

WIRELESS *for the* **WARRIOR**

Pamphlet Series

No. 4 'Tech Manual Art'



'THE RELEVANT WORKING INSTRUCTIONS'

Cover, typesetting and layout: Louis Meulstee.

Cover illustration: Working Instructions Wireless Set No. 88 Types A & B.

The cover artwork and layout of this WftW Pamphlet was prepared in Serif Pageplus X8 using Times New Roman, Arial, AvantGarde Md Bt and Poppl-Laudatio fonts. The scanned illustrations and photos were enhanced and prepared with the use of Adobe Photoshop (Elements). The finished publication was directly converted into PDF format.

Inspired by Ludwell Sibley's article 'Tec Manual Art', published in the AWA *'The Old Timer's Bulletin'* Vol. 33, No. 4, Nov. 1992.

Reworked, amended and much enlarged edition publication in the WftW Pamphlet series No. 4.

Version 1.00. February 2022.

© Louis Meulstee, PA0PCR

Ottersum

The Netherlands

info@wftw.nl

www.wftw.nl

ISBN/EAN 978-90-829965-6-2

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, 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.

For previously issued free to download WftW Pamphlets see page 67.



February 2022.

	Page
Contents	3
About this publication	4
Acknowledgements	4
UK	5
Signal Service 1918	7
'All informed'	14
Signal Training Pamphlet No. 3	15
Manuals, working/ operator instructions	19
Miscellaneous training	23
Australia	24
Canada	25
United States	29
USA training	34
Germany WW2	36
Holland	37
Sweden	38
Variations on a theme	39
Good and bad sites UK	40
USA	41
WW2 Germany	42
Sweden	42
Appendix 1 Tech Manual Art by Ludwell Sibley	43
Appendix 2 Tech Manual Art - a Canadian view- by Chris Bisailion	43
Appendix 3 Tech Manual Art - another look- by Louis Meulstee	45
Appendix 4 The Buzzer, souvenir edition	47
Appendix 5 Jimmy, the magazine of the Royal Signals in M.E.	49
Appendix 6 ATC Gazette, 1944, RAF Q code	61
Appendix 7 Signals, Story of the Australian Signal Corps.	62
Source references and publications	65
Info pages	67

About this publication

The title of this publication was originally devised by *Ludwell Sibley*, (KB2EVN *), for an article with the title 'Tech Manual Art', (Art in military technical manuals) published by the Antique Wireless Association Inc. in its Journal *'The Old timer's Bulletin'*, November 1992.

As a follow up on this article Chris Bisailion published a similar article *'Tech Manual Art - A Canadian view'* in 1993, and I published a selection of similar illustrations of a more international character in the February 1994 issue of the Old Timer's Bulletin.

When recently requested to provide a few high resolution scans of two drawings from this article, I remembered that the original photocopies used for this article were stored 28

years back in a folder along with a large number of additional cartoons and line drawings photocopies, and later made scans over the years, mostly at the Royal Signals Museum Archives.

At that stage it was thought to be a good idea to share the pages of the original *'The Old Timer's Bulletin'* articles in a WftW Pamphlet, together with at the time due to space limitations not accepted cartoons, a collection of later found cartoons and other line art drawings printed in various technical manuals and other publications, directly or indirectly related to military signalling.

Although many of the illustrations in this WftW Pamphlet No. 4 came from technical manuals, user handbooks and training pamphlets related to sig-

nal communication in the Army, some were taken from general Army, RAF and Navy manuals.

Added at a much later stage during the preparation was a selection of cartoons found in 'Greetings from the Signal Service', 'Jimmy', 'The Buzzer', Australian 'Signals', and ATC Gazette RAF 'Q' codes.

Selecting, scanning and cleaning up over 460 illustrations was a time consuming job. Afterwards the classification (rejection in some cases) in a digestible order, divided in specific topics, took again much time when preparing the manuscript for publication.

*) Author of the standard book on valves entitled *'Tube Lore'*, isbn 0-9654683-0-5.

Acknowledgements

Special thanks to Ludwell Sibley, the originator of the first Tech Manual Art publication, an inspiration for two follow ups and this WftW Pamphlet No. 4.

My gratitude goes to the Royal Signals Museum in Blandford Forum, U.K., for granting permission of publishing line drawings from the original manuals, handbooks and publications held in the museum archives.

Chris Bisailion, who published a first follow-up article in the Old Timers's Bulletin, gave kind permission to add his material, including a biography of 'Ting', the artist who draw the cartoons in several Canadian technical manuals, and provided scans taken from the cartoon pages of 'The Buzzer'.

With thanks to Pete McCollum and Chris Bisailion for proof reading the draft document.

UK
Australia
Canada

GREETINGS FROM THE SIGNAL SERVICE ROYAL ENGINEERS was a small souvenir booklet with drawings by Royal Engineers Corporal C.R. Lown in 1918. An original is held in the Royal Signals Museum Archive. Most of the drawings were reduced in size. In those days Army communication was mainly based on lines (telephone, telegraph) and dispatch rider (D.R). (*Ref. No. 92*).

GREETINGS FROM
THE SIGNAL SERVICE
ROYAL ENGINEERS

O.A.S.

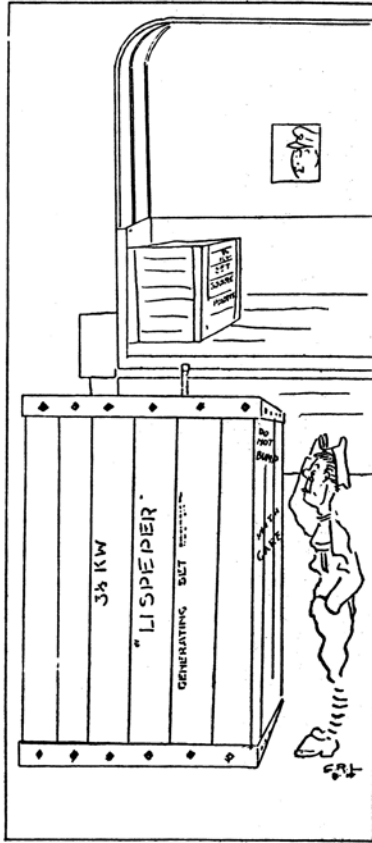


1918





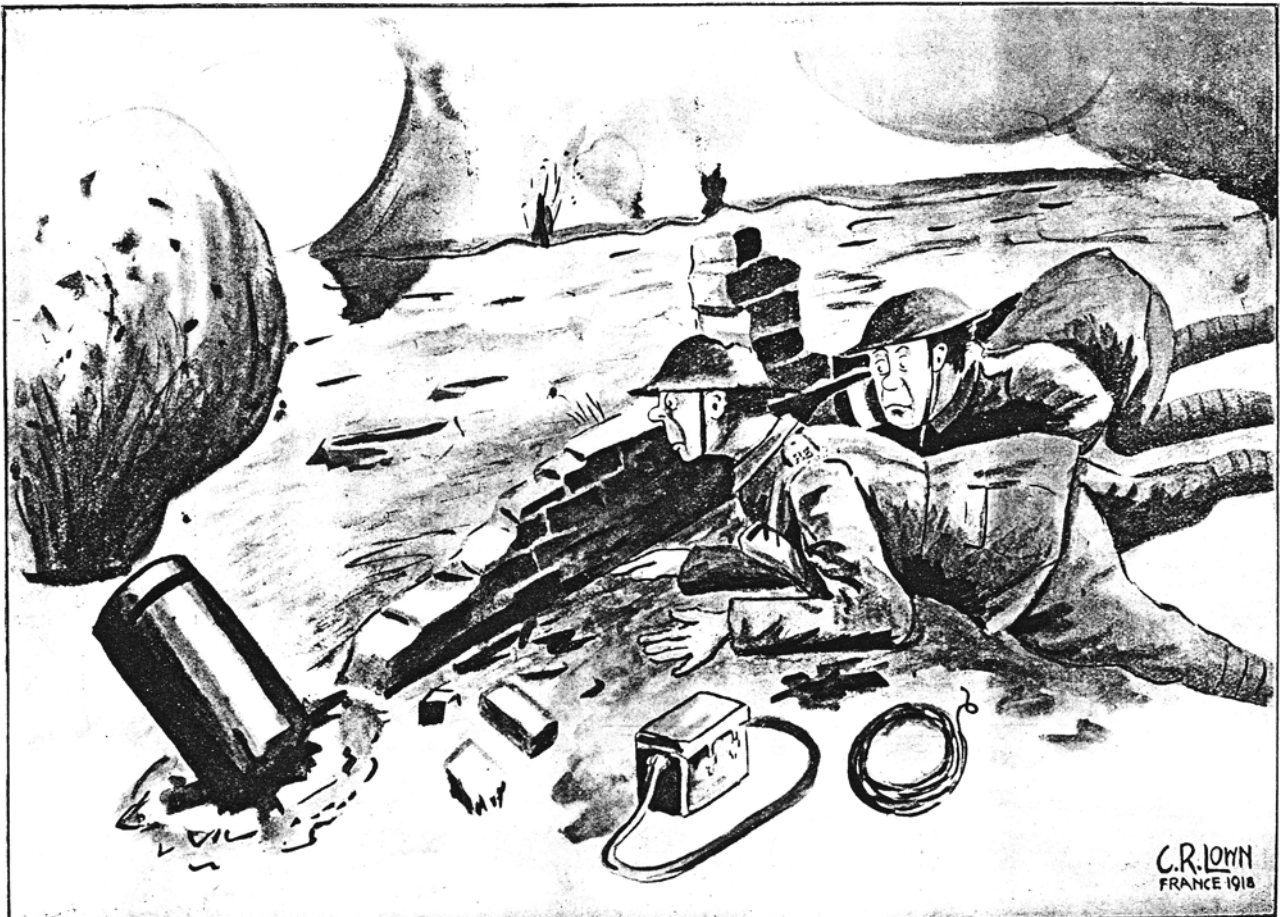
The Interpreter Operator
(Modern).



P.E.L.
(Portable (?) Electric-Light (?))



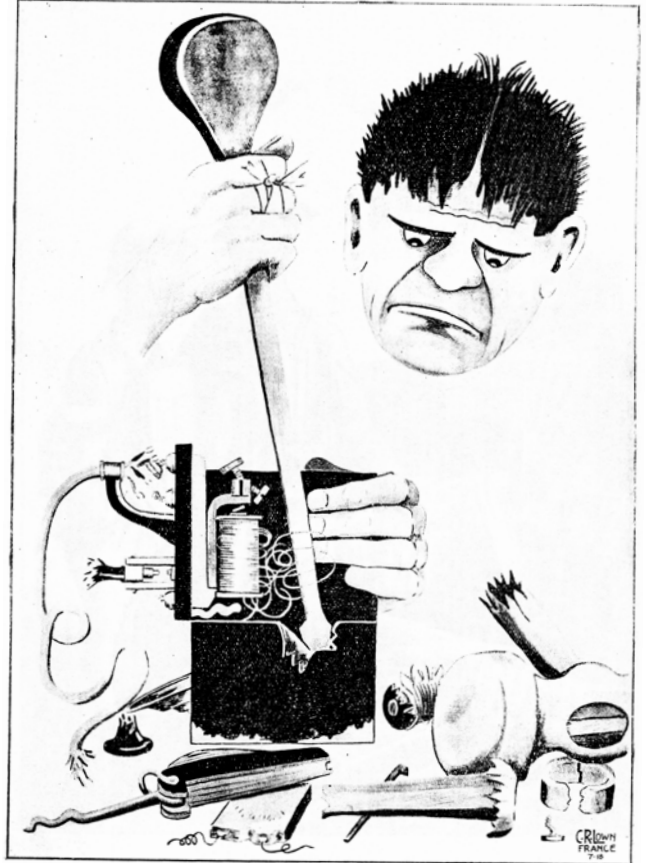
A Wire-less Station complete
with Aerial ——— Torpedo.



"Wish I'd stopped at the Dépôt, Alf."



"Blime, Alf! Oo's pinched our blinking test box?"



Buzz or Bust: Sapper Fone applies for Superior Rating.

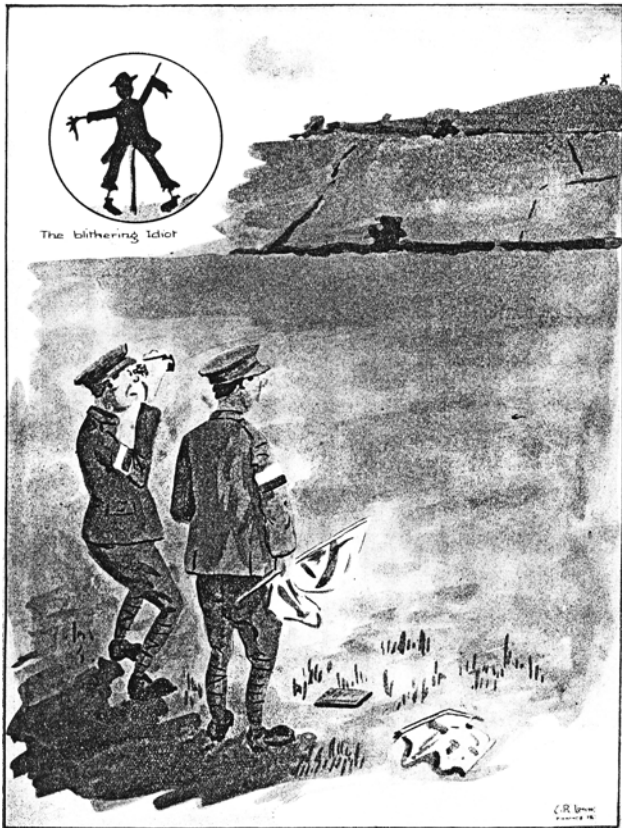


D.R. "Where's 'eadquarters, mate?"
"Well, they were in that there shatoo before dinner."



"Bring them pliers, Jock!"

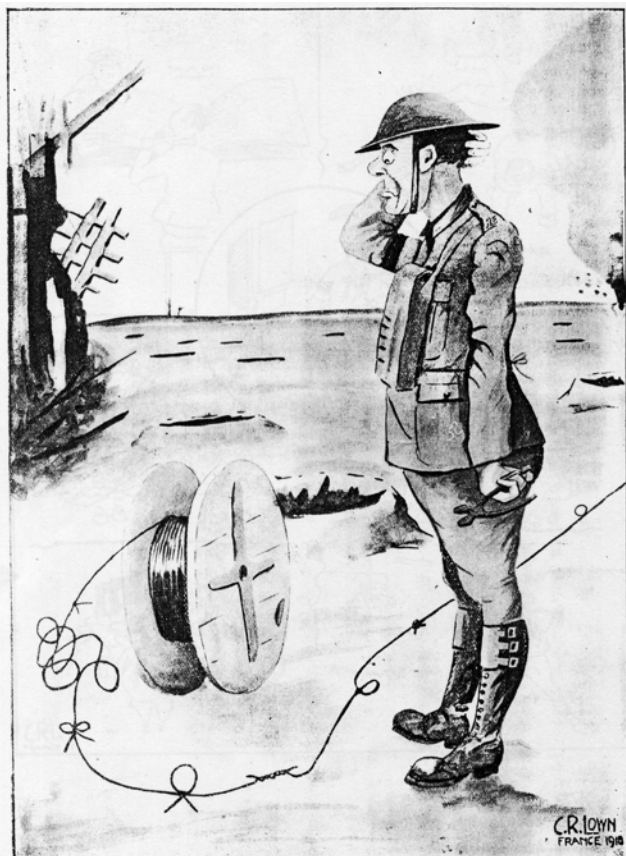
"B—— the pliers!!!"



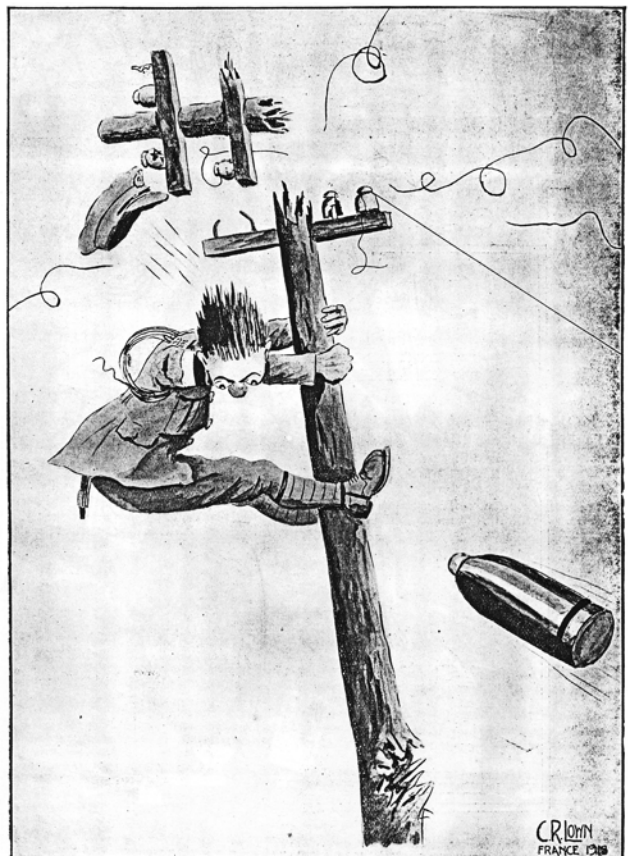
"What's that blithering idiot trying to send now, Alf.?"



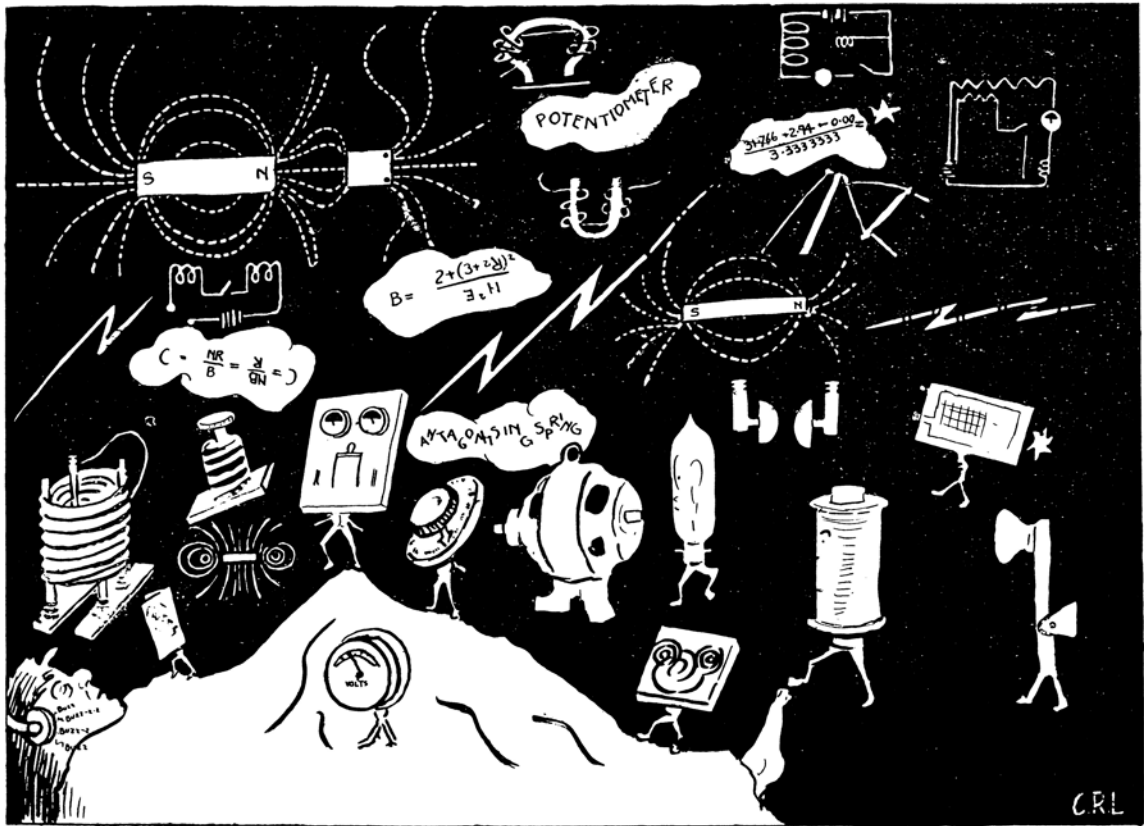
"Don't shout so ——— loud there Mac. You'll give our position away."



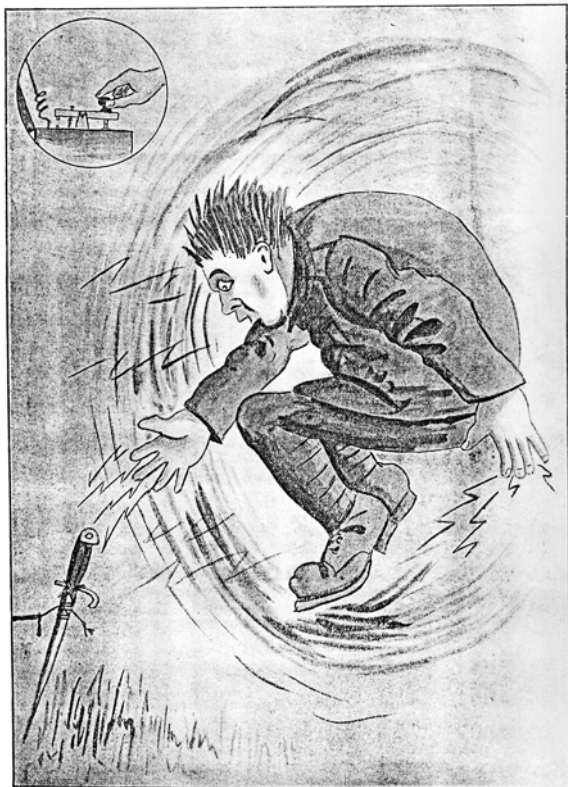
Pioneer Diss recognizes the drum he worked overtime on at the Base Dépôt.



"It's an 'earth-return,' Bill."



At the end of the wireless course—"What are the wild waves saying?"

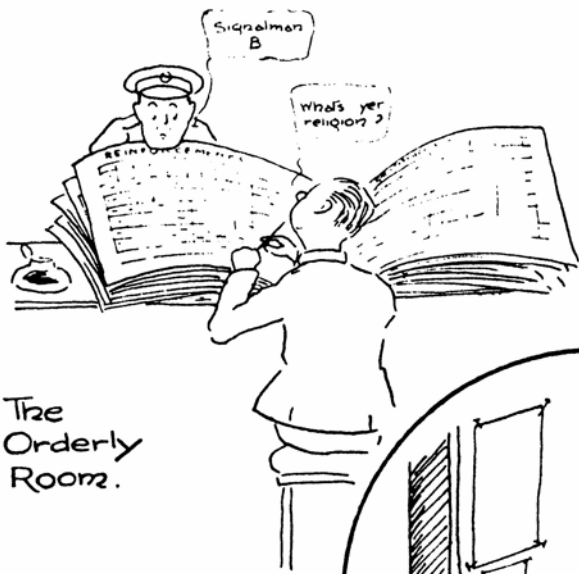


The Power of the Buzzer: —one who didn't know.



"—!]. What sort of airline do you call that, Smith?"
"Comic, Sir."

THROUGH THE BASE DEPOT.



The Orderly Room.



Jerks



Trying to change an odd pair of socks at Q.M. Store



The Cable-shed.



