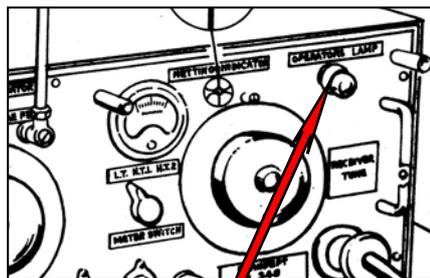
**Remarks:** The pins were thinner than those of Lamps Operator No. 2 and positioned slightly closer by setting one pin, but otherwise both lamps were similar. It was marked at the bottom with a large '1'.



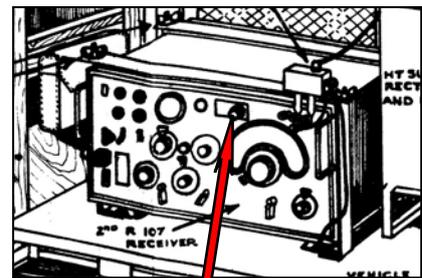
Valve test panel R107 showing position of lamp socket.



R208



CN 348

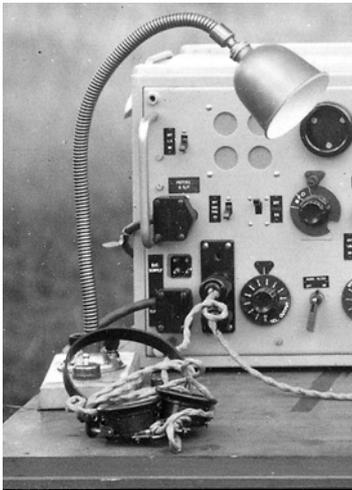


R107

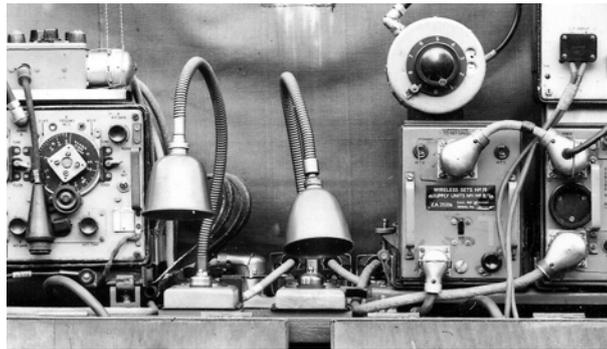
### Lamps Operator No. 2 ZA 4524

Used With Wireless Set No. 11, R105, R107, R208, CN348. Required a Bulb 6V J (Bulb 6.5V T in R208) and fitted into a socket on the front panel. It was also issued with WS Nos. 12, 12HP and 33 complete station, and with Wireless Set No. 11 (Aust) and No. 11 (Cdn).

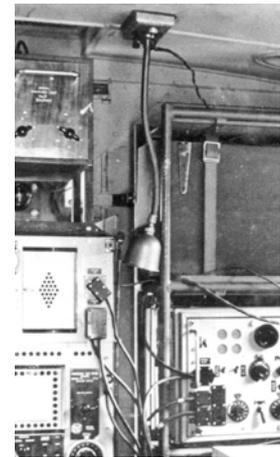
**Remarks:** The pins were thicker than those of Lamps Operator No. 1 and positioned slightly further apart by setting one pin, but otherwise both lamps were similar. It was marked at the bottom with a large '2'.