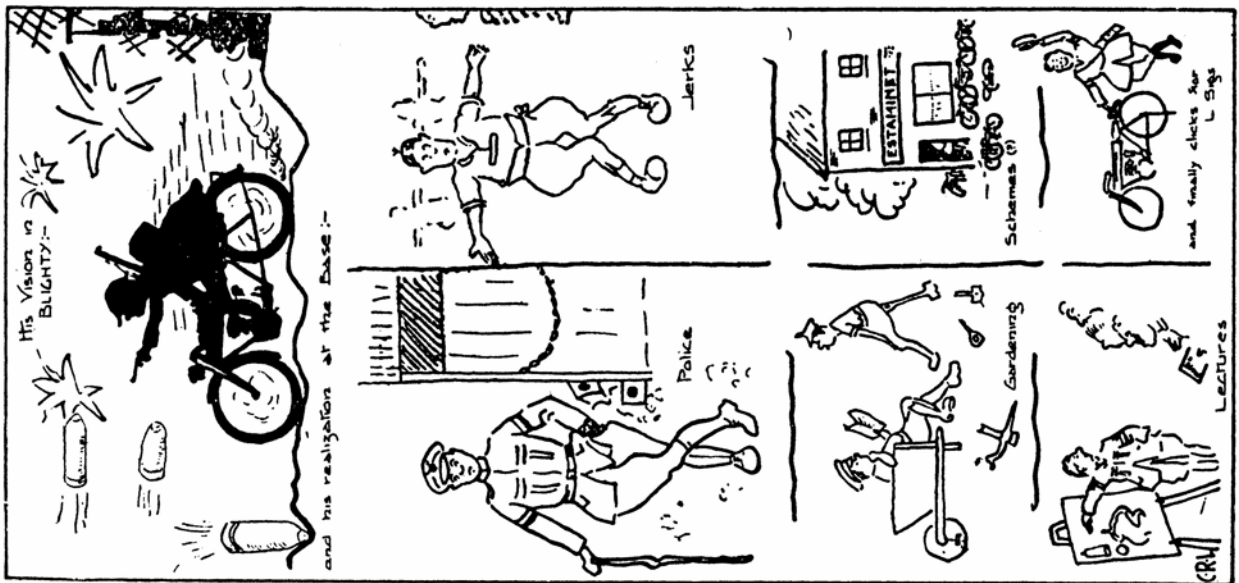
The DR's



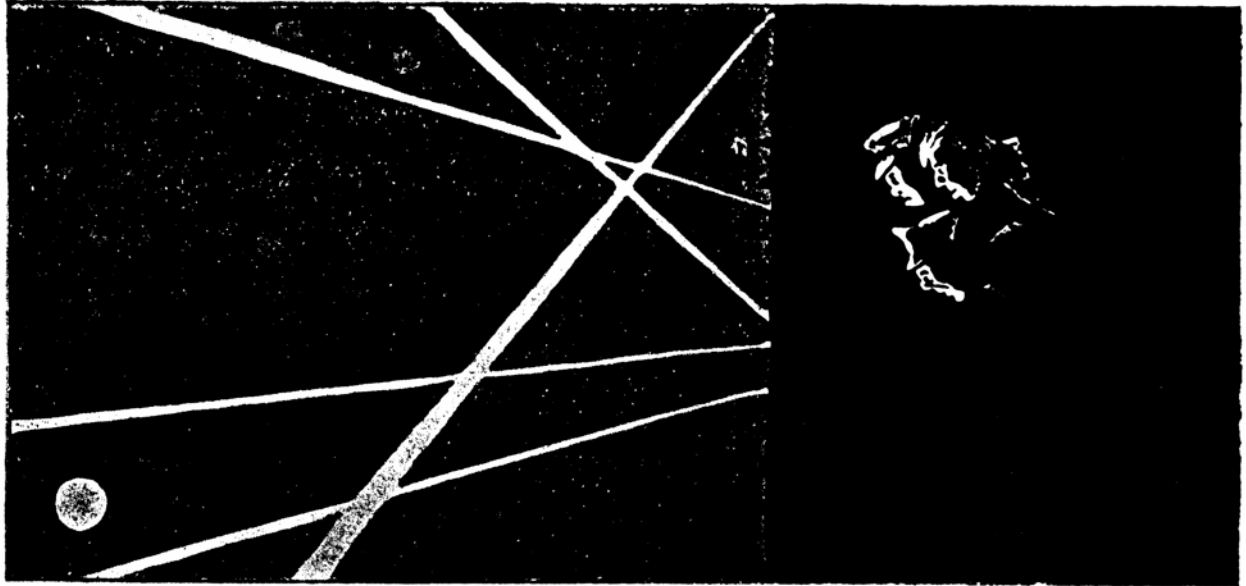
That notice board



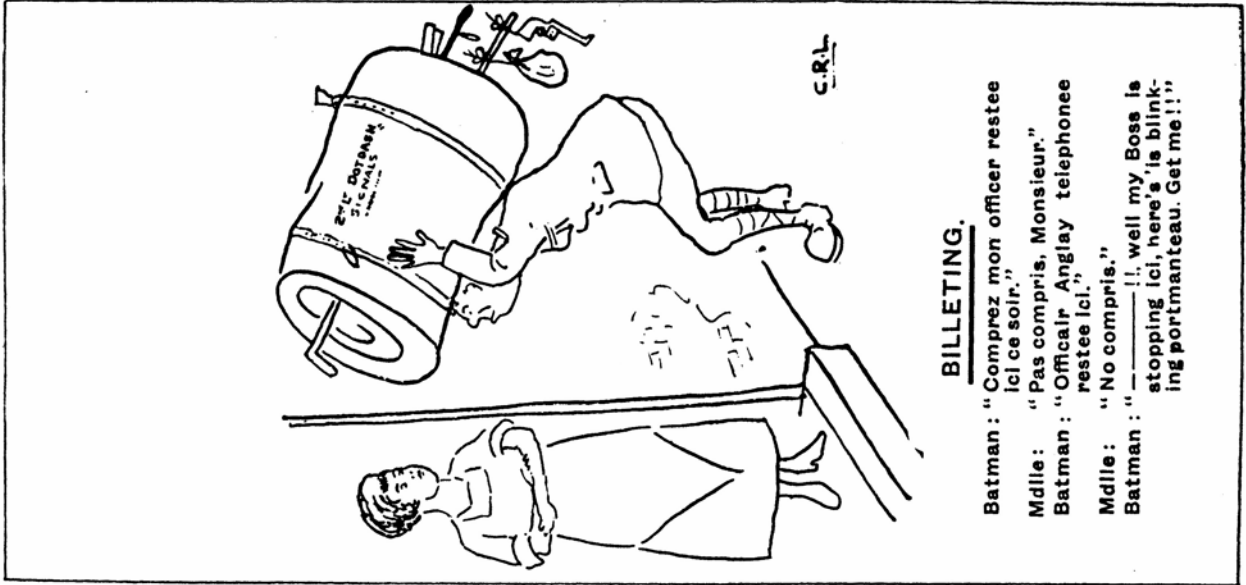
Good-bye-e

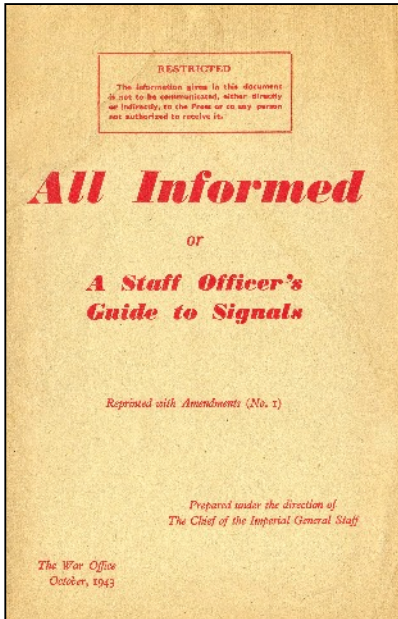


The D.R.



At the end of a perfect day

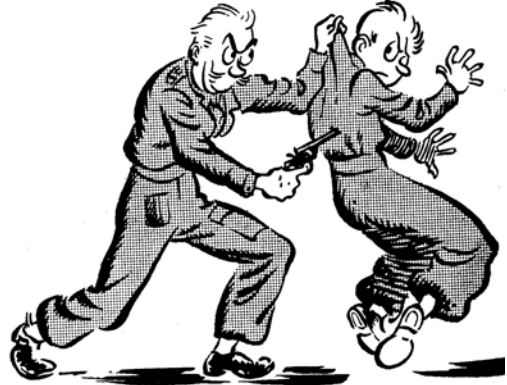




'ALL INFORMED' or 'A Staff Officer's Guide to Signals' was a small printed booklet issued to staff officers explaining and guide lining the job of the Royal Corps of Signals providing maintenance and operation of army communications for most formations down as far as battalions. The publication gave hints on the efficient use of a telephone, wireless message writing, and foremost working together as a team. '...don't expect your lineman how to hold a pigeon...don't be surprised if your operator cannot join a 7-pr. cable or ask your instrument mechanic to climb telegraph poles...if you want the telephone in your office moved, don't grip the first signalman you see -he will probably be a driver anyway- but talk to an officer...'. (Ref. No. 45).



... how to hold a pigeon



... grip the first signalman



... subscribers change frequently



... soft voiced by nature



... very wild indeed



... out of bounds



... from the signalman



... range of temptations



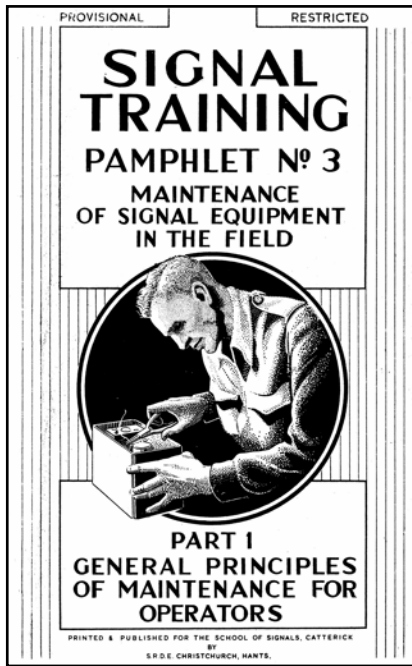
... plain shouting



... a penny a word



... sew on buttons



One of the richest sources of line drawings was (provisional) *Signal Training Pamphlet No. 3*, Maintenance of signal equipment in the field. *Part 1: General principles of maintenance for operators.* (170 pages).

It was written for the School of Signals in Catterick in 1947, jointly by the School of Signals (Publications department) and the publications section of the Signals Research and Development Establishment (SRDE) in Christchurch. It covered all aspects of maintenance and preservation of signal equipment using a large amount of relevant and up to date data e.g. on experiences gained during WW2,

particularly storage and use in tropical environments, richly illustrated by a large number of cartoons. This publication was only provisional, with the ultimate intention of the War Office being to revise and re-issue the final version at a later date. The probably only known copy of this pamphlet that survived is held in the Royal Signals Museum Archives in Blandford Forum.

It was eventually published in its definite form as *Signal Training Volume III, Maintenance of Signal Equipment in the field, Pamphlet No. 1 General Principles of Maintenance, WO Code No. 8505, 1950. (Ref. No. 46).*

Excerpt from the introduction: 'Need for maintenance'

...the success of a modern army depends directly on the efficiency of communications, and this in turn is dependent on the signal equipment being always in perfect working order. It is therefore particularly important that all signal equipment should always be kept in perfect condition, otherwise it may break down and interrupt communications, thereby completely upsetting the commander's plan and perhaps turning a victory into a defeat...



'UPSETTING THE COMMANDER'S PLAN'



'REPORTING ANYTHING THAT REQUIRES ATTENTION'



'WELL OILED'



'MAY BE PICKED UP'



'DROP HEAVY OBJECTS ON IT'



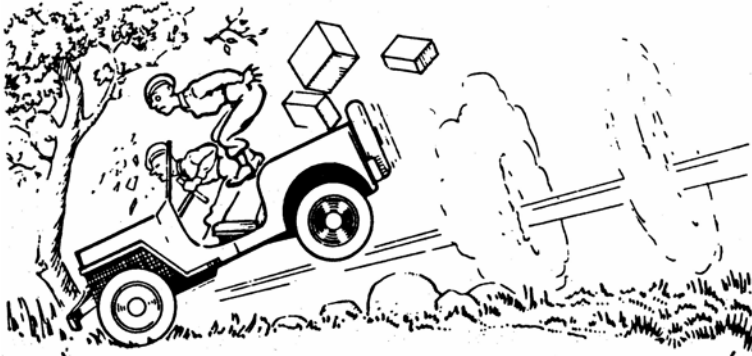
'MAKE SURE THAT IT NEVER LEAVES THE STATION'



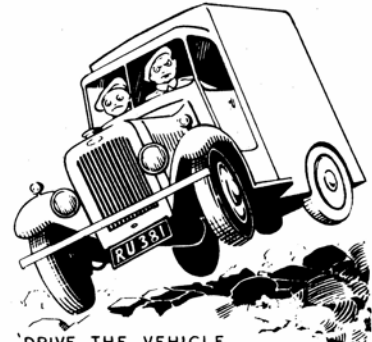
'FINISHED OFF WITH A DRY CLOTH'



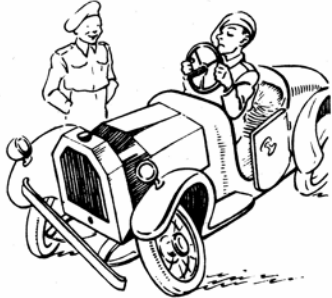
'AT THE MOST INCONVENIENT MOMENT'



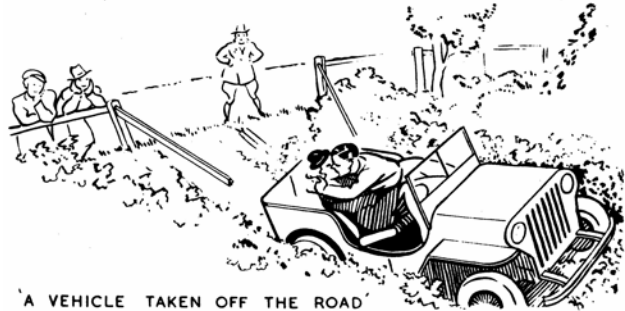
EXCESSIVE VIBRATION AND SHOCKS SHOULD BE AVOIDED



DRIVE THE VEHICLE OVER A ROUGH ROAD



'LOOSE METAL WORK'



'A VEHICLE TAKEN OFF THE ROAD'



'THE RELEVANT WORKING INSTRUCTIONS'



'IF THEY ARE IDLE'



'WHEN IT HAS COLLECTED DUST'



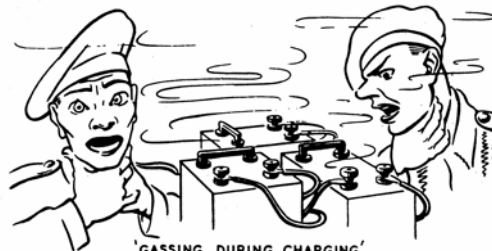
'NOTES MADE OF ANY WORK DONE'



'UNABLE TO REASSEMBLE IT CORRECTLY'



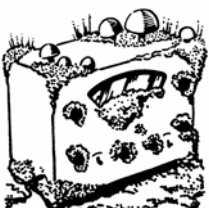
'OPPOSE THEIR ENTRY'



'GASSING DURING CHARGING'



'ENSURE THAT THE WATER USED IS REASONABLY CLEAN'



'MOULD GROWS VERY QUICKLY'



'DO NOT USE UNDUE FORCE WHEN OPERATING THE CONTROLS'



Chapter VIII..Fault Finding..



NEVER TOUCH THE AERIAL WHILE SET IS ON--"SEND"



'PRODUCE DISTORTED SPEECH'



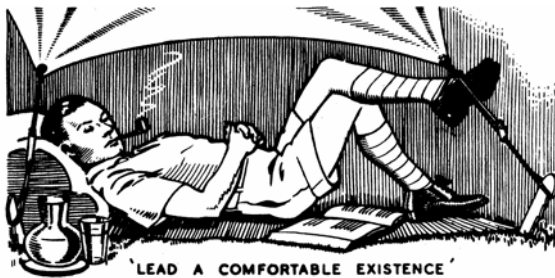
'MAY BE KICKED OR TRODDEN ON'



'DONT OPEN BOXES AT RANDOM'



'A STATE BORDERING ON DESPAIR'



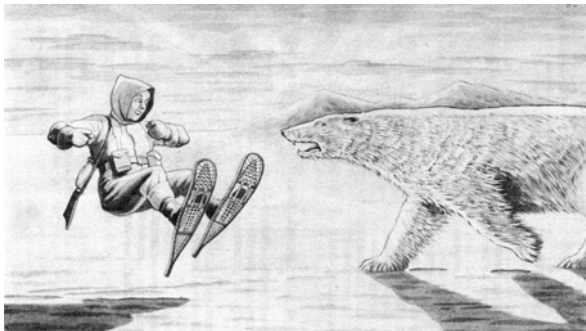
'LEAD A COMFORTABLE EXISTENCE'



'DESPERATE EMERGENCIES DEMAND DESPERATE ACTION'



'LOW TEMPERATURES HAVE A DELETERIOUS EFFECT ON CERTAIN ITEMS OF EQUIPMENT'



'THE FREEZING OF BREATH MOISTURE'



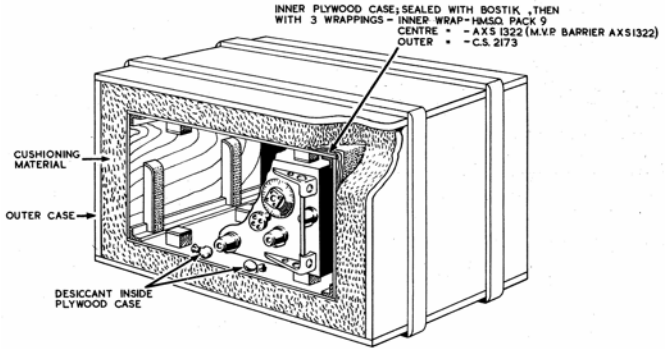
'PLACE THE BATTERIES IN THE POCKETS'



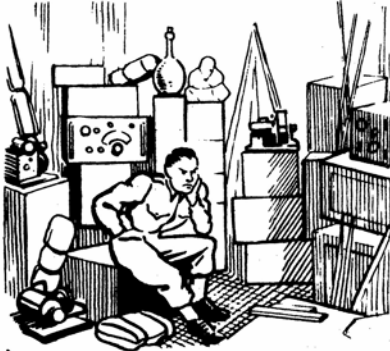
'DRY OUT EQUIPMENT AS OFTEN AS IS POSSIBLE'



A WELL CONSTRUCTED CASE HAS NO WEAK POINTS



TYPICAL METHOD OF PACKING RECEIVERS AND TELEPRINTER EQUIPMENT



'THE STORAGE OF EQUIPMENT ... PRESENTS MANY PROBLEMS'



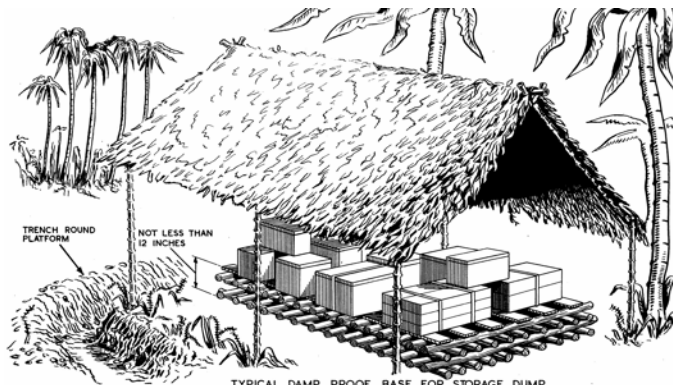
'IT IS UNLIKELY THAT ANY REALLY DRY GROUND WILL BE FOUND'



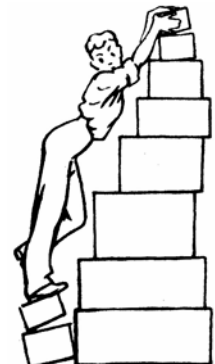
'QUICKLY SHOW SIGNS OF DETERIORATION'



'MAKESHIFT SHELTERS MAY HAVE TO BE ERECTED'

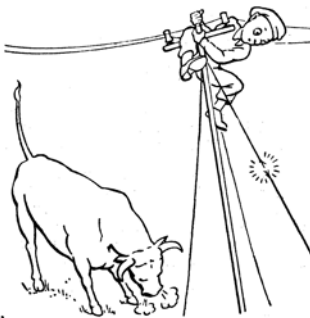


TYPICAL DAMP PROOF BASE FOR STORAGE DUMP

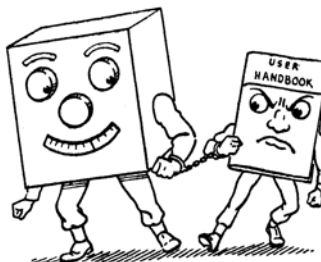


'STOW THE LIGHTER ITEMS ON TOP'

The provisional *Signal Training Pamphlet No. 3, Part 1*, was eventually superseded by *Signal Training Volume III, Maintenance of Signal Equipment in the field, Pamphlet No. 1 General Principles of Maintenance, WO Code No. 8505, 1950*. Only a very small number of the original illustrations from the provisional pamphlet were used, plus a few new ones which are shown below. (Ref. No. 47).



'BADLY MAINTAINED EQUIPMENT WILL LET YOU DOWN AT THE MOST INCONVENIENT MOMENT.'



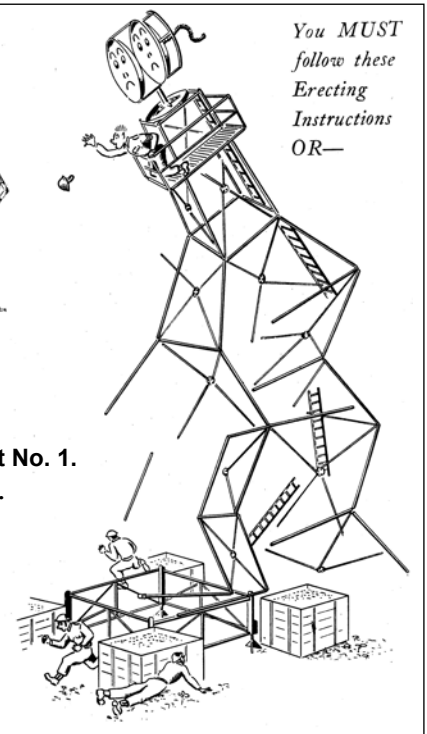
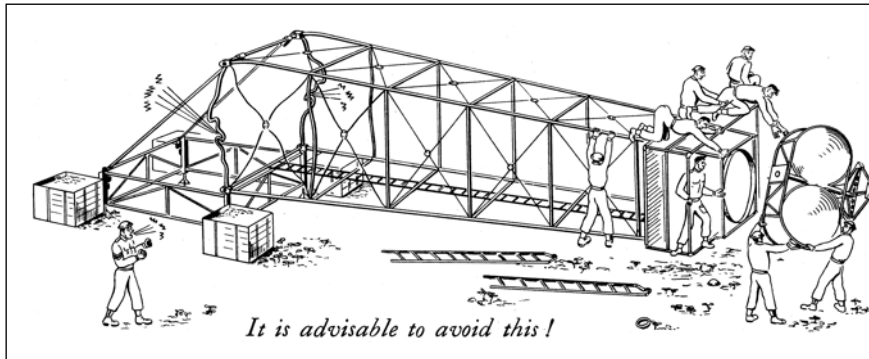
'MAKE SURE THE "USER HANDBOOK" NEVER LEAVES THE STATION'



'DO NOT USE BLOW-LAMPS NEAR PETROL'



'ITS NO USE ADOPTING HIT OR MISS METHODS'

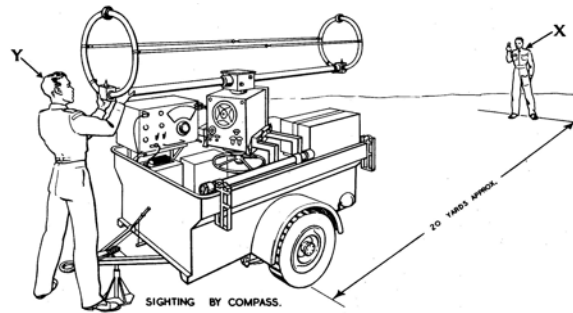


Mast Telescopic 27ft.
(Ref. No. 31).

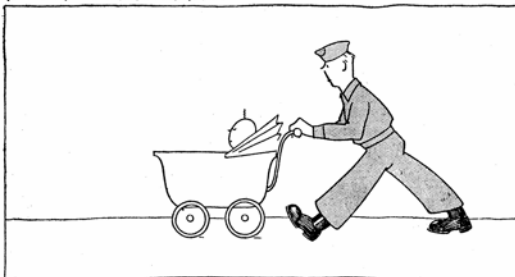


Towers 66ft No. 1.
(Ref. No. 32).

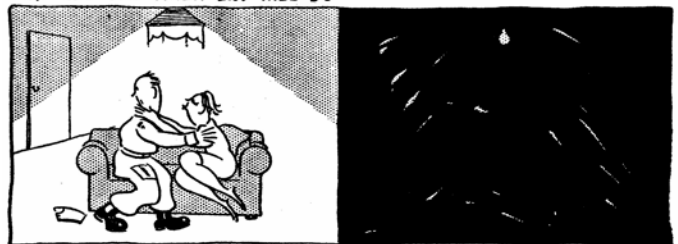
DF Station P.E. No. 1.
(Ref. No. 40).



WEEKLY MAINTENANCE



WHY USE H.P. WHEN L.P. WILL DO



WS No. 19.
Amplifier RF No. 2.
(Ref. Nos. 1,2,3,5).



WE OFTEN WONDER



WHY OPERATORS FACED WITH A NEW SET

WILL TURN EVERY KNOB _____
 SWITCH EVERY SWITCH _____
 UNFASTEN EVERY BOLT _____

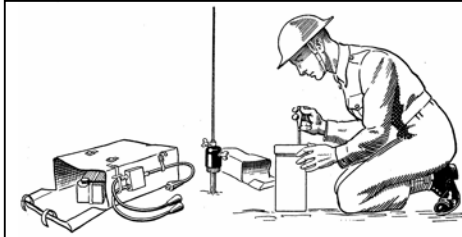


AND ONLY WHEN THE SET IS COMPLETELY UNSERVICEABLE



WILL THEY READ THE INSTRUCTIONS

Wireless Set No. 46.
(Ref. No. 6).



See page 19.

"I CANT GET A SIGNAL SIR"

"I GOT THE BATTERY FROM THE 18 SET SIR"



THE MAN WHO DIDNT LOOK AT THE KEYSWAY THE MAN WHO DID



What is wrong with this picture?

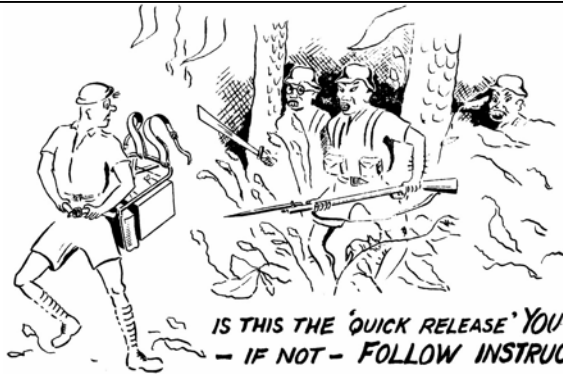


Set under operational conditions.