R 107



Wireless Station No. 19/19HP



WS No. 33/R107



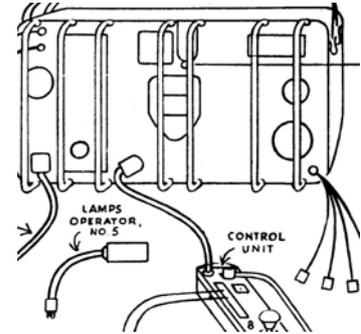
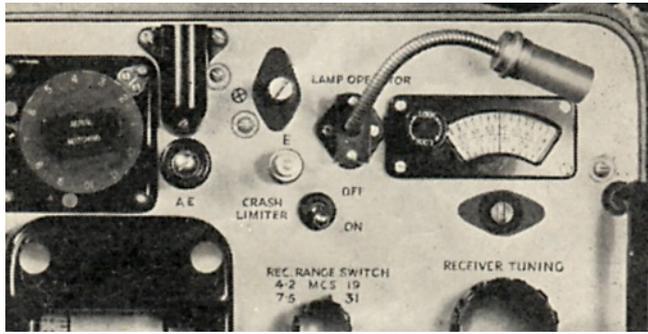
### Lamps Operator No. 3 ZA 4600

Used with Wireless Sets Nos. 12, 12HP, 19, 33, 53 vehicle stations and various other applications. **Remarks:** This was principally a table or ceiling mounted lamp, not receiving its power direct from the set, but from the vehicle or installation battery. It was normally fitted on a mounting plate known as Lamps Operator No. 3, Slides, ZA 3291.

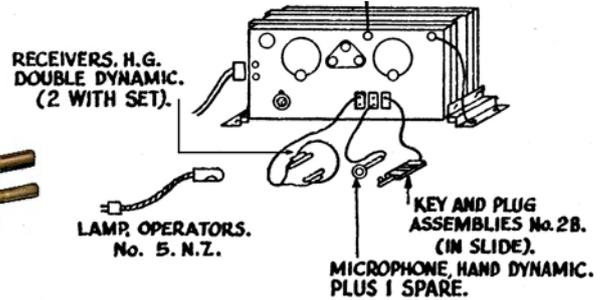
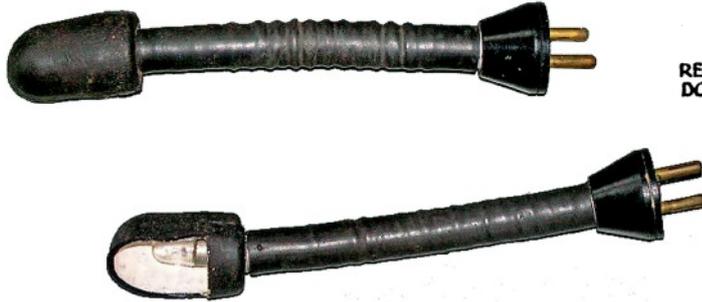


### Lamps Operator No. 4 ZA 1906

Used with fixed and semi-mobile stations. Intended for mains operated 240V bulbs. **Remarks:** Believed to be an adoption of a commercial lamp having art deco elements. Also recorded as having been used with Reception Set R106 in AA Command Post. Note the engraved broad arrow below the identification plate.



**Lamps Operator No. 5 ZA 10741**  
Used with Wireless Set No. 21. Replaced by Lamps Operator No. 6A.



**Lamp Operators No. 5 N.Z. GA 104**  
Used with New Zealand Wireless Set ZC1 Mk.I and Mk.II. Based on, but otherwise differing in many aspects to the British version.

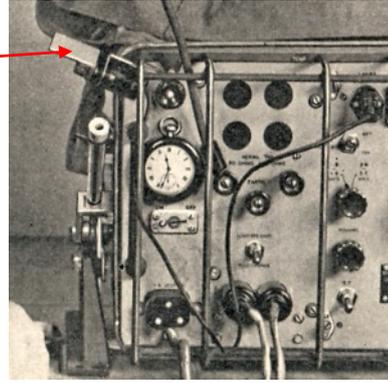
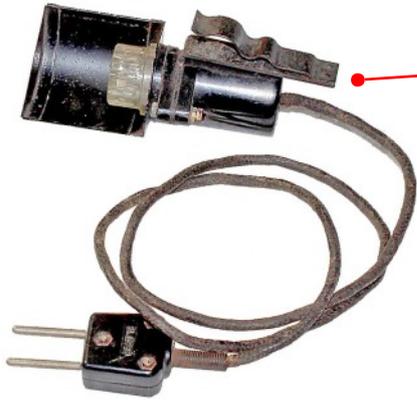


British version



Canadian version (Also known as RCA-110077-1 and NSN 5820-21-108-6221)

**Lamps Operator No. 6 ZA 11521**  
Used with all versions of Wireless Set No. 19 and No. 19 (Cdn). The threaded plug at the end of the wire screws in place of the pilot lamp on the supply unit.



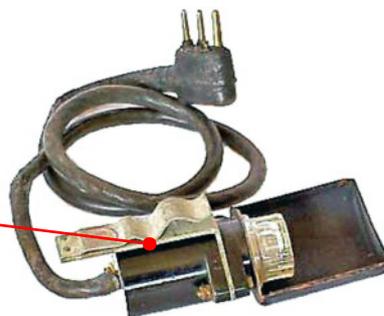
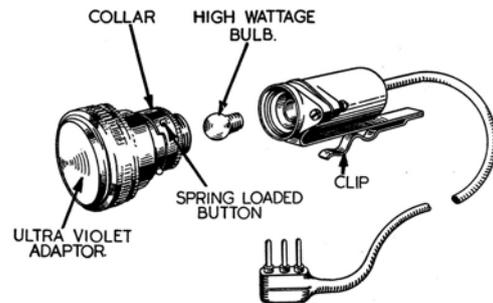
### Lamps Operator No. 6A ZA 12645

Used with Wireless Sets Nos. 21, 22, S.R.O.S., S.R.H.Q., Wireless Set No. 22 (Aust), 122 (Aust), Reception Sets R109 and R308.



### Lamps Operator No. 6A Mk.I/I ZA 29311

Tropicalised version of Lamps Operator No. 6A. Also known as Lamps Operator No. 6AT. Use was similar to No. 6A.

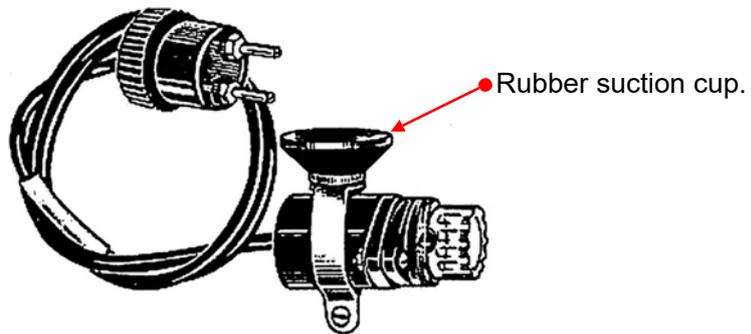


### Lamps Operator No. 6B ZA 28365 (NSN 6230-99-942-7881)

Used with Wireless Set No. 62 and Station Radio C12. **Remarks:** Wireless Set No. 62 working instructions showed an UV adaptor that could be fitted on this lamp, but it is doubtful whether this adaptor ever was issued.

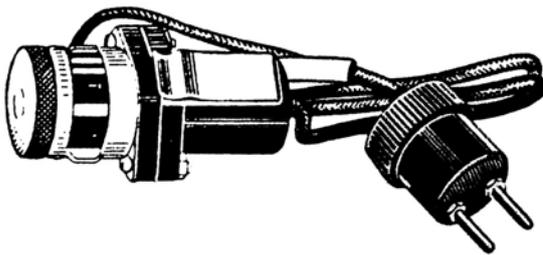
### Lamps Operator No. 1 ZA/C 4523

Used with Canadian Wireless Set No. 9. It was similar to the British ZA 4523. No picture was available at the time of writing.