ALWAYS NET TO H.Q. STATION



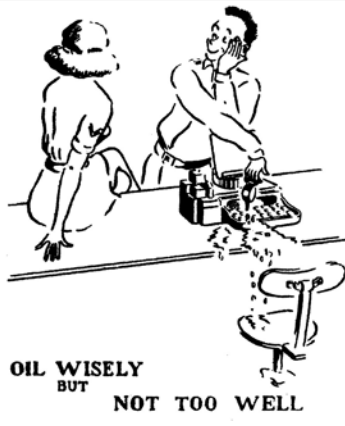
Radio Link S.R. *(Ref. No. 15).*



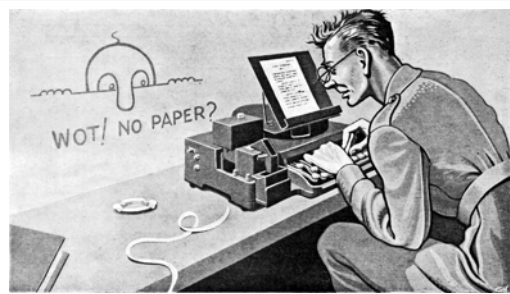
IS THIS THE 'QUICK RELEASE' YOU WANT? - IF NOT - FOLLOW INSTRUCTIONS
Wireless Set No. 42. *(Ref. No. 33).*



OIL WISELY BUT NOT TOO WELL

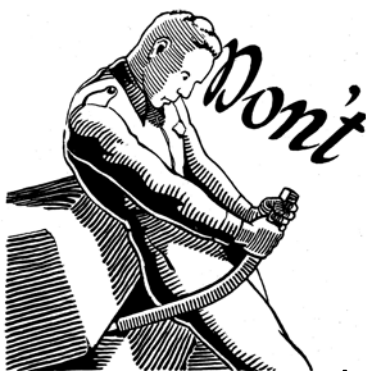


OIL WISELY BUT NOT TOO WELL

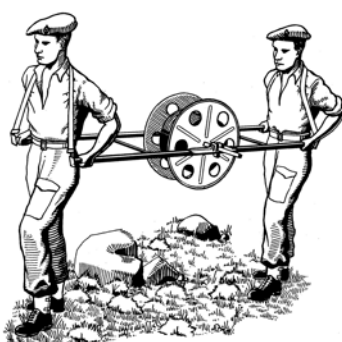


Perforator No. 44 (above/centre). *(Ref. No. 35).*

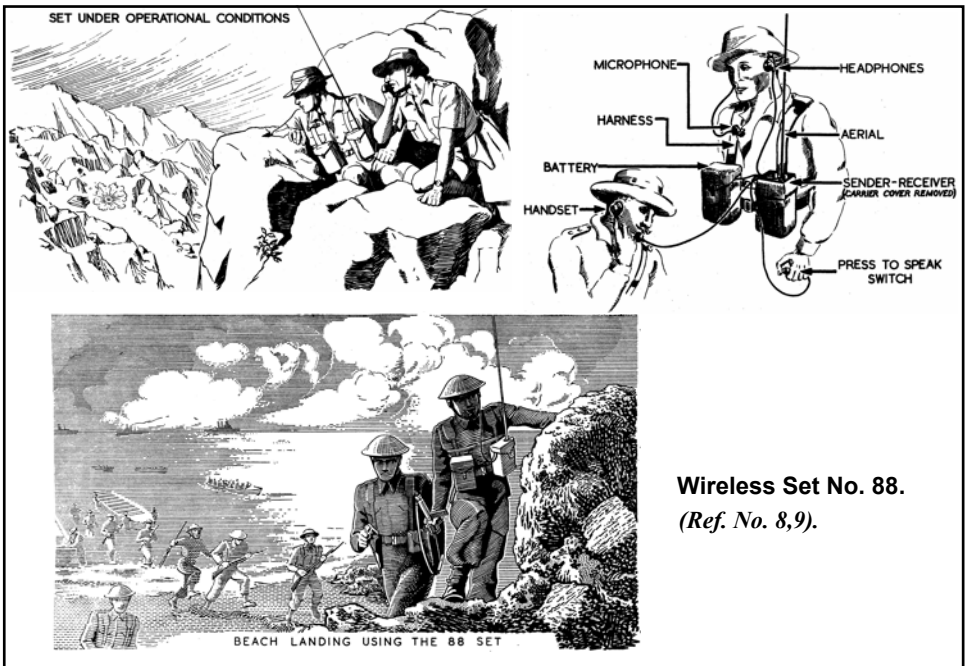
Reperforator No. 7TR (left). *(Ref. No. 36).*



Apparatus cable laying No. 11. *(Ref. No. 37).*



WS C.N. 348. *(Ref. No. 34).*



Wireless Set No. 88.
(Ref. No. 8,9).



Operating using 10 ft. aerial

Wireless Set No. 31.
(Ref. No. 7).



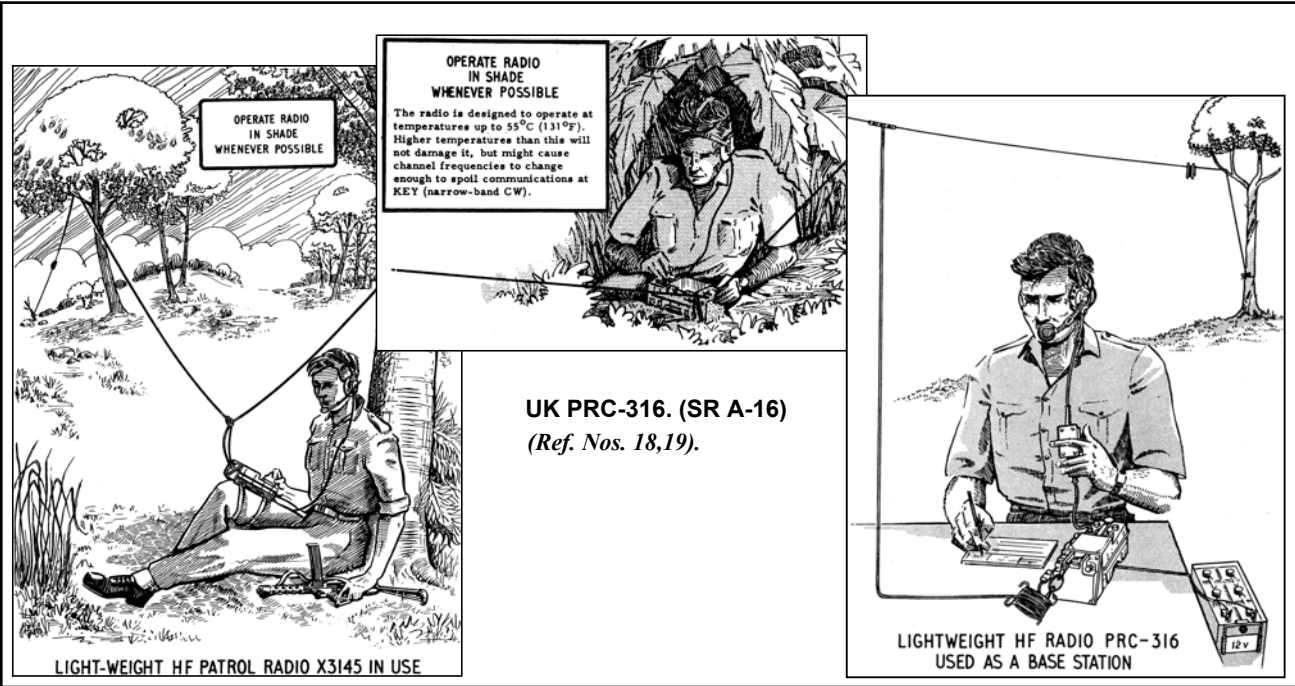
(Ref. No. 16).
Wireless Sender A-12.



Station Radio A-14. (Ref. No. 17).



Transmitter-receiver A-43R.
(Ref. No. 25).



UK PRC-316. (SR A-16)
(Ref. Nos. 18,19).

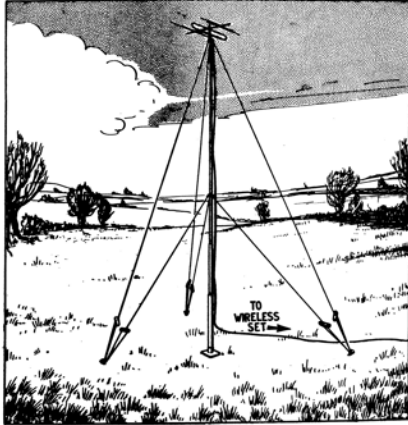
LIGHTWEIGHT HF RADIO PRC-316
USED AS A BASE STATION



Signal training, Pt. 2. 1982. (Ref. No. 50).

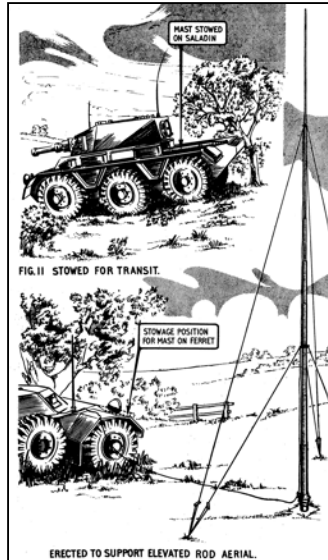


Transmitter-receiver A-40. (Ref. No. 22).



MAST ERECTED FOR LIGHT AERIAL ARRAY

Mast telescopic 27ft. (Above/right). (Ref. No. 31).



ELEVATED AERIAL IN USE.

Elevated aerial. (Ref. No. 27).



AUDIO EXTENSION LEAD



PRC-350: audio extension (left) and remote aerial (right). (Ref. No. 28).



Operational Use



OPERATIONAL USE

T/R A-41/A-42. Work of two artists. (Ref. Nos. 23/24).



Rebroadcast T/R A-41/A-42. (Ref. No. 26).

Signal Training

Signal Training Pamphlet No. 7—Training



Signal training pamphlet No. 7.
(Ref. No. 44).

PART I HOW TO INSTRUCT 1945



"Learn by doing"



We are training for success in war.



Passing on knowledge



"Physical requirements must also be considered."



"Let the student have his say."

SIGNAL TACTICS



Part II-The Infantry Battalion 1945 (Provisional)

Signal training All Arms Part II. (Ref. No. 42).

SIGNAL TACTICS



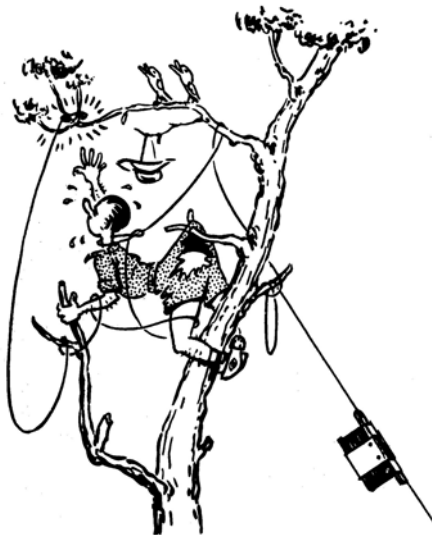
Part III The Motor Battalion

1946

Signal training All Arms Part III. (Ref. No. 43).



Wireless Station A-510. (Ref. No. 49).



When dismantling station, lower the aerial, disconnect the cord, then pull the cord from the bobbin end. — — — — —
DON'T ATTEMPT TO THROW THE BOBBIN BACK OVER THE TREE AS THIS OPERATOR DID!



Signal Training (Vol. III) Australian Pamphlet No. 6

Wireless Set No. 11 (Aust). (Ref. No. 41).

DENY IT TO THE ENEMY . . .



'YOU CAN'T USE IT,
— WAY SHOULD AE ?

HIT IT WITH A BRICK
OR HAMMER,
CROWBAR, PICK-AXE,
BOOT OR RAMMER,



A HAND GRENADE IS GOOD THEY SAY,



FOR SPEEDING THINGE
ALONG THEIR WAY.
IT REDUCES THEM TO LITTLE BITS,
AND MAKES QUITE SURE
THAT NOTHING FITS.

WHATEVER METAOD YOU MAY CHOOSE
TO MAKE YOUR SET UNFIT TO USE,
DON'T LEAVE A BIT FOR AIM



TO FIND,
DON'T LEAVE THE SMALLEST
— THING BEHIND,

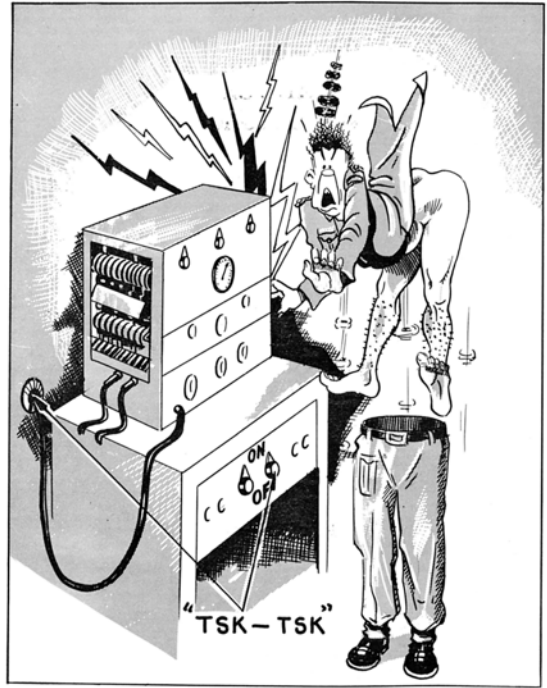
HIT IT, SMASH IT, BATTER IT,
BURY IT, DROWN IT, SCATTER IT.

THE MOTTO IS HERE
FOR ALL TO SEE

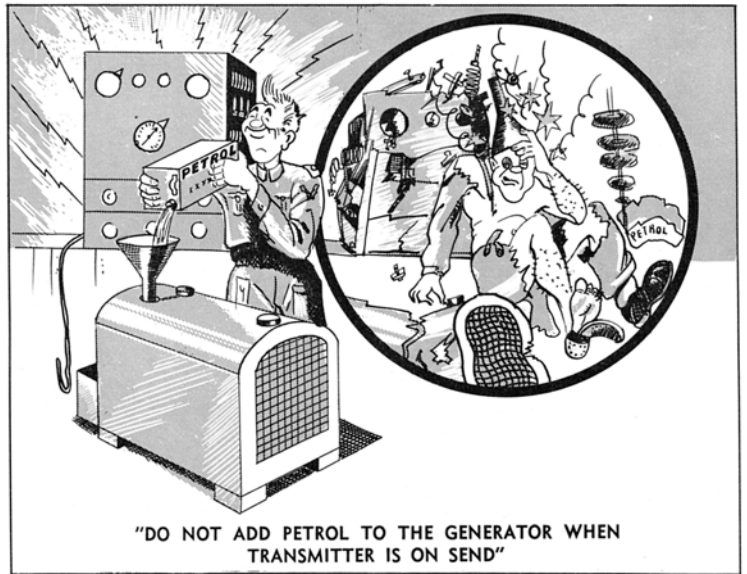
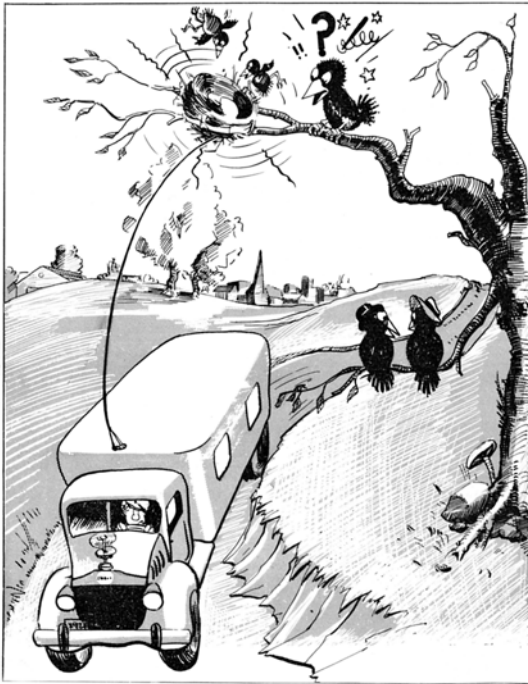


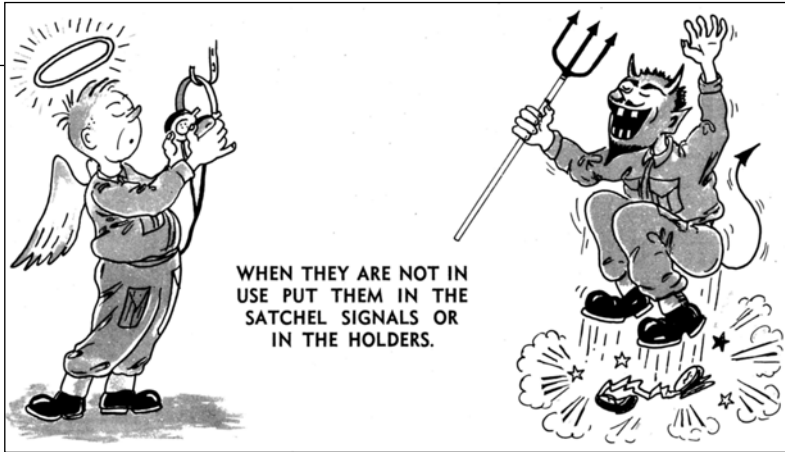
DENY IT TO THE ENEMY !

Wireless Set No. 62. (Aust). (Ref. No. 48).

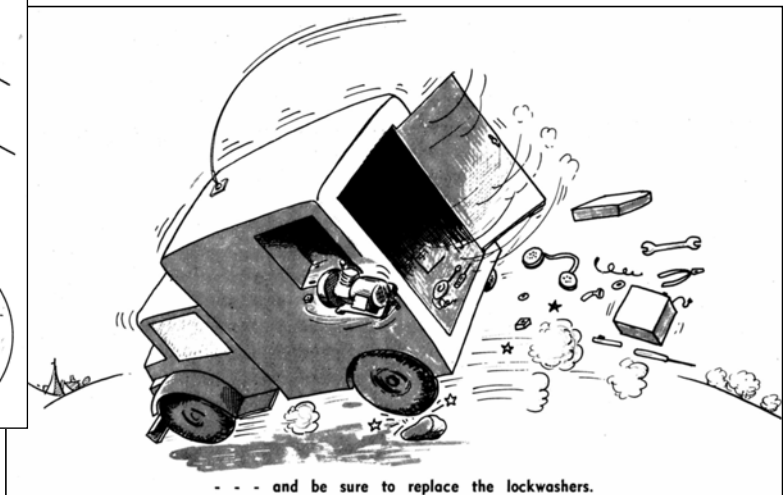
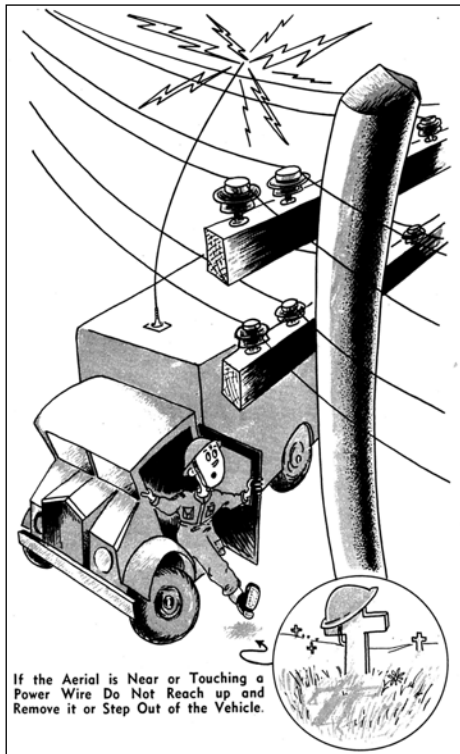


All illustrations on this page:
Transmitter Canadian No. 43 Mk.II.
(Ref. No. 10).





All illustrations on this page:
 Wireless Set Canadian
 No. 52. Mk.II.
 (Ref. No. 11).

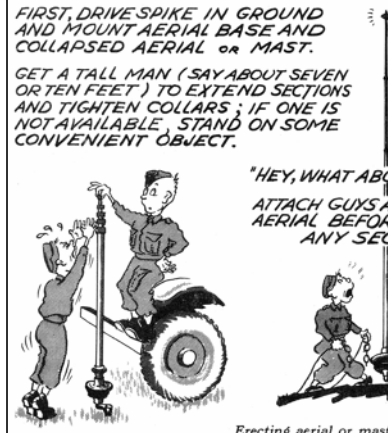




Erecting Vertical Radiator on roof of vehicle.



The wind is a great help—sometimes!



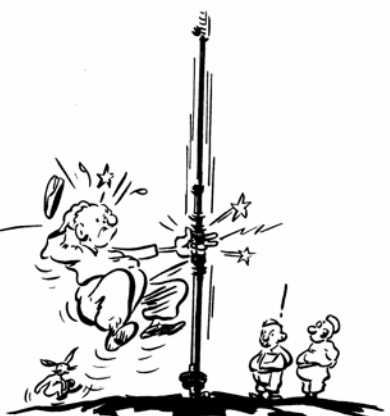
Erecting aerial or mast on ground (first method).



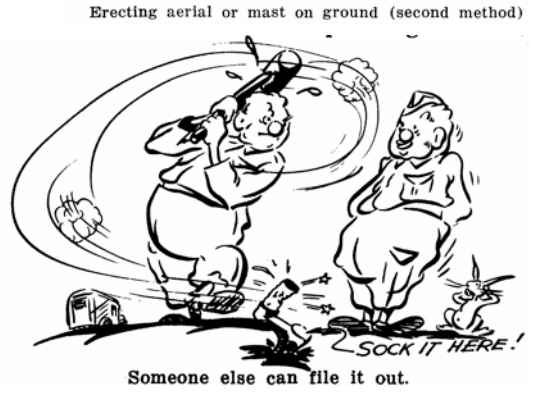
Erecting aerial or mast on ground (second method)



Don't get your guys tangled.



It's hard on the fingers.



Someone else can file it out.

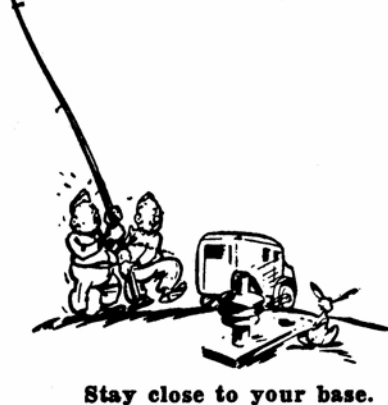


Walk . . . Don't run.

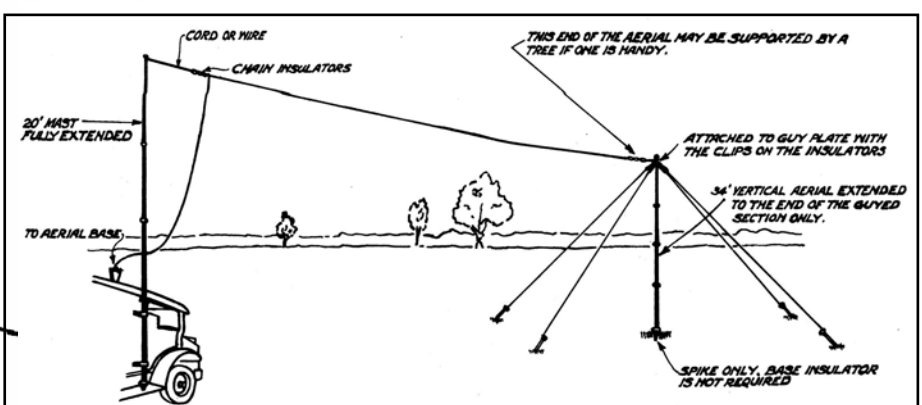
All illustrations on this page:
Antenae Vertical 34' Steel Mk.I.
(Ref. Nos. 12/13).



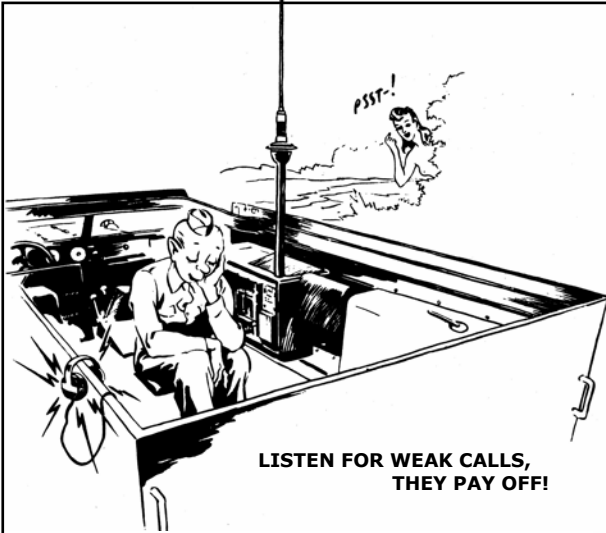
. . . All the way out.