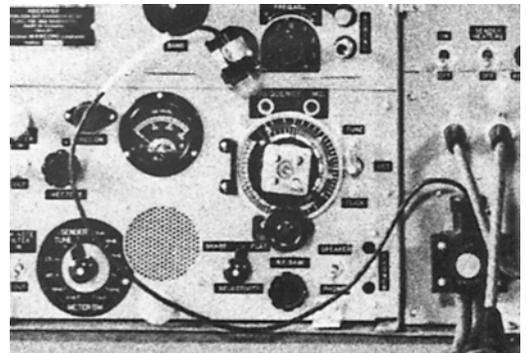
### Lamps Operator No. C1 ZA/C 4412

Used with Wireless Set (Cdn) No. 52. **Remarks:** There were no apparent differences between the Lamps Operator No. C1 and No. C6. "...may be incorrectly labelled 'Lamp Operator's C6 ZA/C00065'..." (A note from WS (Cdn) No. 52 EMERs)



### Lamps Operator No. C2 ZA/C 2092

Used with Wireless Set (Cdn) No. 29.

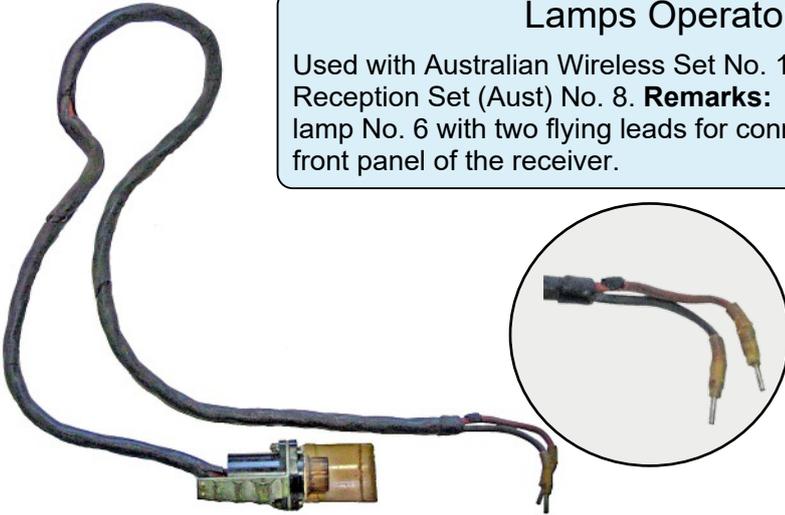


### Lamps Operator No. C6 ZA/C 00065

Used with Wireless Set (Cdn) No. 52. **Remarks:** There were no apparent differences between the Lamps Operator No. C1 and No. C6. "...may be incorrectly labelled 'Lamp Operator's C6 ZA/C00065'..." (A note from WS (Cdn) No. 52 EMERs)

### Lamps Operator No. 6 (Aust)

Used with Australian Wireless Set No. 153, in particular the associated Reception Set (Aust) No. 8. **Remarks:** The lamp was a standard operator lamp No. 6 with two flying leads for connecting to two terminals fitted on the front panel of the receiver.



LAMPS OPERATOR NO. 11 MK. 1/1. Z1/6230-99-943-7883

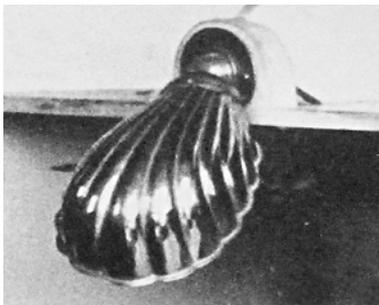
### Lamps Operator No. 10 Mk.1/1 and 11 Mk.1/1

Lamps Operator No. 10 Mk.1/1 (ZA 31038) was fitted to a clamp and arm marked Lamps Operator No. 11 Mk1/1 (Z1/6230-99-943-7883). This might at first glance an odd combination, but as several samples were encountered, this assembly appeared original.



### Unknown Lamps Operator

This variation of Lamps Operator No. 2 was unmarked. It had a different top cover.



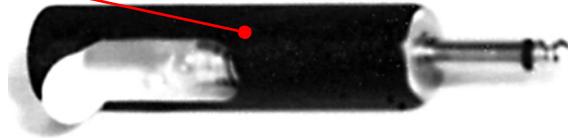
Close up and general view of an unknown type commercial lamp. Here seen fitted in an early Golden Arrow Mk.II receiver trailer. It was also fitted in other vehicles.





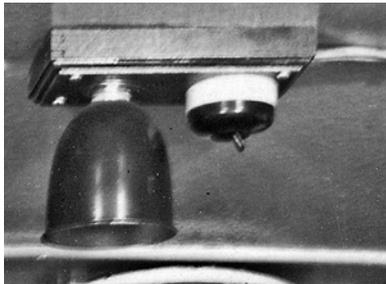
### Light Indicator Z1/ZA 54573

Issued with Wireless Set No. 128 (also known as Mk.128), fitted in a wooden cabinet.

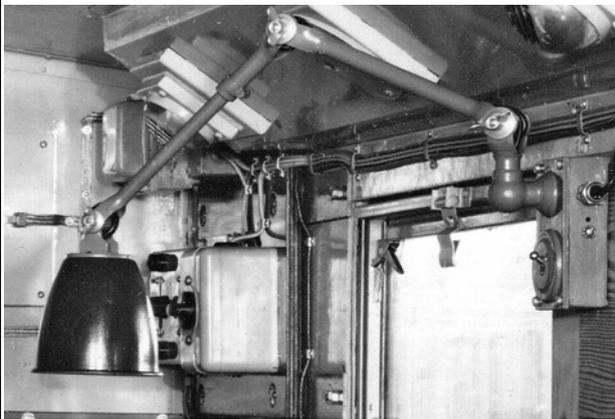


### Miscellaneous post-war lamps.

Several versions and variations of fixed mounted ceiling and wall mounted lamps have been encountered. These lamps were not specifically wireless station items and normally part of a vehicle installation kit.

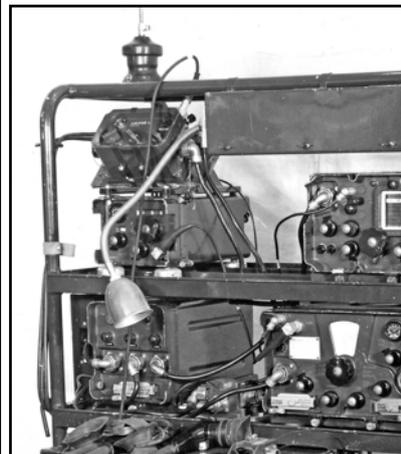


The armless ceiling lamp shown left and right was used in numerous wireless and line communication vehicles and trailers. It was based on Lamps Operator No. 3.



### Lights desk adjustable 2 arm Dugdill type MSV/54

This articulated lamp, believed to be an adoption of a commercial product, was fitted in various post-war wireless trucks e.g. Truck 1-ton GS Wireless HP. (Left and below) Stores number X2/6230-99-942-6380.

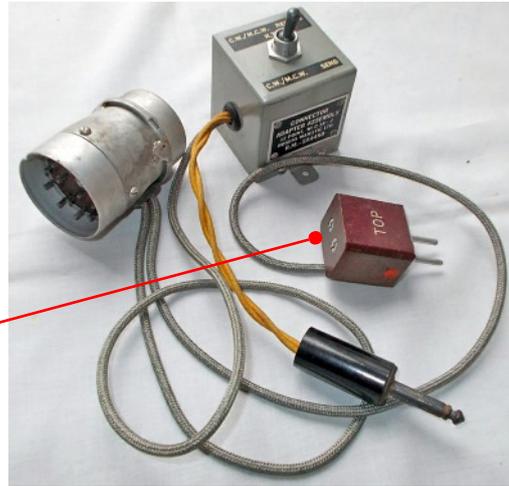


A flexible arm lamp used with Station Radio C11/R210 fitted in an air transportable container (left). It might have been based on the design of Lamps Operator No. 3.



## Adapter Assemblies 12-pt No. C1 ZA/CAN 5070

Used with Amplifier Can. No. 19 along with Wireless Set No. 22. 12V for operation of the adapter was derived from the Lamps Operator socket on the No. 22 Set Power Supply Unit No. 4. This plug had a socket on top for connecting a Lamp Operators No. 6A.