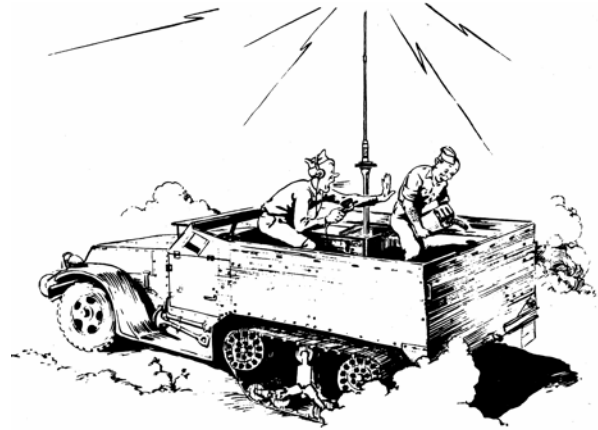
Stay close to your base.



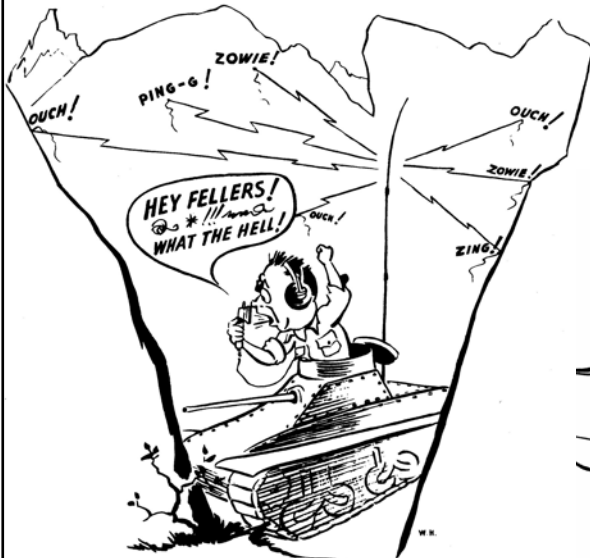
USA



**LISTEN FOR WEAK CALLS,
THEY PAY OFF!**



NEED WE SAY MORE?



**LOOK OUT FOR DIPS,
VALLEYS AND DEPRESSIONS!**



All illustrations on this page:
SCR-506-A (1943).
(Ref. No. 72).



**CHEW THE FAT AT THE MESS
-NOT AT THE MIKE!**

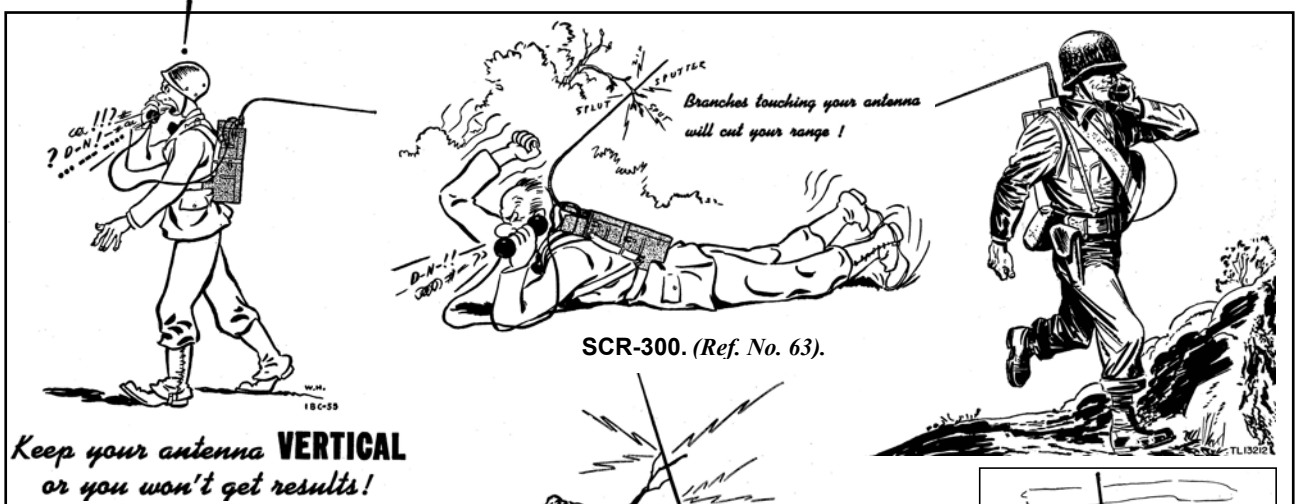


**DON'T DESIGN YOUR OWN ANTENNA!
-STICK TO WHAT'S RECOMMENDED.**

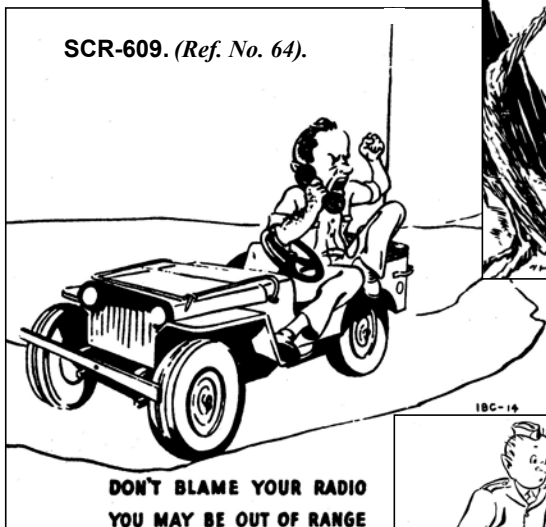


SCR-504.
(Ref. No. 64).





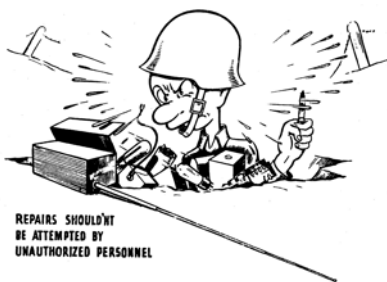
Keep your antenna **VERTICAL** or you won't get results!



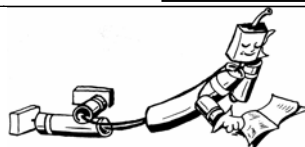
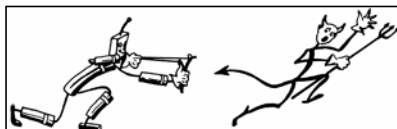
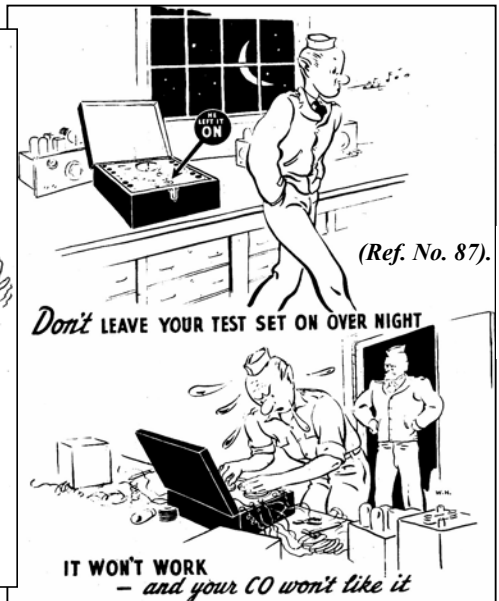
DON'T BLAME YOUR RADIO
YOU MAY BE OUT OF RANGE



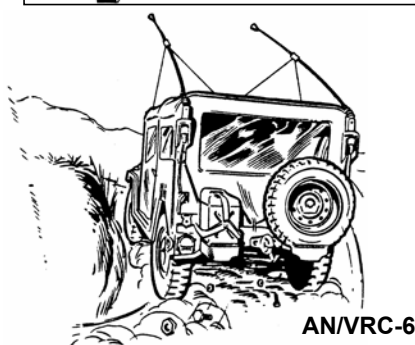
FM-24-18. (Ref. No. 87).



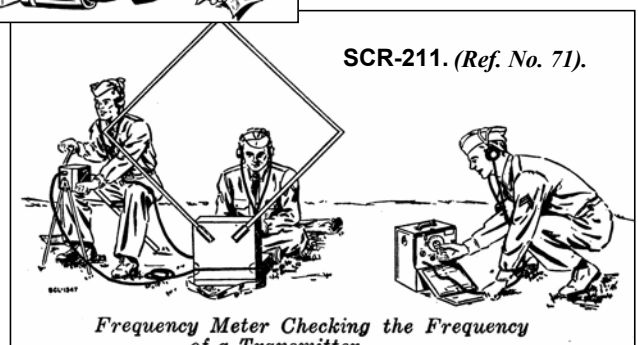
SCR-509. (Ref. No. 64).



AN/ART-13.



AN/VRC-6. (Ref. No. 66).



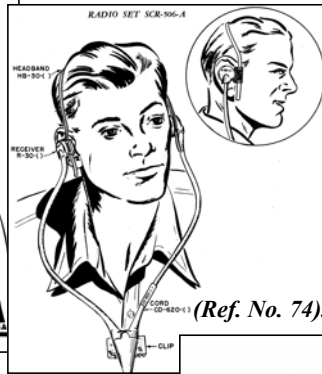
Radio Set SCR-506-A is designed for installation in tanks, amphibian trucks, personnel carriers, command cars, and many other vehicles.



SCR-506. (Ref. No. 74).



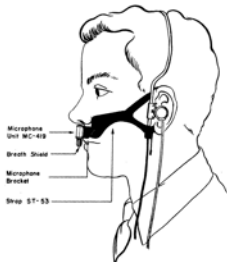
Chest Set TD-1. (Ref. No. 82).



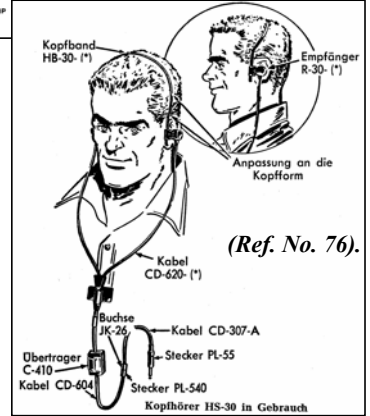
(Ref. No. 74).



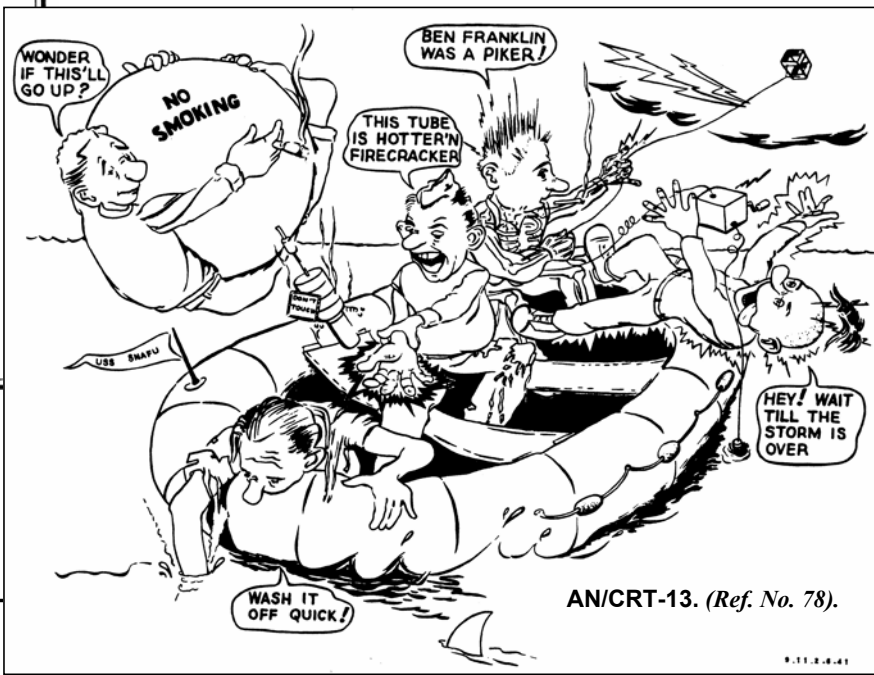
Headset HS-30-1. (Ref. No. 82).



(Ref. No. 74).



(Ref. No. 76).



AN/CRT-13. (Ref. No. 78).

9-11-2-4-43

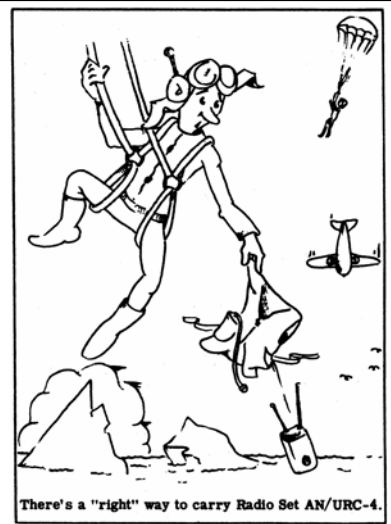


Keep your big thumb off the antenna! You make a lousy radiator.

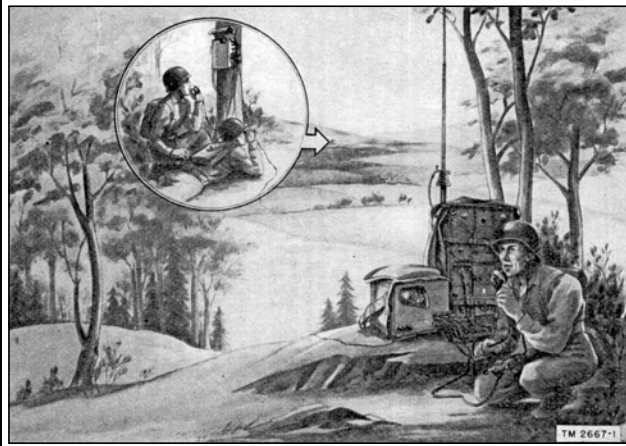
AN/URC-4. (Ref. No. 68).



Any "dope" can waste the battery, but a smart guy will save it for an emergency.

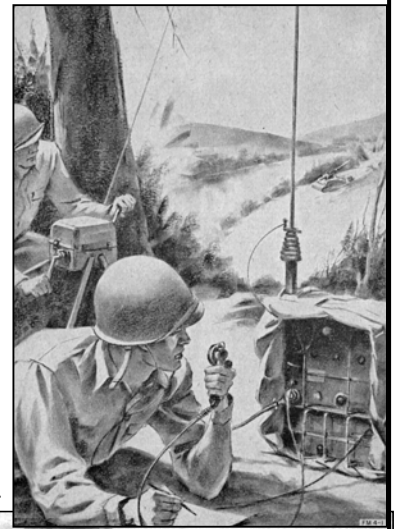


There's a "right" way to carry Radio Set AN/URC-4.



RC-289. (Ref. No. 90).

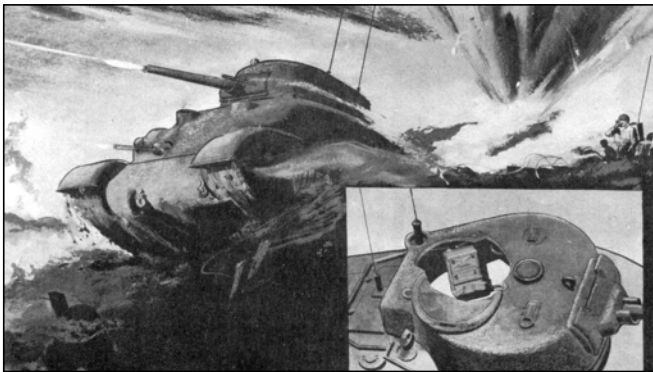
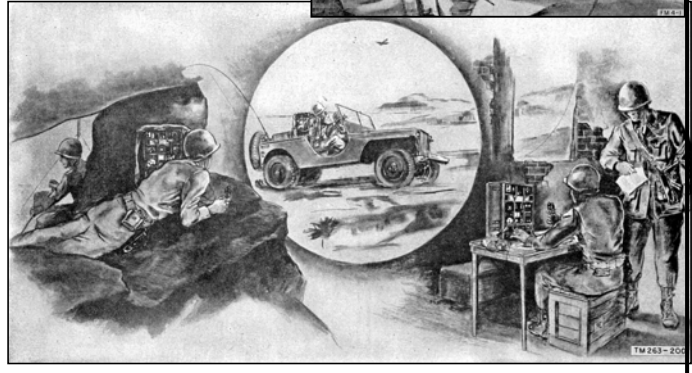
FM-24-18.
(Ref. No. 87).



AN/GRC-9. (Ref. No. 80).

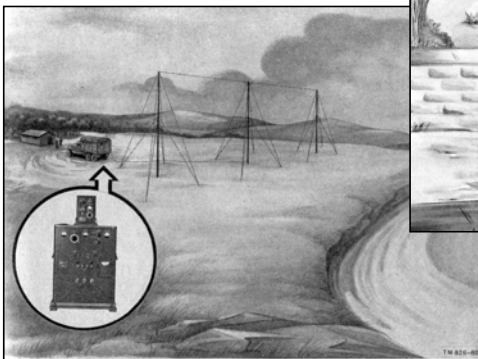
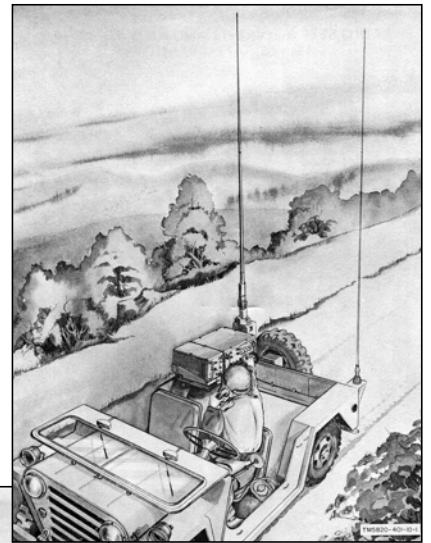


AN/GRC-106. (Ref. No. 67).

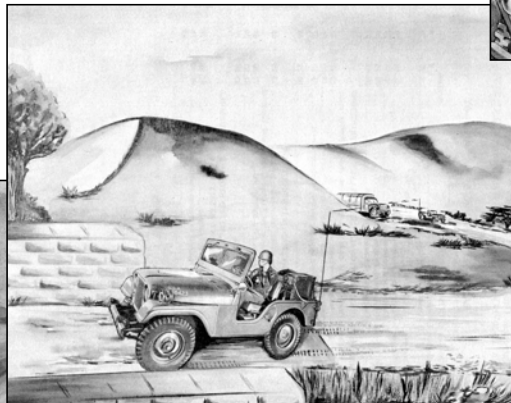


AN/VRC-3. (Ref. No. 65).

AN/VRC-12.
(Ref. No. 69).



BC-610. (Ref. No. 70).



AN/VRC-6. (Ref. No. 66).

SCR-300.
(Ref. No. 63).

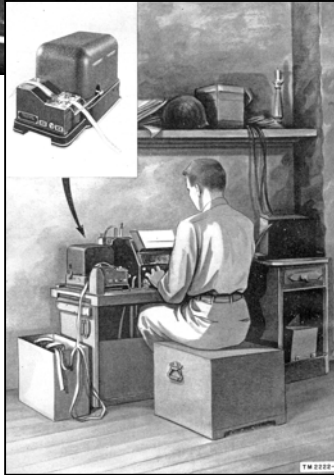




GR-8. (Ref. No. 82).



AN/UIQ-3. (Ref. No. 84).

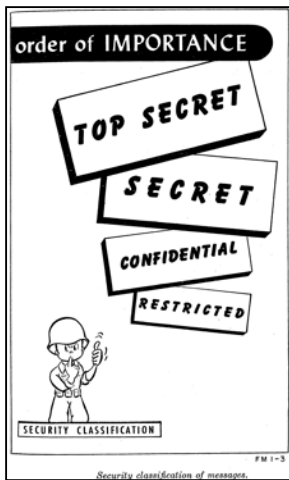


TT-12. (Ref. No. 81).

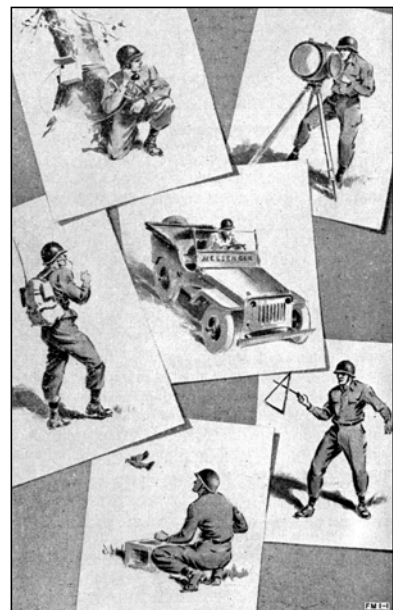


AN/VIA-1. (Ref. No. 83).

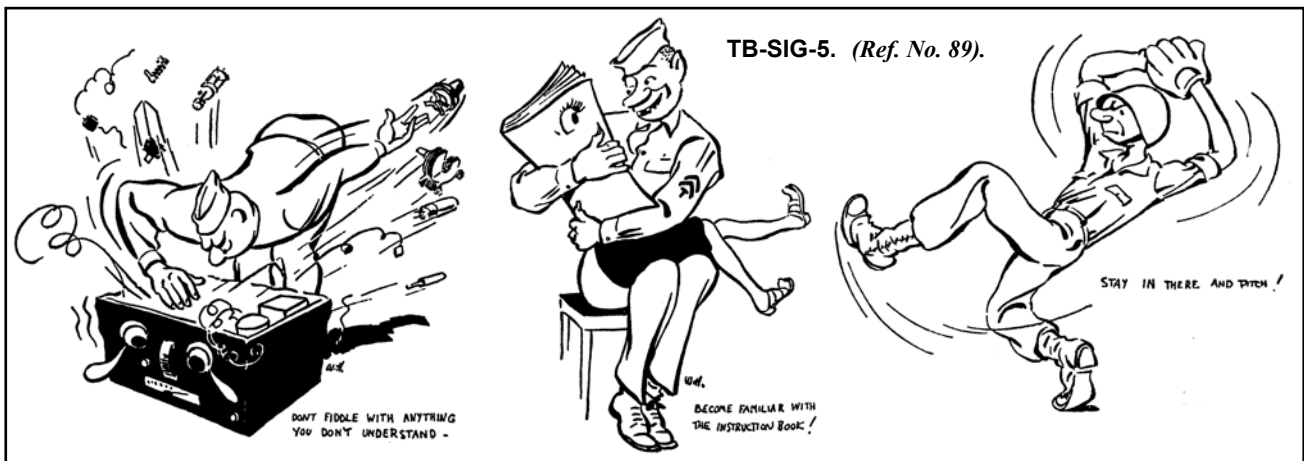
USA training



Mobile or vehicular radio set.



SIGNAL COMMUNICATIONS. (Ref. No. 88).

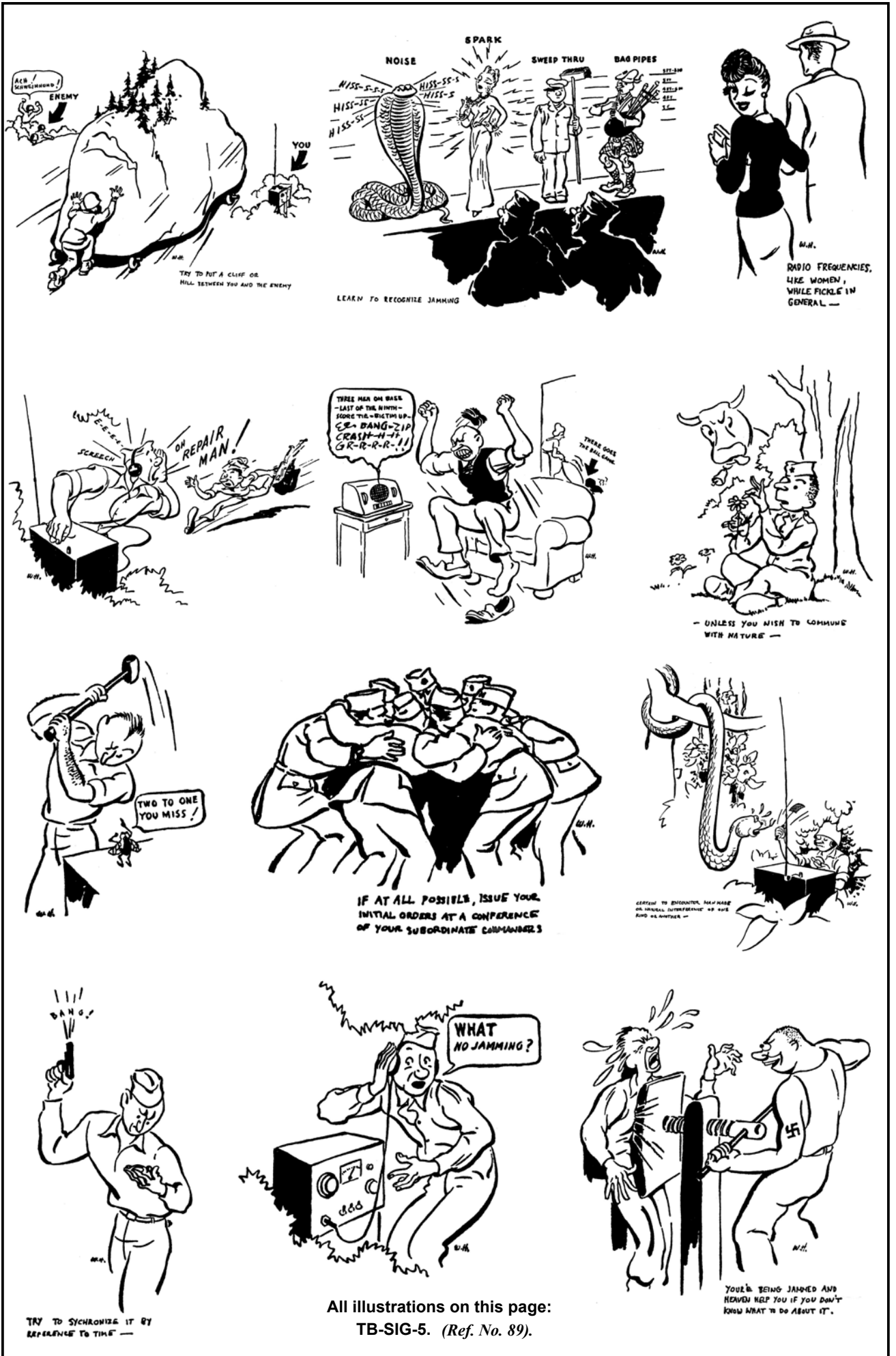


TB-SIG-5. (Ref. No. 89).