The first known operator lamp was issued with Lamp Electric Field Mark I, fielded in early 1917. The signal lamp had an electric bulb but the operator lamp was a small kerosene oil lamp. It was substituted in 1917 by the OL Daylight Signalling (later patterns were known as Lamp Electric Signalling Daylight or Lucas Lamp), initially issued without an operator lamp. Later 1920s patterns (known as Lamp Signalling Daylight Short Range, used and produced well into WW2) were basically similar in construction and issued with an operator lamp known as Lighting Attachment.



Lighting Attachment No. 1.



Lighting Attachment No. 2.



Lucas Lamp used on the Western Front in 1917.



WW1 model: Lamp Electric Signalling Daylight, (Lucas Lamp) fitted in a wooden box.



Probably the last produced variation: Lamp Signalling Daylight Lightweight.

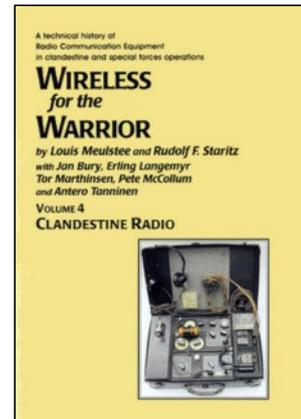
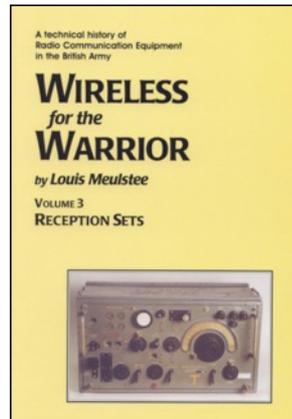
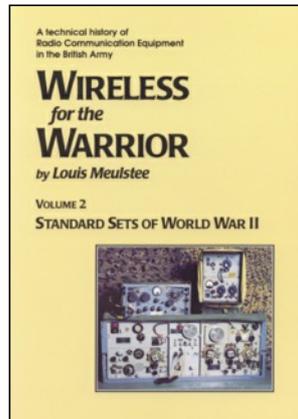
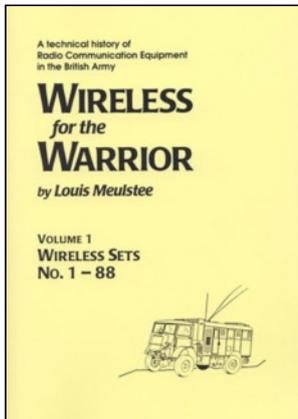
## Lighting Attachment.

An operator lamp known as 'Lighting Attachment' was issued in the 1920s with Lamp, Signalling, Daylight, Short Range and later variations. It was functionally similar to most operator lamps, but built stronger and fitted with an on/off switch at the top. Two versions are noted: an early Bakelite (No. 1) and a metal model No. 2.