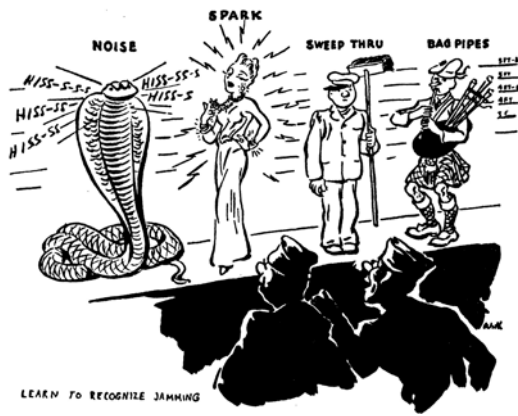
DONT FIDDLE WITH ANYTHING YOU DONT UNDERSTAND -

BECOME FAMILIAR WITH THE INSTRUCTION BOOK!

STAY IN THERE AND PITCH!



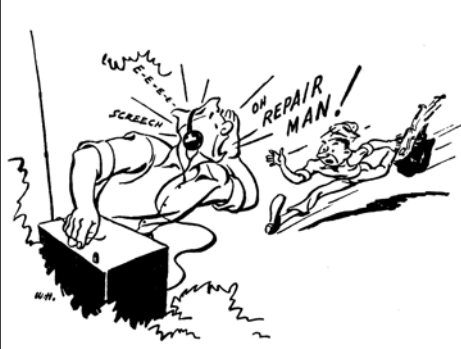
TRY TO PUT A CLIFF OR HILL BETWEEN YOU AND THE ENEMY



LEARN TO RECOGNIZE JAMMING



RADIO FREQUENCIES, LIKE WOMEN, WHILE FICKLE IN GENERAL —



THREE MEN ON BASE — LAST OF THE BIRTH — SCORE THE BIRTH UP — CRASH-BANG-ZIP — CRASH-H-H — GR-R-R-R-!!!



— UNLESS YOU WISH TO COMMUNE WITH NATURE —



IF AT ALL POSSIBLE, ISSUE YOUR INITIAL ORDERS AT A CONFERENCE OF YOUR SUBORDINATE COMMANDERS



CERTAIN TO DISOBTAIN, HAVE MADE OR UNWILLING INTERFERENCE OF WARE AND ANOTHER —



TRY TO SYNCHRONIZE IT BY REFERENCE TO TIME —



WHAT NO JAMMING?



YOU'RE BEING JAMMED AND HEAVEN HELP YOU IF YOU DON'T KNOW WHAT TO DO ABOUT IT.

All illustrations on this page: TB-SIG-5. (Ref. No. 89).

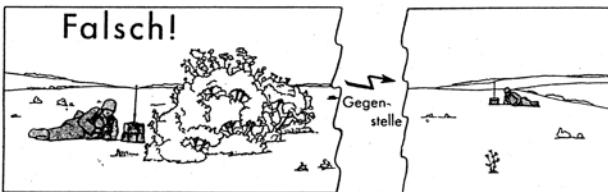
Zum Einlegen in das Gerät!

Feldfunksprecher b und c Gerät im Stand

UT 820/1



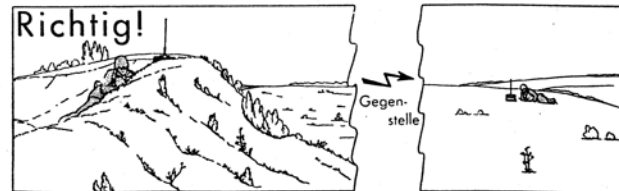
Nicht um das Gerät herumstehen!, sondern vom Gerät zurücktreten!



Gerät in Richtung der Gegenstelle **nicht hinter** dem Busch, sondern **vor** dem Busch aufstellen!



Gerät in Richtung der Gegenstelle **nicht hinter** den Hügel, sondern **auf** den Hügel stellen!



O K H (Wa Prüf 7)

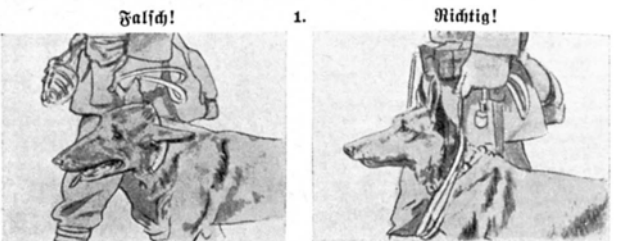
Wrong and right: Feldfu. b and c. Stationary position.

(Ref. No. 60).

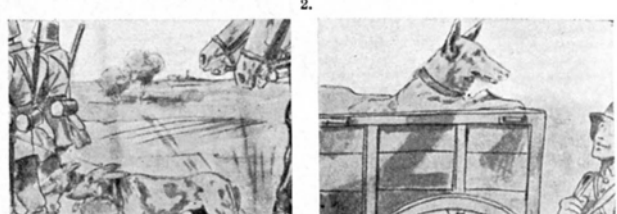
UT 820	Feldfunksprecher b und c umfaßt:
UT 820/1	Gerät im Stand
UT 820/2	Gerät im Stand
UT 820/3	Gerät im Marsch

8. Der Meldehunddienst in Bildern.

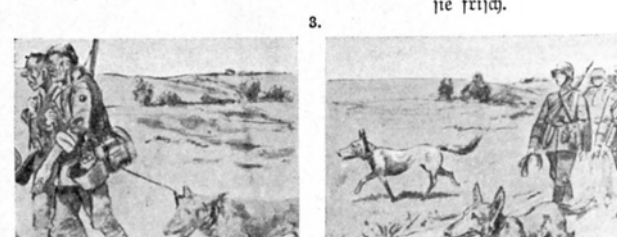
Nachstehende Bildreihe erschien erstmalig in unserer Zeitschrift „Kriegskunst in Wort und Bild“.



Führt man den Hund immer ganz kurz an der Leine, so wird er dadurch eingeschüchtert. **Man führt den Hund für gewöhnlich an ganz loserer Leine.**



Hunde, die in dichter Marschkolonnen marschieren, ermüden schnell. **Wenn es möglich ist, sie auf Fahrzeugen fahren zu lassen, so bleiben sie frisch.**



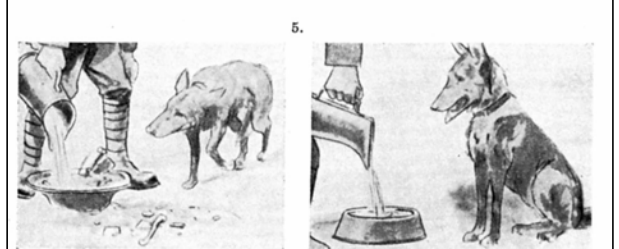
Auch unter Staubeentwicklung leiden Hunde, deren Nase im dichtesten Staub ist, sehr. **Man nimmt die Tiere besser an den Anfang der Kolonne und läßt sie dort zeitweise frei laufen.**

Treatment of messenger dogs.

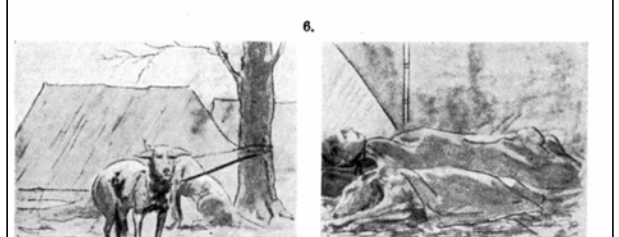
(Ref. No. 61).



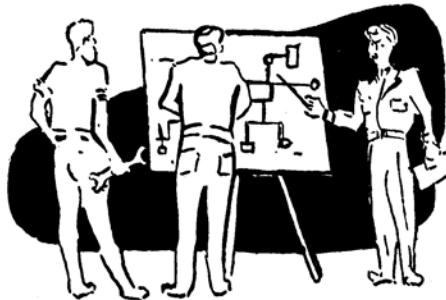
Wenn Fremde den Hund füttern, wird er verdorben. **Wer dem Meldehund einen Leckerbissen geben will, lasse das durch den Hundeführer tun.**



Gießt man dem Hund Trinkwasser in eine schmutzige Schale, so erkrankt der Hund leicht. **Klares Wasser in sauberer Schale ist auch für den Hund ein Hochgenuß.**



Wer Schutz vor schlechtem Wetter aufsucht, aber seine Hunde draußen im Unwetter läßt, ist nicht wert, Hundeführer zu sein. **Die Hunde gehören auch in der Ruhe zu ihrem Führer.**



All illustrations on this page are from: Preventief Onderhoud (Preventive Maintenance), Voorschrift Nr. 1325, M.v.O., Feb. 1954. (Ref. No. 29).

*Geheimzinnig waas
over elektronische uitrusting....*

?

VERBINDINGSDIENST

CONTROLE OP UITVOERING PREVENTIEF ONDERHOUD Tek. Bl. 11 Z. 070

T

O

V

R

I

S

CONTROLE OP UITVOERING PREVENTIEF ONDERHOUD Tek. Bl. 1 Z. 070

**DE CONTROLE OP HET PREVENTIEF ONDERHOUD
IS HET GEBRUIKEN VAN
GEZOND VERSTAND**

en:

voelen!

ruiken!

zien!

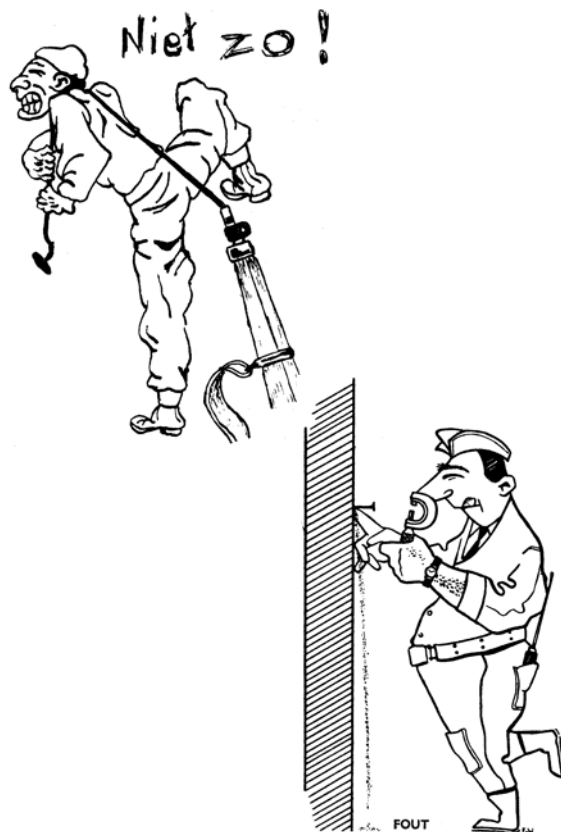
horen!

CONTROLE OP UITVOERING PREVENTIEF ONDERHOUD Tek. Bl. 12 Z. 070

RADIO ZENDE- EN ONTVANGTOESTEL AN/GRC9

- Zijn de antenneaansluitknoppen niet vuil? Zitten zij vast?
- Is het keramische bordje niet gescheurd?
- Zijn de beschermbeugels niet verbogen of roestig?
- Zijn de calibratiekaarten niet vuil of onleesbaar?
- Kunnen de schakelknoppen vrij bewogen worden?
- Zijn de afdekplaatjes van de microfoon- en signaalteleaansluitingen niet verbogen? Zijn de rubberbeschermringen niet uitgedroogd?
- Zijn de contactpennen niet vuil of verbogen?
- Zijn de venstertjes niet vuil of gebarsten?
- Is het toestel geaard?

CONTROLE OP UITVOERING PREVENTIEF ONDERHOUD Tek. Bl. 3 Z. 070



Klätingriighet..... kan få oanade följder!



RÖR EJ manöverorgan och dylikt, vilkas användning och ändamål är OBEKANT....



STUDERA NOGGRANT handledning och beskrivning för materielen innan den tages i bruk!

10W M-44. (Ref. No. 59).

LIVSFARA

HÖGSPÄNNING



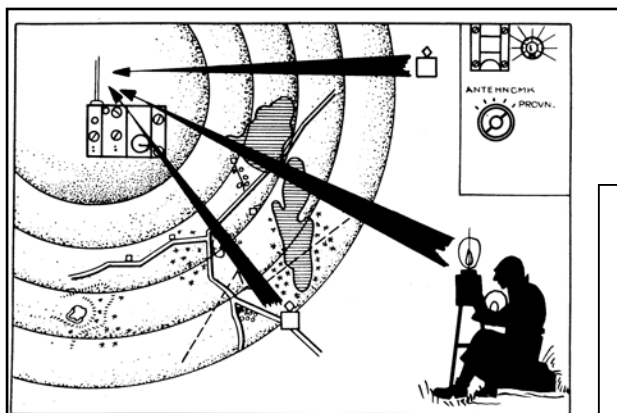
HAR NI GJORT KLART FOR ER ATT DENNA MATERIEL HAR LIVSFARLIGA SPANNINGAR!

Flygvapnet Mr.2.
(Ref. No. 58).

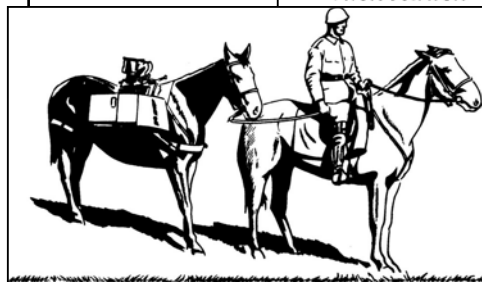
Ra120/122.
(Ref. Nos. 54/55).



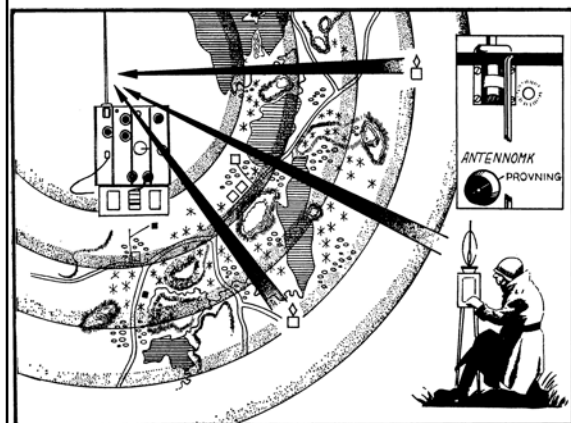
Låt icke antennen vidröra grenar eller andra föremål. Det minskar räckvidden



Varning för fientlig radiospaning



10W Br/4.
(Ref. No. 51).

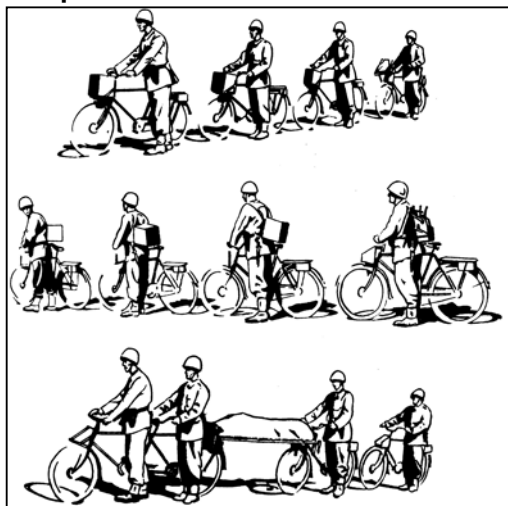


Varning för fientlig radiospaning

**Beware of enemy radiolocation.
Ra121 (top) and Ra120/122 (below).**

(Ref. Nos. 54-56).

Transport of 10W Br/4 m/39-43 station.





Swedish Ra120/122 (left) and Ra130 (WS No. 88) right.
(Ref. Nos. 56,57).



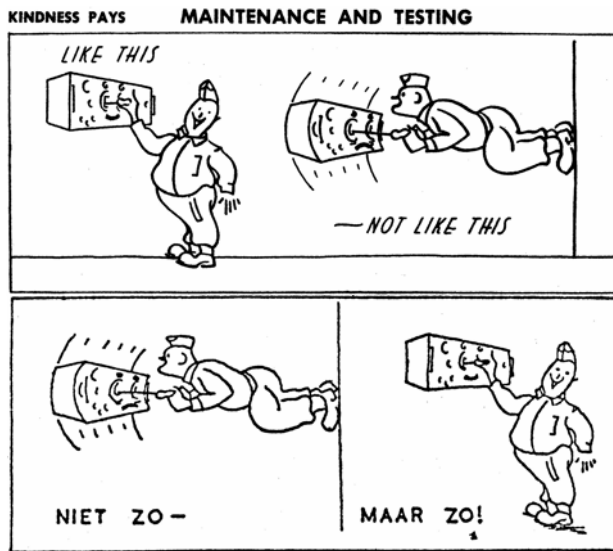
Australian Station Radio A-510.
(Ref. No. 49).



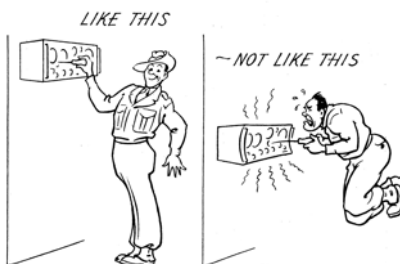
Dutch RC-1 (Wireless Set No. 88). (Ref. No. 30).



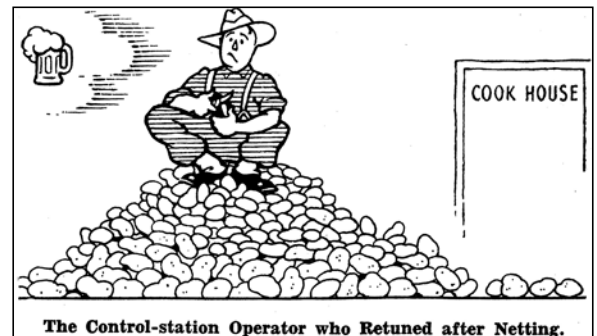
Wireless Set No. 88. (Ref. Nos. 15).



Kindness Pays

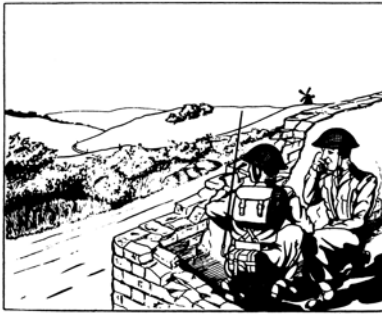


WS No. 19 and 22: British (top Ref. 2), Dutch (centre Ref. 4) and Australian WS No. 62 (bottom Ref. 48).



The Control-station Operator who Returned after Netting.

Wireless Set No. 19 and 22 British (top Ref. 2), and Australian Wireless Set No. 62 (bottom Ref. 48).



EXAMPLE OF A GOOD SITE

GOOD SITES

EXAMPLES OF GOOD SITES



BAD SITES.



POOR SITES

EXAMPLES OF POOR SITES

WS A-40. (Ref. No. 21).



DOUBTFUL SITES



GOOD SITES



GOOD SITES.

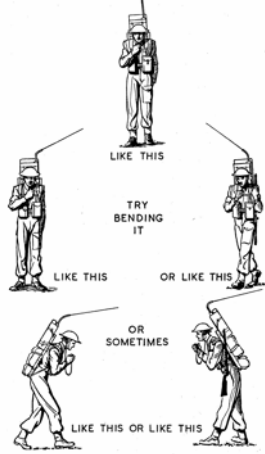


WS No. 31. (Ref. No. 7).



WS No. 46. (Ref. No. 6).

IF YOU CANNOT RECEIVE WELL WITH THE AERIAL



LIKE THIS

TRY BENDING IT

LIKE THIS

OR LIKE THIS

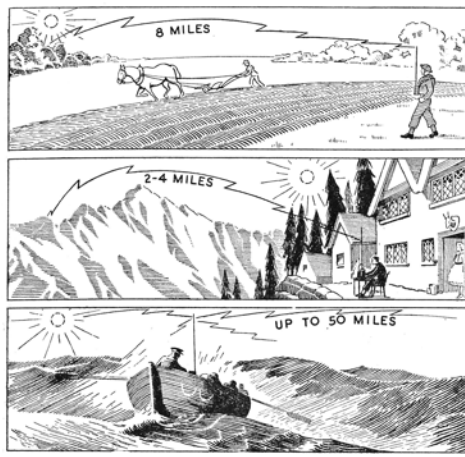
OR SOMETIMES

LIKE THIS OR LIKE THIS

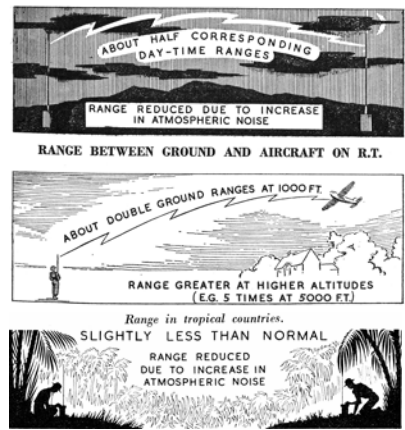
IF YOU CAN HEAR CONTROL CLEARLY HE CAN HEAR YOU CLEARLY

WS No. 31. (Ref. No. 7).

NORMAL DAYTIME RANGES ON R.T.

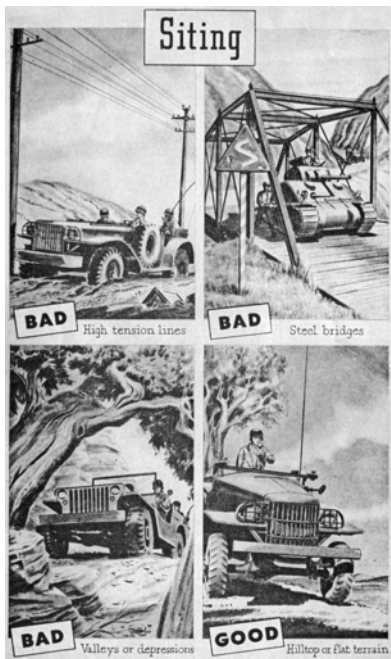


NORMAL NIGHT-TIME RANGES ON R.T.



WS No. 46. (Ref. No. 6).

Good and bad sites... USA



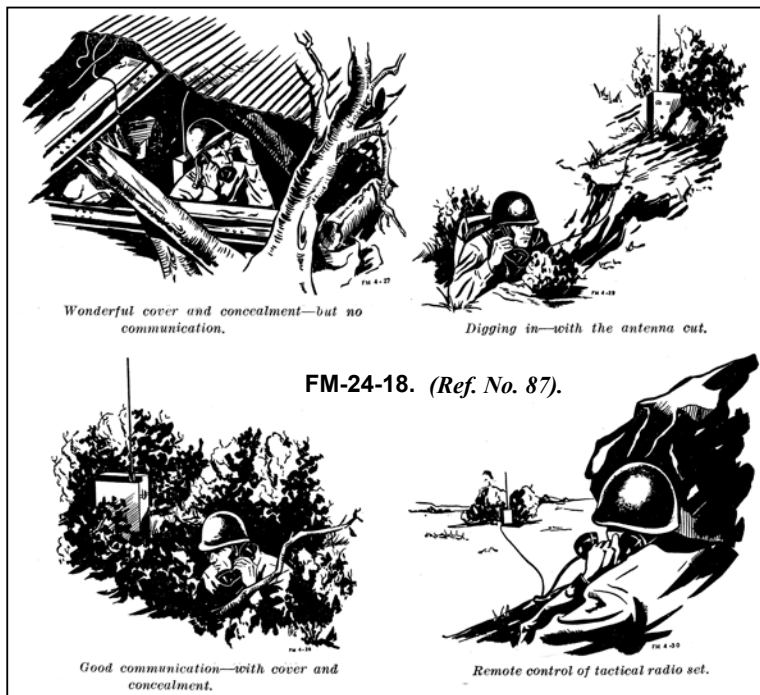
SCR-193. (Ref. No. 62).



SCR-509. (Ref. No. 64).



SCR-300. (Ref. No. 63).