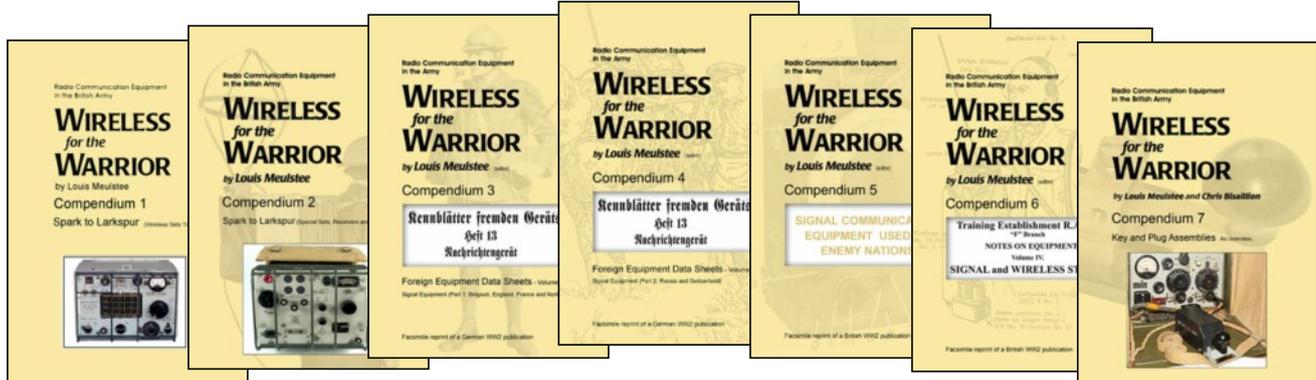
# NOTES

## About the Wireless for the Warrior books.

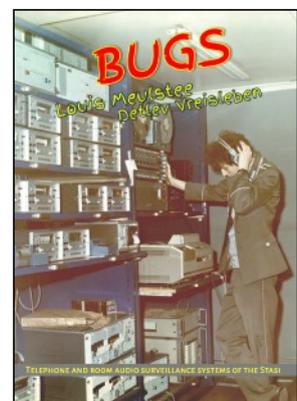
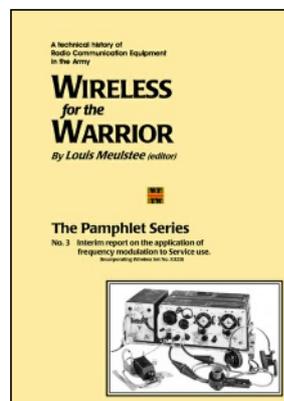
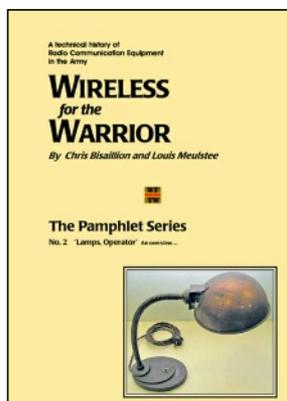
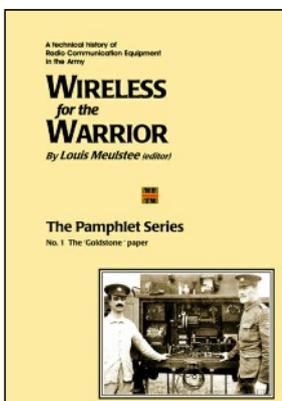
The Wireless for the Warrior range of books (comprising the **Volume** and **Compendium** series) are intended as a source of reference to the history and development of radio communication equipment used by the British Army from the very early days of wireless up to the 1960s. Line equipment and military radio communication equipment from other countries is also covered in the recently published Compendiums. For detailed information, review pages and order information visit [www.wftw.nl](http://www.wftw.nl)



The books in the WftW **Volume** series are very detailed and include circuit diagrams, technical specifications and alignment data in addition to technical development history, complete station lists and vehicle fitting instructions. Generally no operational histories are given as these have been published extensively in numerous other books.



The WftW **Compendium** series is a new addition to the Wireless for the Warrior range, currently comprising 7 books. The new series is principally intended as a practical guide and reference source to vintage military signal communication equipment. The books are particularly valuable to anyone with an interest, professionally or otherwise, in this subject, requiring an elementary but complete quick reference and recognition handbook. Containing condensed data summaries, liberally illustrated with photos and drawings, explanatory captions and short description of the main ancillaries, its pocket size format and laminated soft cover makes it an ideal reference and reliable companion for events such as auctions and radio rallies, or just for browsing at leisure.



The WftW **Pamphlet** series is the latest addition to the Wireless for the Warrior range, created to accommodate a future range of reprints of articles and reports of historical importance, hitherto not published documents, and technical reports on British Army signalling. This new series replaces the now discontinued 'Overview' booklets, free to download and print ready.

WftW **'BUGS'** is the newest book describing the technical history of telephone and room surveillance systems of the Stasi.