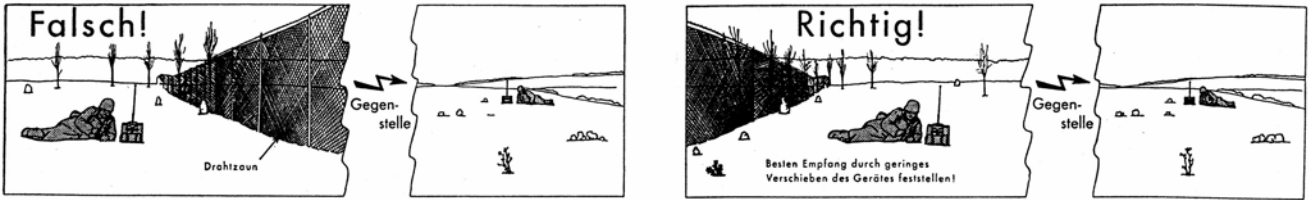


FM-24-18. (Ref. No. 87).

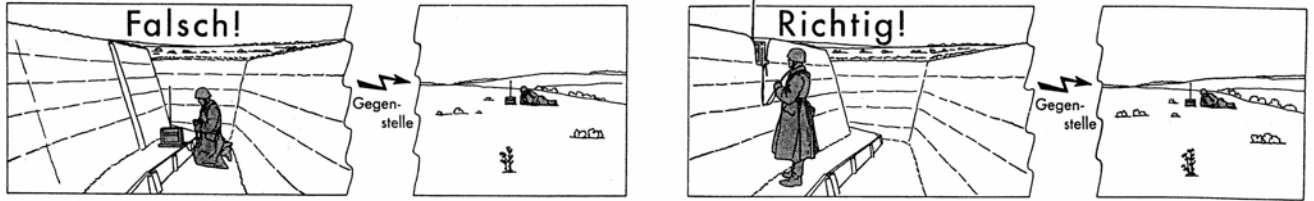


Good and bad sites... WW2 Germany.

Gerät im Stand



Gerät in Richtung der Gegenstelle **nicht hinter** den Drahtzaun, sondern . . . **vor** den Drahtzaun stellen!



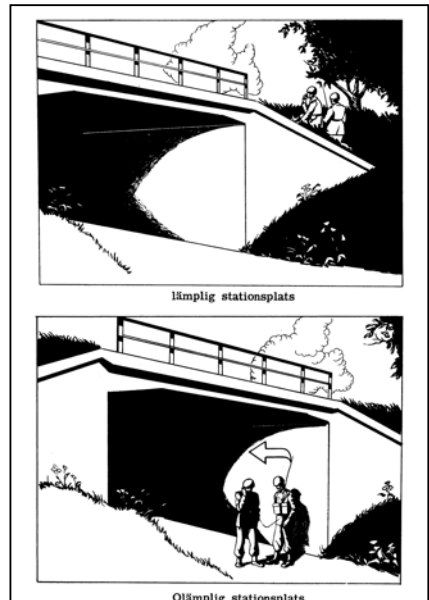
Gerät nicht auf die Grabensohle, sondern auf den Grabenrand stellen!

Feldfunksprecher b and c. (Ref. No. 60).

Good and bad sites... Sweden.

OLÄMPLIGT		LÄMPLIGT	
Jfr ex B. Signalisten har ställt sig under viadukten	Högspänningsledning	Slätter utan skärmade terrängöremåli	Jfr ex E. Signalisten har undvikit den djupt nedskurna vägen och placerat sig över viadukten
Jfr ex D. Signalisten har placerat stationen nere i grusstaget. Samma förbindelseriktning som i D	Bro med fackverk av järn	Bergshöjder	Jfr ex G. Signalisten befinner sig i ett grustag men har placerat stationen på ett krön (möjligt tack vare förlängningskabeln). Pilen anger förbindelseriktningen
och olämpligt utnyttjade stationsplatser		Exempel på lämpligt . . .	

Ra 120. (Ref. No. 54).



Skogsbryn mot slätt - lämplig	För bästa förbindelse välj den streckade vägen
Bergskrön - lämplig	Undvik ravinens botten - välj den streckade vägen

Ra 130. (Ref. No. 57).



Olämplig = Unsuitable
Lämplig = Suitable

Appendix 2

The first of the two the follow-up article (4 pages) published in AWA 'The Old Timer's Bulletin' Vol. 34, No. 2, May, 1993.

(Ref. No. 93).

TECH-MANUAL ART - A CANADIAN VIEW

Source material from Chris Bisailion, VE3CBK
1324 Old Carp Rd., R. No. 1, Kamata, Ontario K2K 1X7, Canada

TING BIOGRAPHY

Merle Randolph Tingley was born in Montreal. Hardly anyone calls him Merle Randolph: he's affectionately known as "Ting."

Ting graduated from Montreal High School, but his editor says he can spell anything, but words. That's why he draws pictures for a living - and has become pretty good at it.

He did take an art course, but left after one year to become a draughtsman. That career was short-lived when he doodled a worm into a building plan. Apparently engineers don't like worms in foundations of their solid structures. (Today, "Luke Worm" appears hidden in all of Ting's cartoons and readers of all ages enjoy the daily challenge of unearthing the little critter with the corn-cob pipe.)

With Hitler on the warpath, Tingley joined the army in 1942. Shortly after, His Majesty's Canadian Forces were looking for a cartoonist to enhance the army magazine *Kiaki*. Ting got the job. Later he transferred overseas to serve on the forces daily *The Maple Leaf*.

The art department of an advertising agency picked him up after the war, but the cartoon bug had bitten and you can't have much fun with beans, soap and deodorant. Hitting the road on a second-hand motorbike, he visited newspapers from coast to coast, but no one took him. The would-be cartoonist took a job as a proof-reader at *The London Free Press* in 1947. Two months later he wormed himself into the first *Free Press* cartoonist's job. He's still there.

Ting cartoons are syndicated to a number of daily and weekly papers across Canada.

Never having lost his ties with the troops, Tingley has entertained our peace-keeping forces in Korea, the Mideast, the Congo, Cyprus and Europe. Added to this are two missions to the Pacific and the Far East sponsored by the American government.

Among his laurels are 15 national and international awards, including five for humorous writing, two children's books and nine volumes of his *Free Press* cartoons.

As a designer for London's fantasy park, Storybook Gardens, Ting has been on the advisory committee since its inception in 1958.

Merle Randolph Tingley has one wife, Genie, two sons, two cats, and a dog, and of course, Luke Worm.

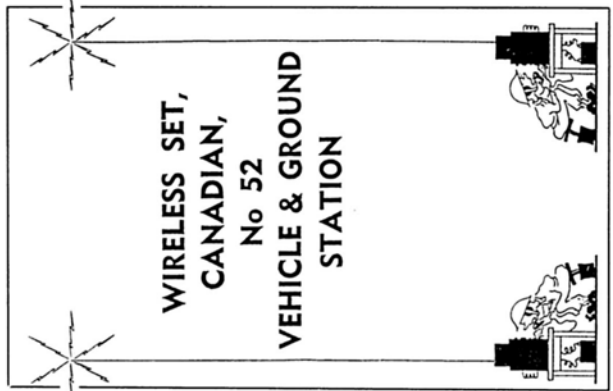
... from the Community Relations Department, London (Ont.) *Free Press*

"Tech-Manual Art" (OTB, Nov. 1992, p. 47) showed some examples of cartoons in U. S. military technical manuals from early in WW II. The story drew comment from Chris Bisailion, VE3CBK, with some background focused on Canadian manuals.

In particular, the syndicated newspaper cartoonist, "Ting," did military work at the time, drawing the figures in the manual for Wireless Set No. 52 and about half the artwork in the 1944 book for "Antennae Vertical 34" Steel Mk 1. They are reprinted herewith.

Some of the smaller figures from the antenna manual show a bunny-rabbit, semi-hidden. Ting explained that military cartoonists were not allowed to sign their names to their work, so they substituted animals for signatures. He didn't do this until later, when he introduced a character called "Luke Worm," a signature to this day.

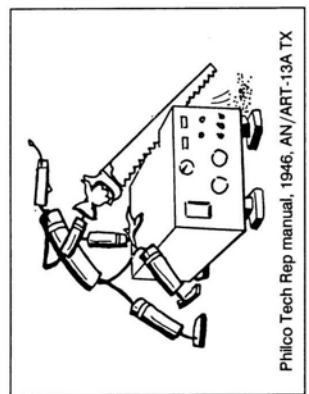
Chris interviewed Ting at "Humour Under Fire," a special open house of war cartoons at the Canadian Centre for Caricature. This is a small museum in downtown Ottawa, part of the National Archives of Canada [136 St. Patrick St., (613) 995-5138, open every day, 10 AM - 6 PM, and until 8 PM on W-Th-F].



TECH-MANUAL ART

one "W. H." However, as the military publication system grew and matured, whimsy disappeared ("The colonel says no more drawings...") Here are a few examples of line art that perhaps relieved the monotony of military/naval training.

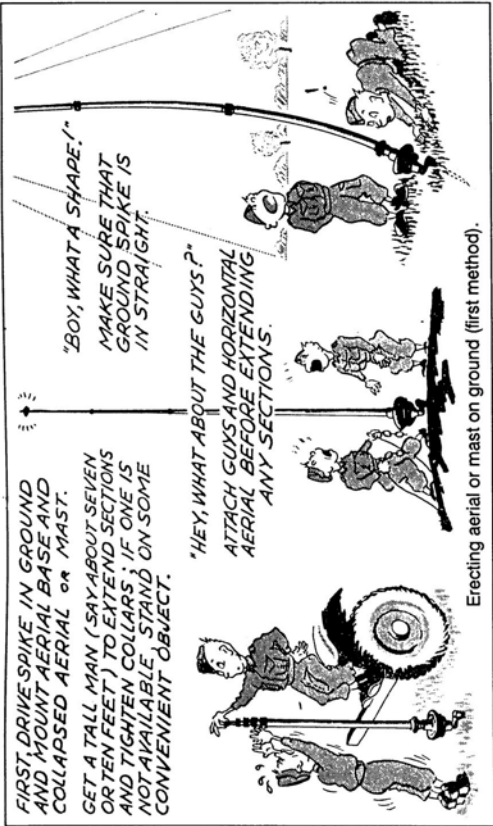
Military technical manuals of the pre-war period and early in WW II occasionally contained small cartoons to emphasize a point or fill an idle bit of page space. In particular, Signal Corps manuals from Ft. Monmouth carried the work of



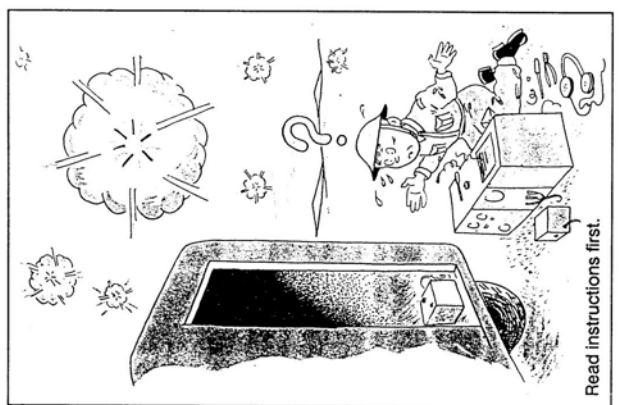
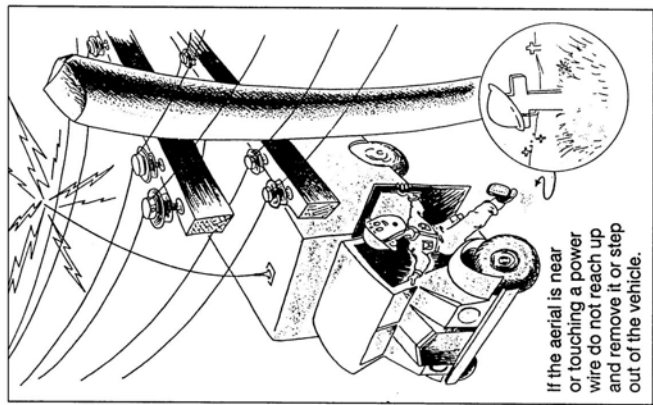
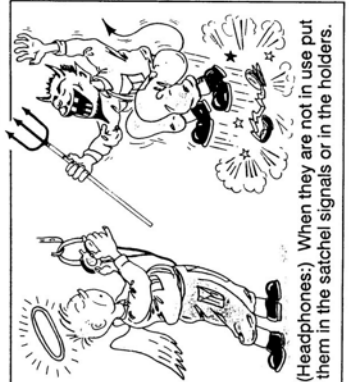
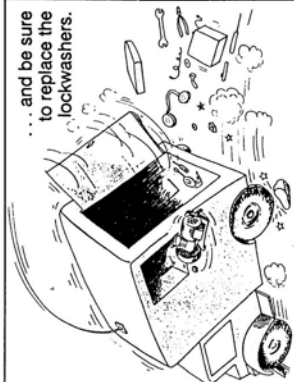
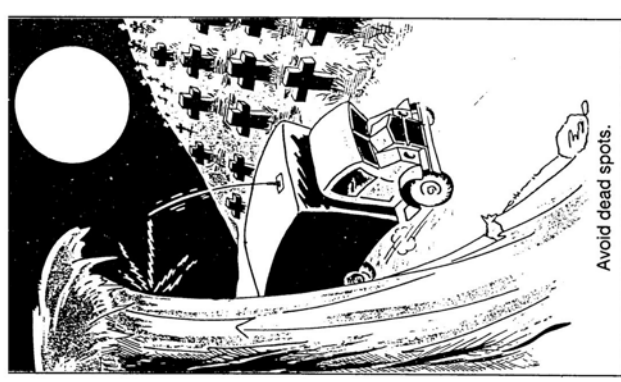
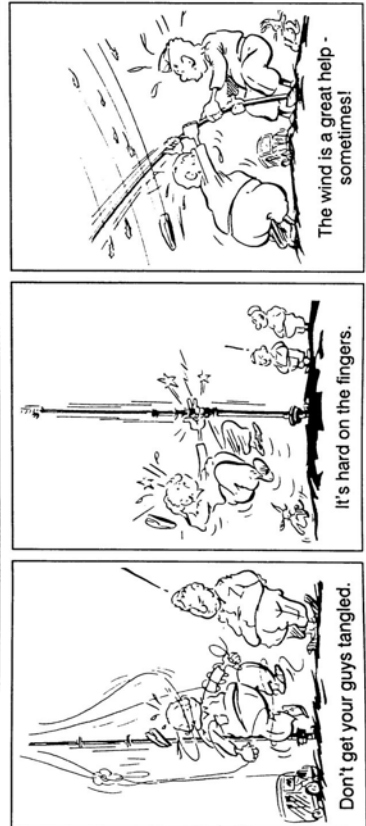
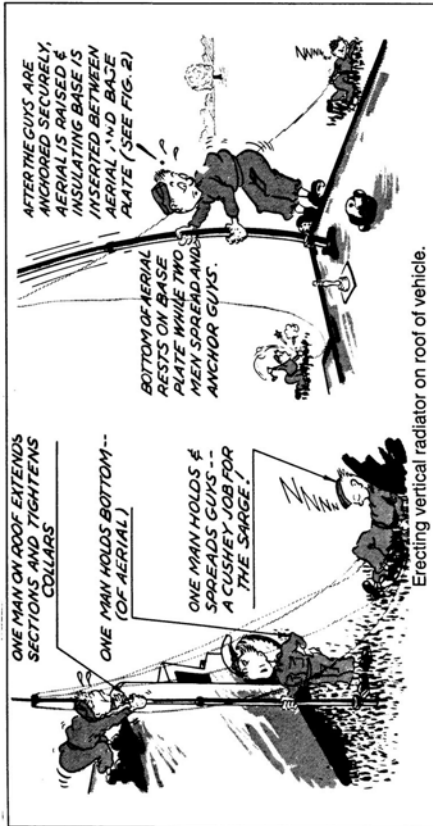
Appendix 1

This is the original article by Ludwell Sibley, published in the AWA 'The Old Timer's Bulletin' Vol. 33, No. 4, Nov. 1992.

(Ref. No. 93).



Erecting aerial or mast on ground (first method).



TECH-MANUAL ART - ANOTHER LOOK
Source material from Louis Meulstee, PAOPCR

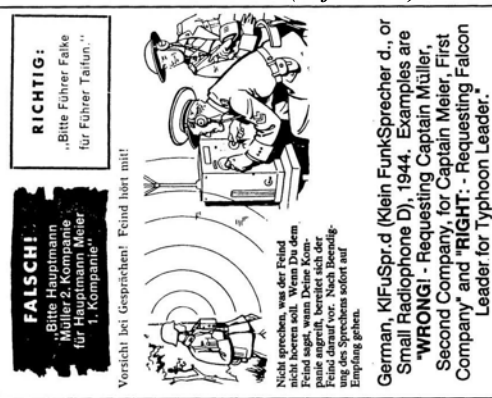
In response to "Tech-Manual Art" (OTB, Nov. 1992, p. 47), Louis Meulstee, PAOPCR, came up with a huge variety of additional cartoon illustrations. His researches covered military technical manuals from Britain, Germany, Australia, and Canada; and even turned up five more illustrations from the unidentified artist "W. H." at Fort Mon-

mouth. It's clear from these results that Britain and the Commonwealth countries spiced up their training material with bits of humorous artwork, more extensively and longer than the U. S. Even the Germans used a little. Here is a collection of this work. Much of it falls into specific categories, as shown below.

DER FEIND HÖRT MIT! (THE ENEMY IS LISTENING TOO!)



German poster, WW I: "[Use] caution on the telephone." - Source: Alan Douglas



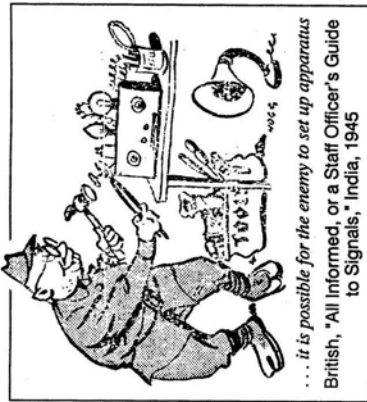
German, KIFuSpr.d (Klein Funksprecher d., or Small Radiophone D), 1944. Examples are "WRONG" - Requesting Captain Müller, Second Company, for Captain Meier, First Company" and "RIGHT" - Requesting Falcon Leader for Typhoon Leader."



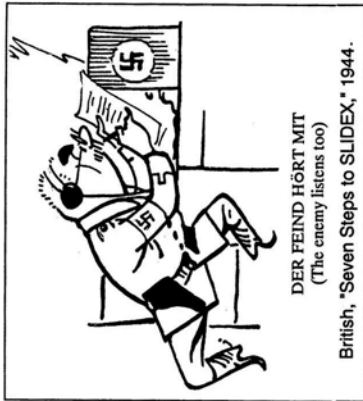
... German intercept operator British, "All Informed, or a Staff Officer's Guide to Signals," 1943.



... Jap intercept operator British, "All Informed, or a Staff Officer's Guide to Signals," India, 1943.



... It is possible for the enemy to set up apparatus British, "All Informed, or a Staff Officer's Guide to Signals," India, 1945

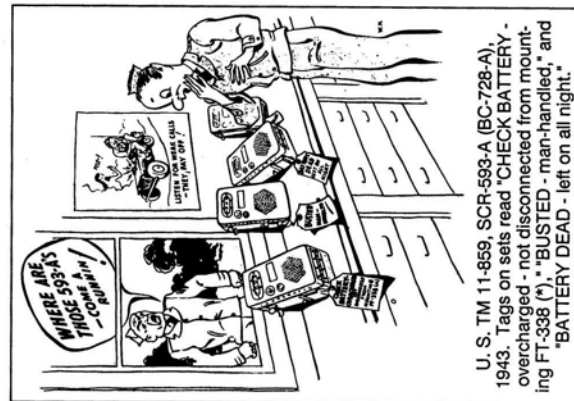


DER FEIND HÖRT MIT (The enemy listens too) British, "Seven Steps to SLIDEX," 1944.

THE SERGEANT AS MOTIVATOR



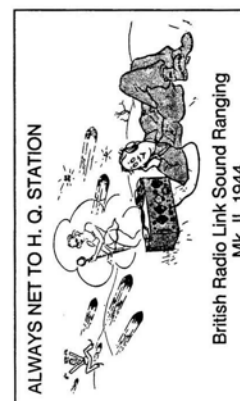
British Wireless Set No. 88, 1948



U. S. TM 11-859, SCR-593-A (BC-728-A) 1943. Tags on sets read "CHECK BATTERY - overcharged - not disconnected from mounting FT-338 (*) - "BUSTED - man-handled," and "BATTERY DEAD - left on all night."



Australian A-510, 1957



British Radio Link Sound Ranging Mk. II, 1944.

Appendix 3

The second follow-up article (5 pages) published in AWA 'The Old Timer's Bulletin' Vol. 35, No. 1, Feb. 1994.

(Ref. No. 93).

LEARNING THE HARD WAY




THE MAN WHO DIDN'T LOOK AT THE KEYWAY

British Wireless Set No. 46, 1945.

LIVE WIRES MEAN - DEAD MEN
Keep away from live circuits!

300 Volts DC encountered in this set.

DANGER



DANGER

WHEN ADJUSTING ITEMS ON TRANSMITTER DECK (E. G., WHEN NEUTRALIZING) SWITCH TO "RECEIVE".

RAF, Air Publication 2528B, TR1464 transceiver, 1945.




IS THIS THE QUICK RELEASE YOU WANT?
-- IF NOT -- FOLLOW INSTRUCTIONS

British Wireless Set No. 42, 1945.

WE OFTEN WONDER

WHY OPERATORS FACED WITH A NEW SET



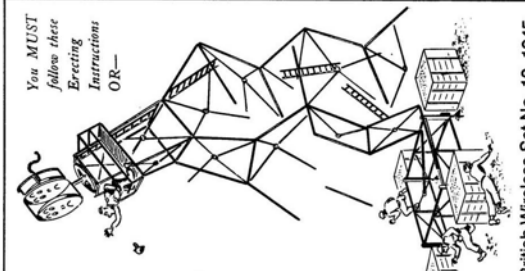
WILL TURN EVERY KNOB EVERY SWITCH UNFASTEN EVERY BOLT

AND ONLY WHEN THE SET IS COMPLETELY UNSERVICEABLE

WILL THEY READ THE INSTRUCTIONS

British Wireless Set No. 46, 1945

You MUST follow these Erecting Instructions OR—

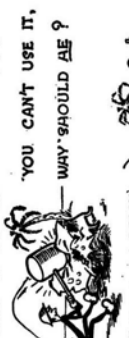


British Wireless Set No. 10, 1945.

UNIVERSAL WISDOM

DENY IT TO THE ENEMY . . .

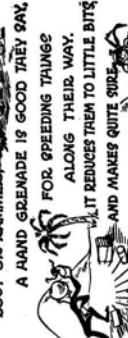
YOU CAN'T USE IT, WHY SHOULD AE ?



OR, RAMMER, CROWBAR, PICK-AXE, BOOT OR RAMMER.

A HAND GRENADE IS GOOD THEY SAY, FOR SPEEDING THINGS ALONG THEIR WAY. IT REDUCES THEM TO LITTLE BITS AND MAKES QUITE SURE THAT NOTHING FITS.

WHATEVER METHOD YOU MAY CHOOSE TO MAKE YOUR SET UNFIT TO USE, DON'T LEAVE A BIT FOR HIM



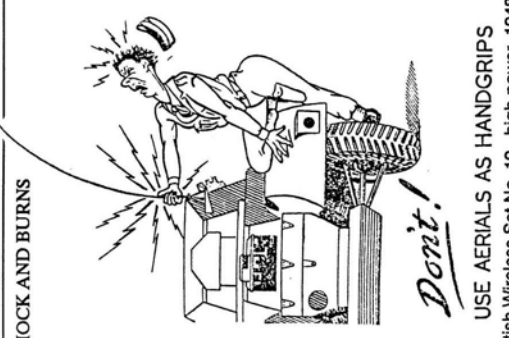
TO FIND, DON'T LEAVE THE SMALLEST TRAIL BEHIND, HIT IT, SMASH IT, BATTER IT, BURY IT, BLOWN IT, SCATTER IT.

THE MOTTO IS HERE FOR ALL TO SEE

DFNY IT TO THE ENEMY!

Australian Wireless Set No. 62, 1955.

SHOCK AND BURNS



Don't!

USE AERIALS AS HANDGRIPS

British Wireless Set No. 19, high-power, 1948.

WHY USE H. P. WHEN L. P. WILL DO



British Wireless Set No. 19, high-power, 1943.

Branches touching your antenna will cut your range!



U. S. TM 11-242, SCR-300 (BC-1000), 1943.



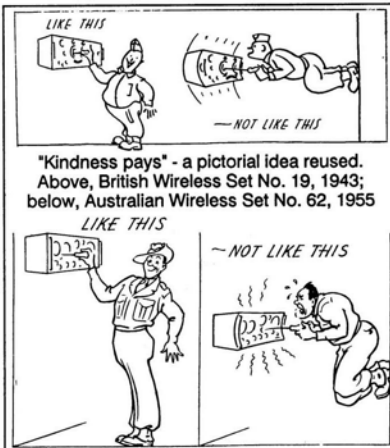
TRY TO PUT A CLIFF OR HILL BETWEEN YOU AND THE ENEMY

TB SIG 5, "Defense Against Jamming," 1944.



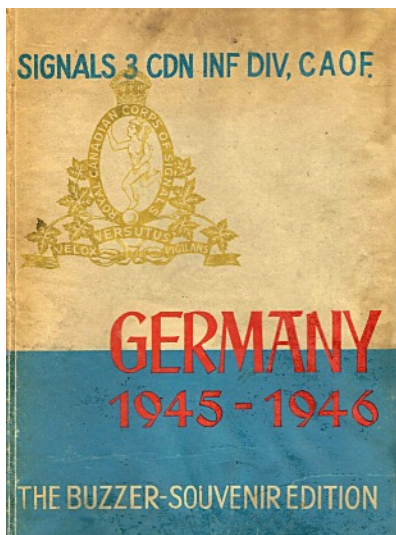
DON'T FIDDLE WITH ANYTHING YOU DON'T UNDERSTAND

TB SIG 5, "Defense Against Jamming," 1944.



Appendix No. 4 'The Buzzer'

(Ref. No. 97).



'The Buzzer' was the magazine of the Royal Canadian Corps of Signals in the 3rd Canadian Inf. Division. A souvenir book, issued by 'The Buzzer', covering the period 1945-46, contained many photographs and two cartoon pages.

OUR DAY

CAOF SIGS

by Williamson



Awakened by the sweet voice of the Orderly Sergeant....



...we dash briskly over to the Mess...



...for an appetizing breakfast, and then...

...we sharpen up a bit...



OFF to WORK

In Charlie Section,



...or Baker,

...in the I.M. shop,



...or piloting a "Gin Palace"...

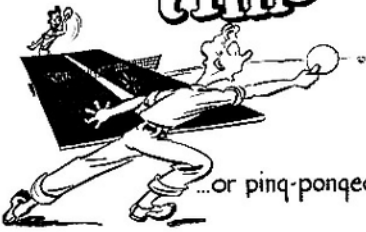


...or maybe struqqing with Stores;

And, in our Free time



...we took the "Passion Wagon" to the big town,



...or ping-ponged

or spent a quiet evening



-in the wet canteen,

...or wrote to "the one-and-only" ...



and so to bed!

DO YOU REMEMBER...



The long, long line-ups?

When the lights used to go out - just at supper



The lovely MUD!



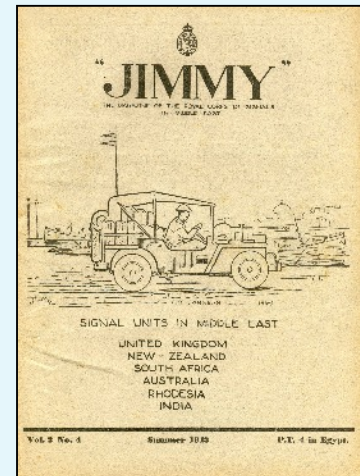
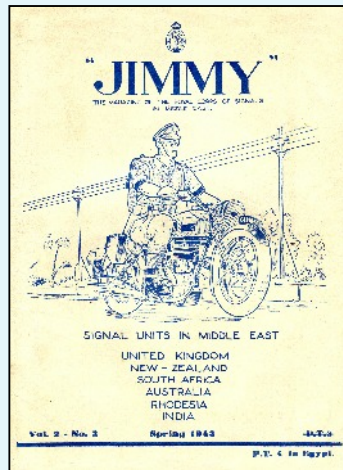
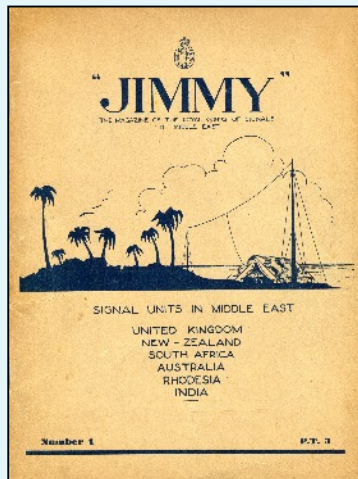
"Have you vashing?"



Those mid-night "Snacks"?

Appendix 5 'Jimmy'

(Ref. No. 94).



80 years ago the Royal Corps of Signals issued their first issue of 'Jimmy', the magazine of the Royal Corps of Signals in Middle East. It was printed in spring 1941 by E. & R. Schindler, a civil printer located in Cairo; later printers were C.E. Albertini in Cairo, and the Jerusalem Press Ltd in Jerusalem. After 10 issues, the magazine ceased to exist at Volume 3, No. 10 (Winter 1944-45). Original copies of the magazine are rare; a complete set of 10 issues is held in the Royal Signals Museum in Blandford Forum, and possibly in the Imperial War Museum.

It is difficult to trace the editors of the magazine, just the name of D.M. Naylor, Major, Royal Signals, can be attributed. Fortunately the names of the individual contributors of stories, photographs, poems and cartoons were stated. In that respect the name of G. Boyington ('Gboy') should be mentioned as top contributor of quality drawn cartoons.

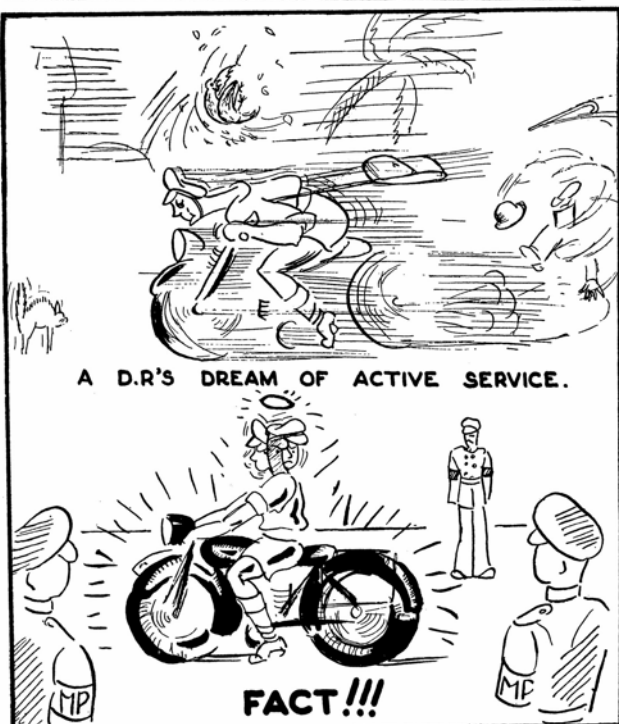
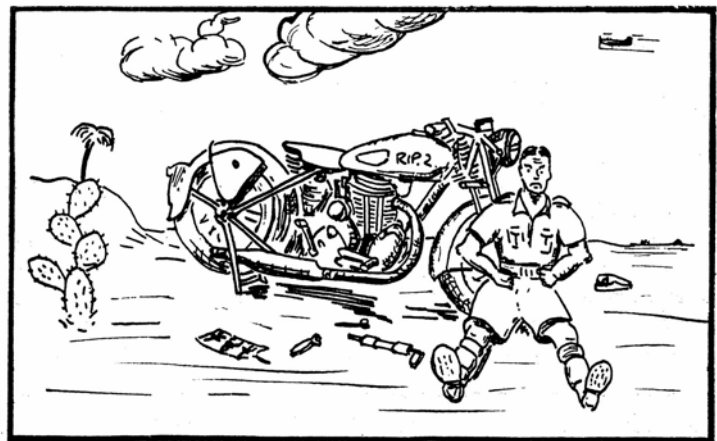
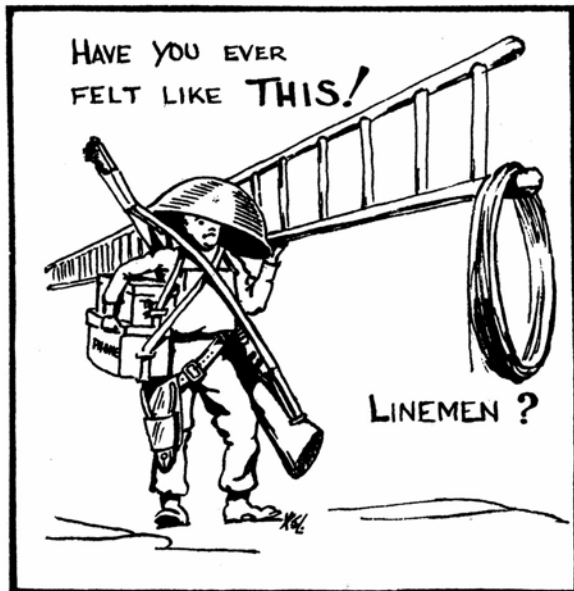
(Part of editorial and introduction in Vol. 1 No. 1 by Maj. Gen. R.E. Barker, S.O.I.C., and editorial in Vol. 3 No. 2, the final issue).

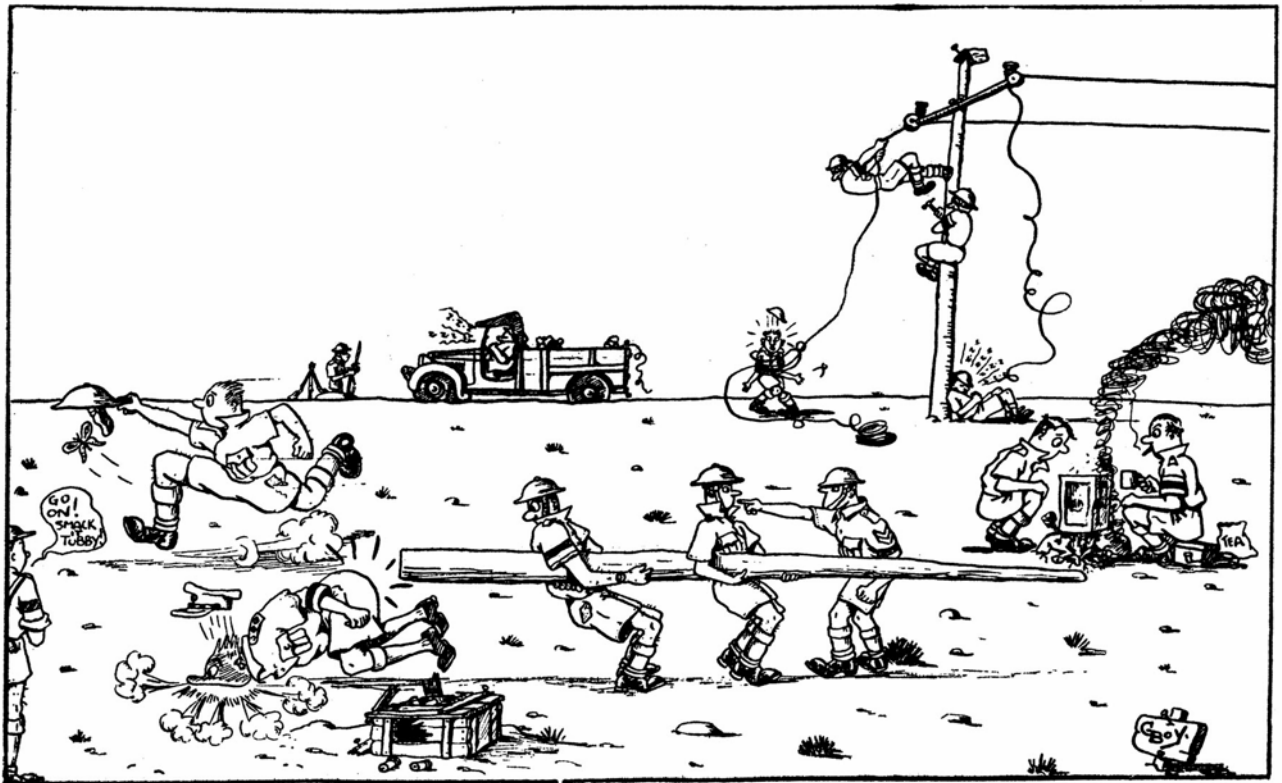
...the idea of producing a Signals Magazine for the Middle East has been thought by certain enterprising Officers, who have spent much time and labour in organising and producing it. The idea has been theirs, their labours have been purely voluntary, and we owe them an extreme debt of gratitude for first at all of the Bright Idea, and secondly the work they have put in...

...the main goal was to give men interest in idle moments. To try and let all know how different Units are progressing through this is made difficult owing to the restrictions of censorship, and to provide some record of our doings amongst Signals in the Middle East, in account of events which are passed, and which will be allowed past, the aforementioned censor...

... 'Jimmy' has not always been an easy child to handle. We freely confess that issues have been late in appearing, Spring Numbers have appeared in the height of the Summer, and Christmas Numbers as well into the Spring. At times, complete issues have been missed altogether. But Jimmy was brought up in the limited spare time of a regrettably small number of individuals who had an idea and did all they could to develop it. And we think that they succeeded...

These scans were taken a number of years ago in the museum archive with kind permission of the Royal Signals Museum. One of the main characters in the comics published in Jimmy over the years, drawn by Gboy, is printed above at each side of the cover. I intend to publish most of the Jimmy cartoons as a supplement in the Pamphlet series No. 4 'Technical Manual Art'.

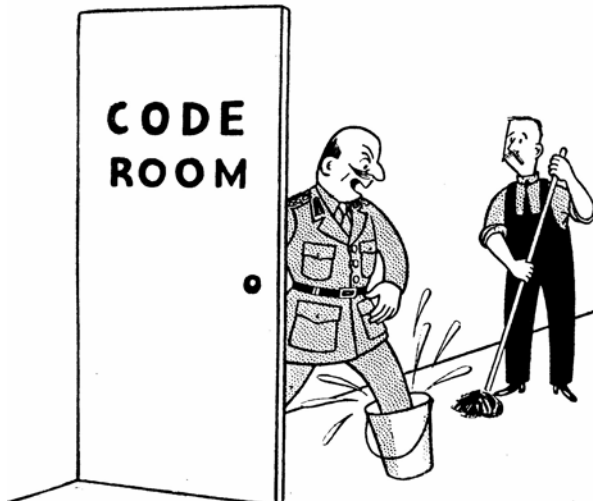




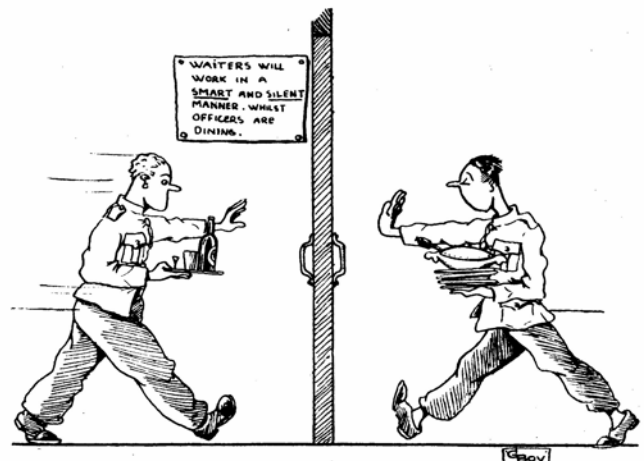
"WE SAID SCAMMEL — NOT CAMEL."

(For those who are unaware: meant was a Scammell tank transporter)

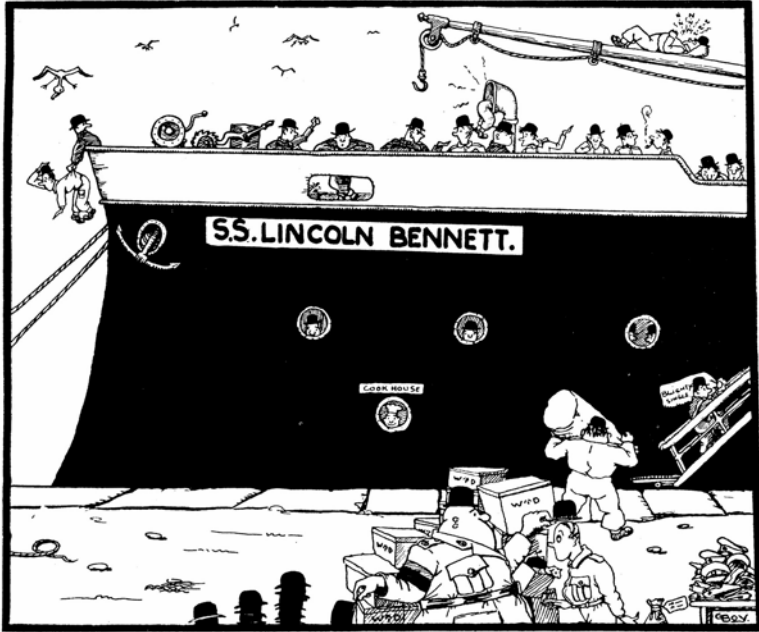
ARMY TERMS ILLUSTRATED



" $\frac{1}{2}$ "KQQPNTX! $\frac{3}{3}$ LLJM₂BCO!!"



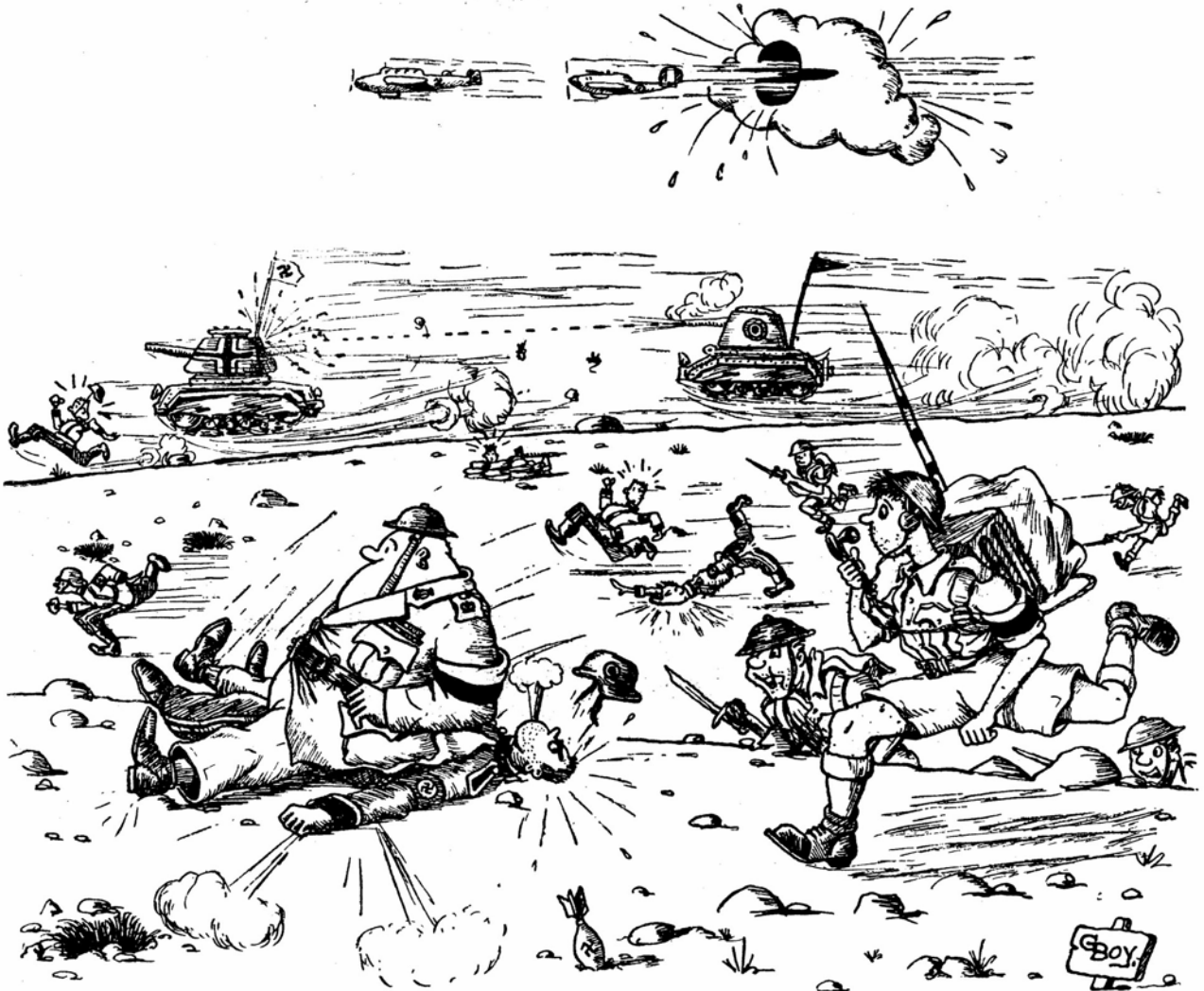
"ANY MINUTE NOW!"



Homeward bound !



OUR 'ANDYMAN!




"THE MAJOR IS BUSY RIGHT NOW, SIR: SHALL I ASK HIM TO CALL YOU BACK?"



CONFOUND THOSE STUKAS !
 NOW I'LL HAVE TO GO AND
 GET A NEW OUTFIT FROM

A. GHANI
 SOLIMAN PASHA
 CAIRO

○
 Tel. 49959
 OPPOSITE THE Y.M.C.A.
 OUTFITTER TO THE ROYAL CORPS
 OF SIGNALS



“But surely, Major, that’s not in Signal Training !”



My Quartering monger, the Noble Sir Allsop

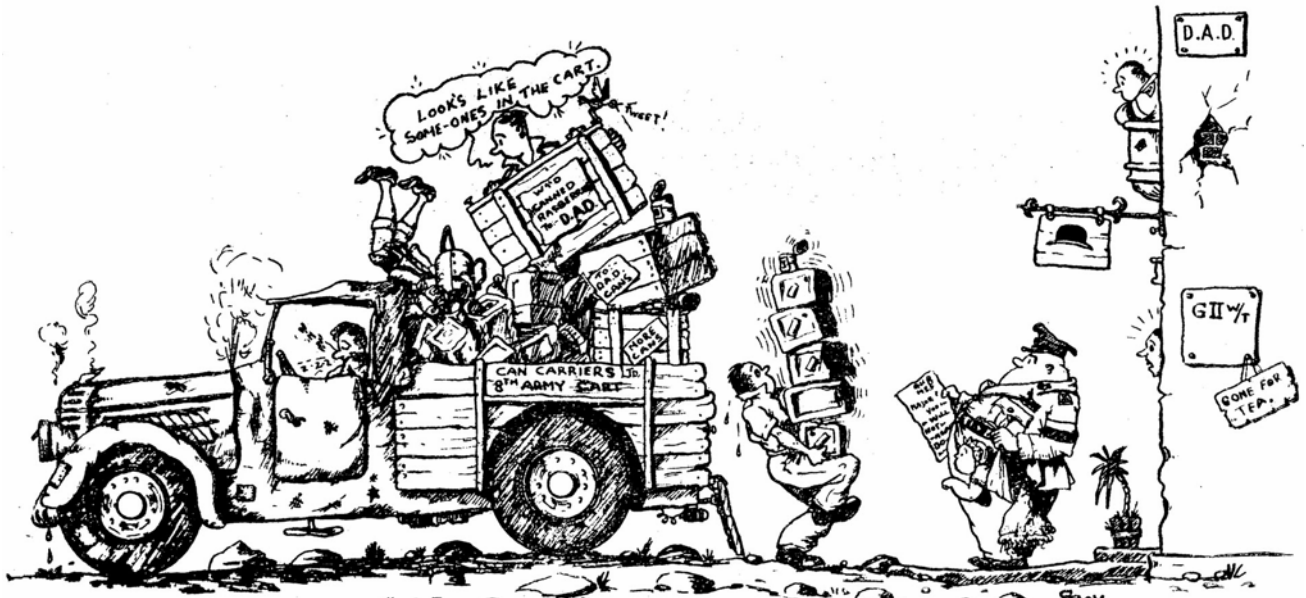
WHY LEAVE THINGS TILL THE LAST SPLIT SECOND ?

Start getting your outfit for the Army of Occupation Now !.
 Winter Greatcoats — Ski Trousers
 Lido Suits — Tyrolean Hattings
 Everything for the well dressed Occupier

ALSO KHAKI SERGE
 and full kit for this winter
 patrol caps a speciality



A. GHANI 21, SOLIMAN PASHA
 TAILOR TO THE ROYAL CORP OF SIGNALS



THE MIDDLE EAST CAN CARRIERS ASSOCIATION Ltd.

(Advert).

THE OLD FIRM!

ADVANCED AT 00-40H
 RETIRED AT 00-45
 ADVANCED AT 00-50
 ETC. ETC.

OUCH!
 OY!

**SLAP IN THE MIDDLE OF THINGS
 MAJOR ENGAGEMENTS CATERED FOR
 AT SHORT NOTICE.**

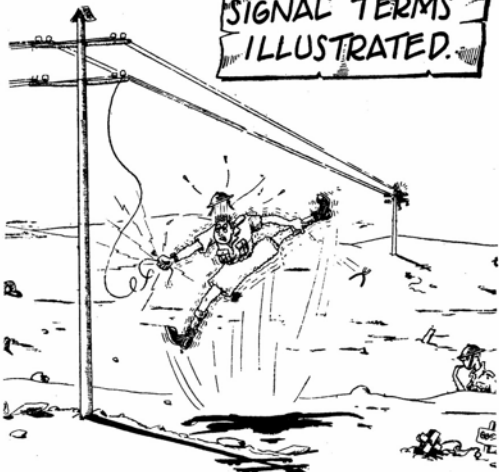
IF YOU MUST JOIN THE ARMY — MAKE SURE IT IS THE EIGHTH ARMY.

FREQUENT RACE MEETINGS ON THE FAMOUS MECHILI AND MERSA MATRUH COURSES.
 — BETTING BOTH WAYS

ALL THE FUN OF THE FAIR!

CAIRO AGENTS — WHITBREAD, PRONGER & CO. **BEAUTIFUL BATHING.** TELEGRAMS — DUNROVIN

SIGNAL TERMS ILLUSTRATED.



HOLD THE LINE!"

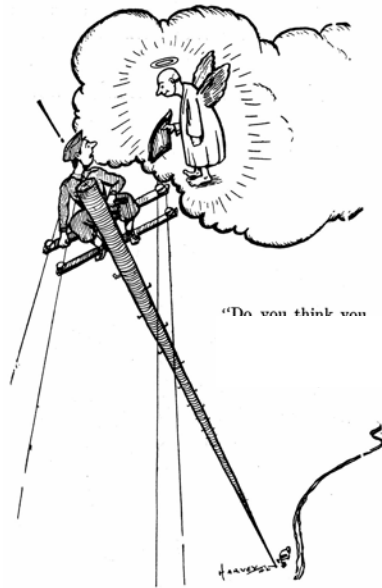
SIGNAL TERMS ILLUSTRATED



A FAST BAG!"



"HEY! WHO'S DOING ACK-ACK" ROUND HERE?"



"Do you think you

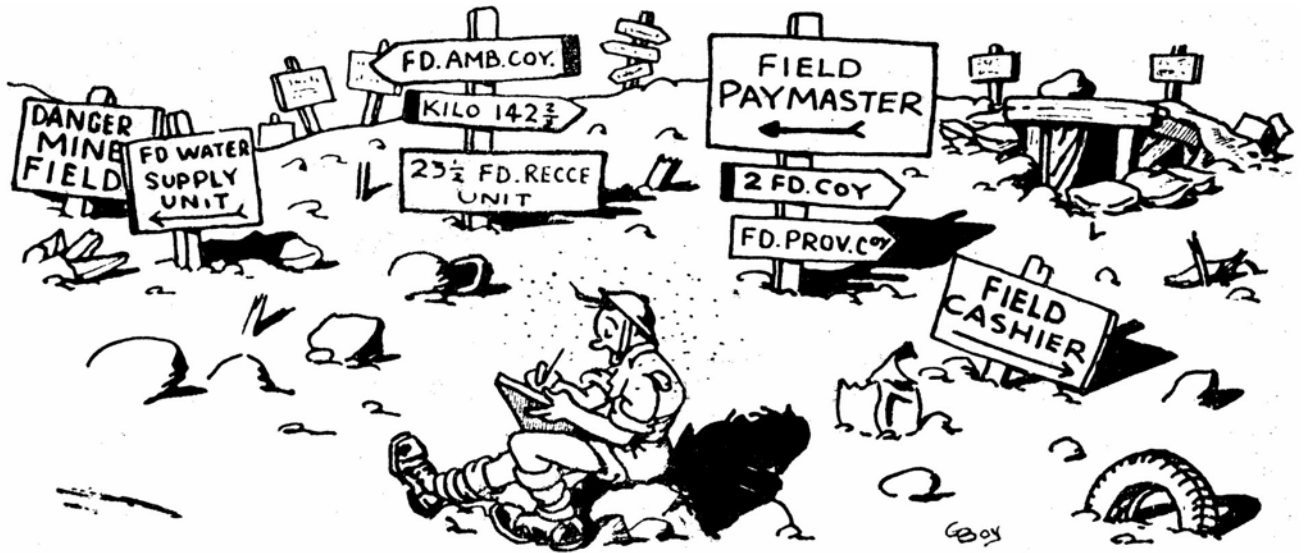
"Do you think you could mend me a string in this?"



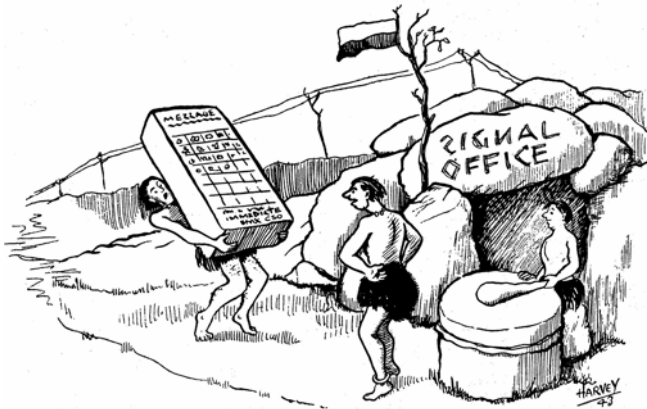
LINCOLN STAFF



"I should have known that was'nt a melon"!



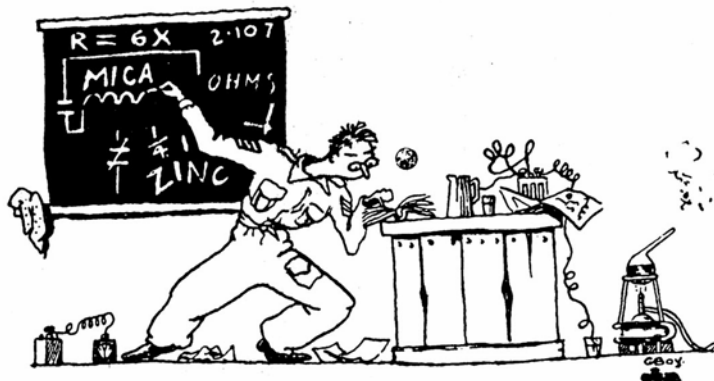
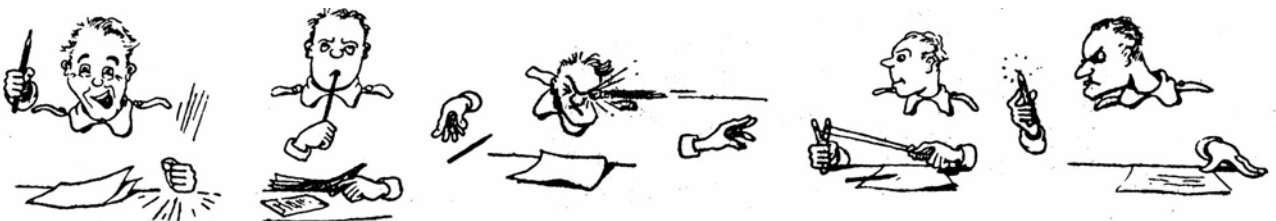
Dear Mum,
I often think of the woods and fields at home.



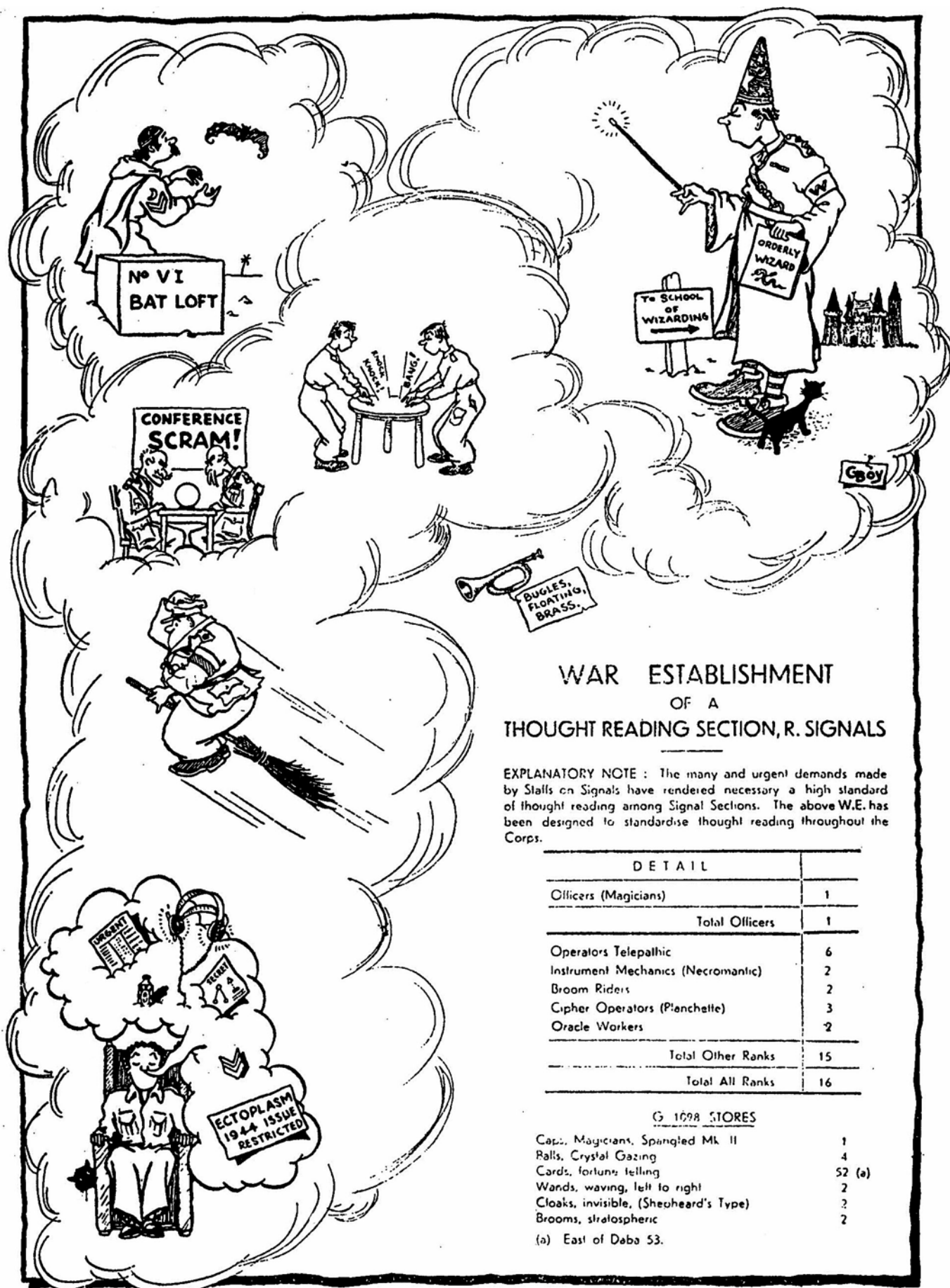
"-- and in future we require all messages in duplicate!"



"..D.R. Desert style.. priority delivery"



O. C. T. U.



WAR ESTABLISHMENT OF A THOUGHT READING SECTION, R. SIGNALS

EXPLANATORY NOTE : The many and urgent demands made by Staffs on Signals have rendered necessary a high standard of thought reading among Signal Sections. The above W.E. has been designed to standardise thought reading throughout the Corps.

DETAIL	
Officers (Magicians)	1
Total Officers	1
Operators Telepathic	6
Instrument Mechanics (Necromantic)	2
Broom Riders	2
Cipher Operators (Planchette)	3
Oracle Workers	2
Total Other Ranks	15
Total All Ranks	16

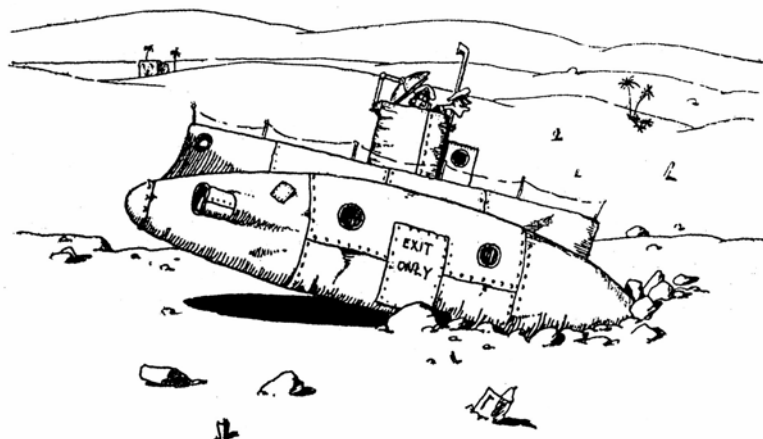
G 1098 STORES

Caps., Magicians, Spangled Mk. II	1
Rolls, Crystal Gazing	4
Cards, fortune telling	52 (a)
Wands, waving, left to right	2
Cloaks, invisible, (Shepherd's Type)	2
Brooms, stratospheric	2

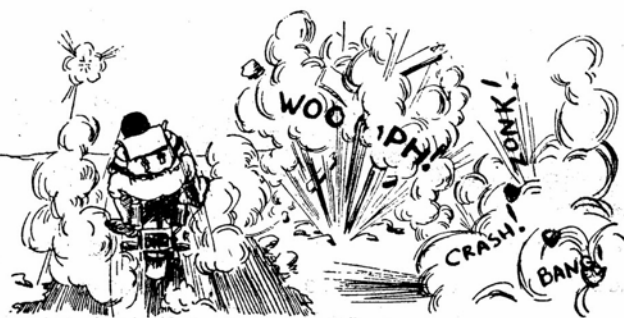
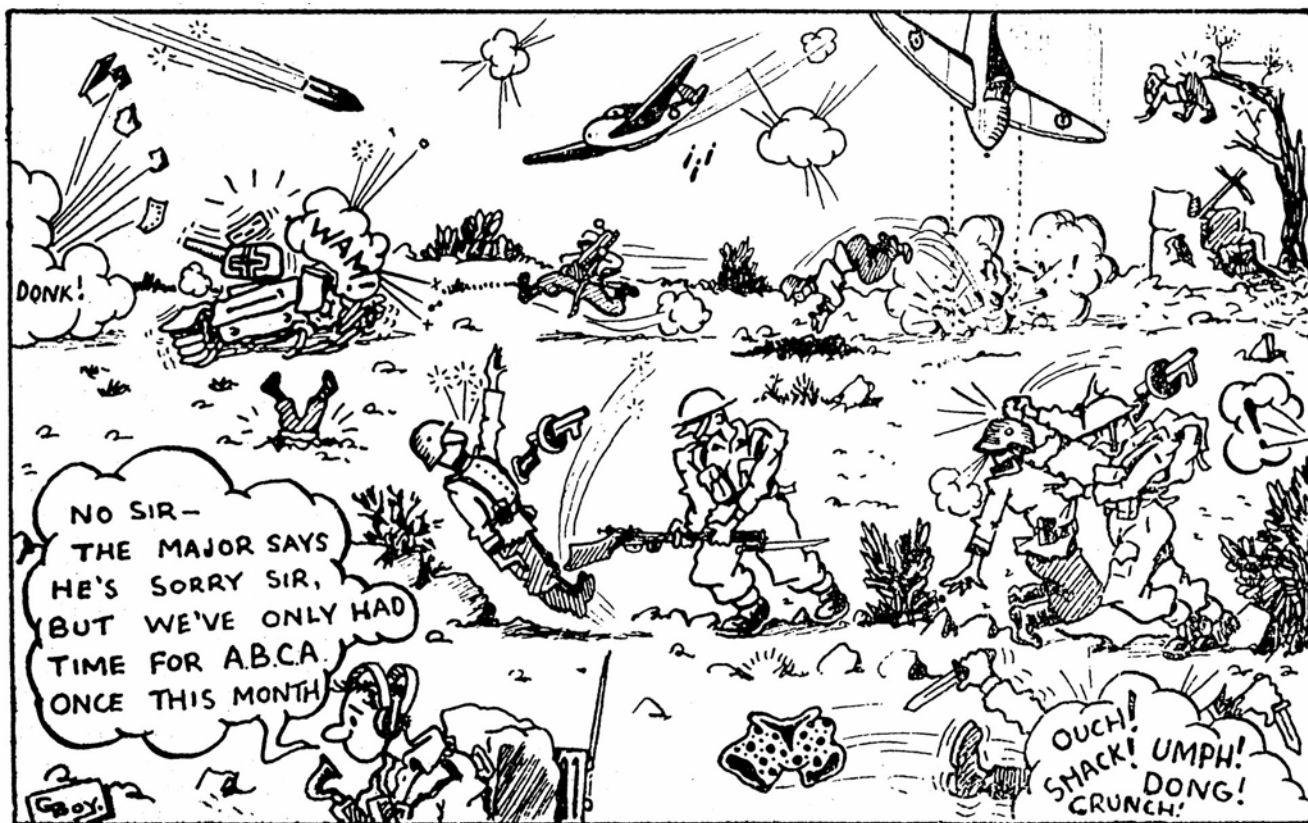
(a) East of Daba 53.



" WELL Y'KNOW, THE BEER AINT WOT IT WAS, AND THE MAIL AINT TOO GOOD - BUT WE DONT DO TOO BAD."

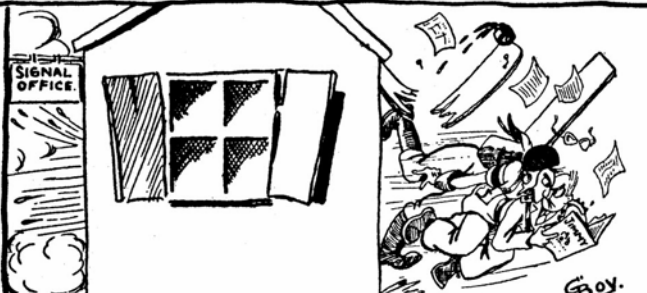
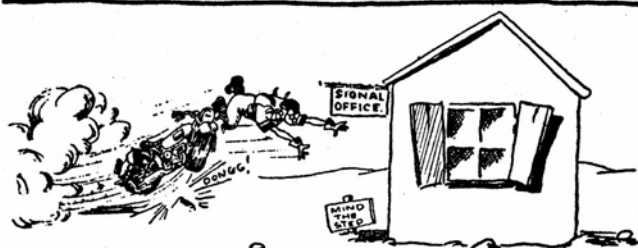


"NOT 'HOW DID WE' DENNIS, 'HOW SHALL WE?'"



THE —

MESSAGE —

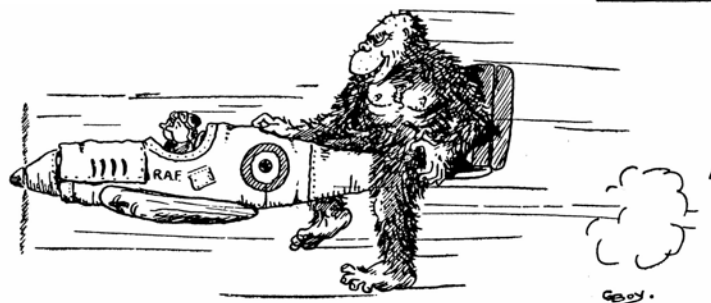
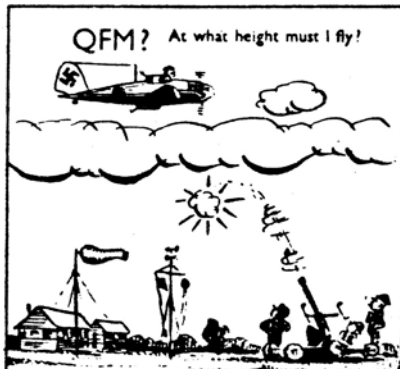
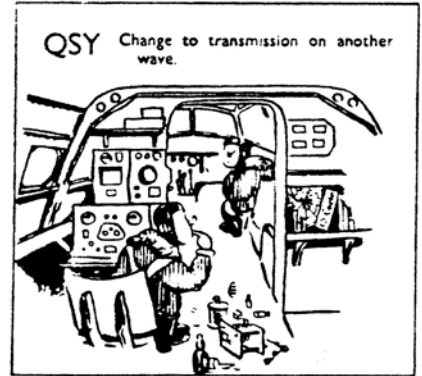
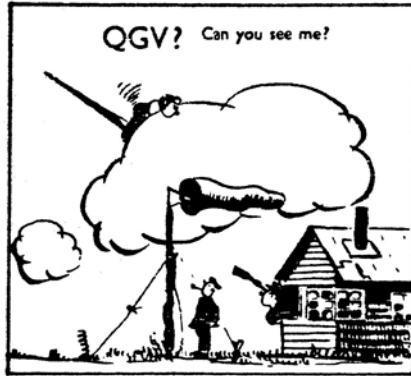


GOES —

— THROUGH! ”

Appendix 6 'Q Code' a RAF view

From, 'The Air Training Corps Gazette', 1944
(Ref. No. 95).



'Jimmy'. Ref. No. 94.

"I BET THAT LAST DIVE SCARED A FEW NATIVES."

Appendix 7 'SIGNALS'

(Ref. No. 96).

'Signals', story of the Australian Corps of Signals, written and prepared by members of the Australian Corps of Signals in early 1945, was an outline of the achievements of the Australian Corps of Signals over the years from the campaigns in the Middle East to the 1944 victories in New Guinea. It paid tribute to the arm of the service which was on duty every hour of the day providing and maintaining vital communication channels for passing of Signals traffic to the far-flung headquarters and units of the Australian Military Forces.

A selection of cartoons from WftW Pamphlet No. 4 was taken from this book which is very recommendable reading, illustrated with numerous photos of signalling in actual use ranging from pigeons, Fullerphone and other line equipment, to wireless.



That's the new O.C. Pigeons.



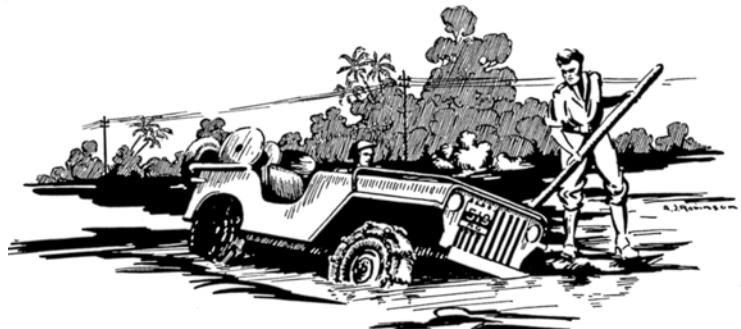
"Oh boy! Dinah Shore!"



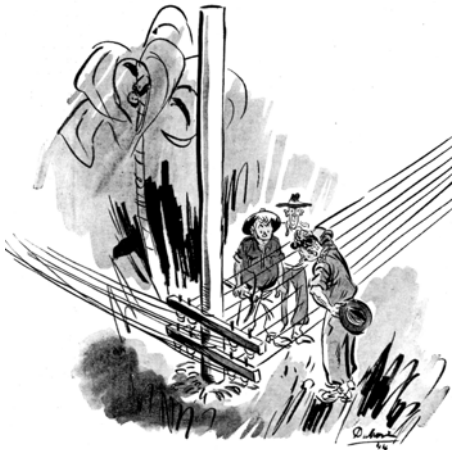
"She's coming through a good strength 5, mate"



LEAPING LENA
Dedicated to a temperamental Jeep.



"Line out, jeep in!"



"Just can't put my finger on it — but we've done something wrong, boys!" "Just about another inch, Joe!"



"What seems to be the main trouble?"



"Line in, Sir!"



"How many times must I tell you — More wrist movement with those dits!"

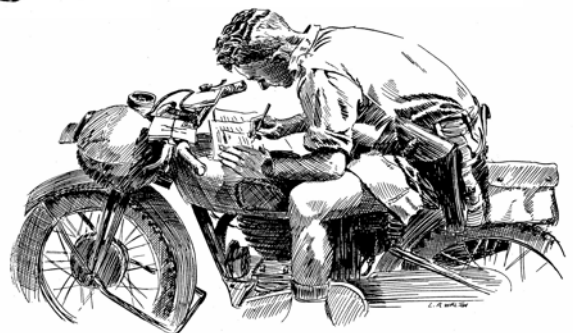
LANDESAY.



"Well, he SAID—'Send with the other foot!'"



"Top button, Dig, you are regimentally undressed!"



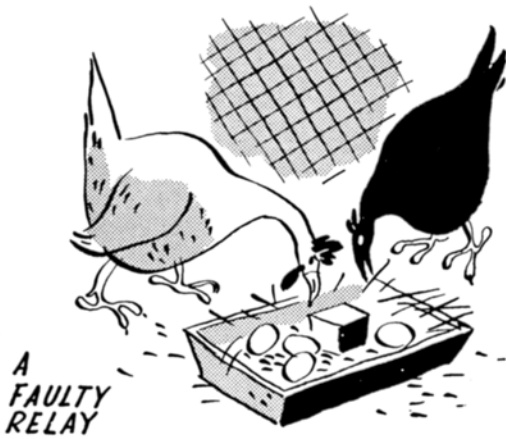


"Cough up that flamin' despatch, yer cow!"

Some Signal Expressions



AN EARTH RETURN



A FAULTY RELAY



WRONG NUMBER



A GOOD JOINT



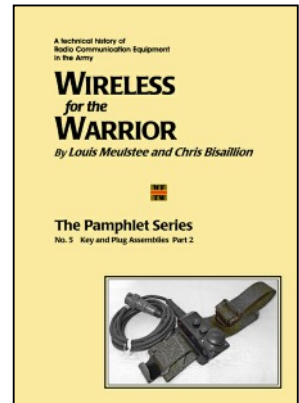
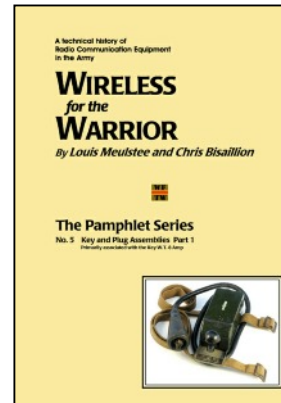
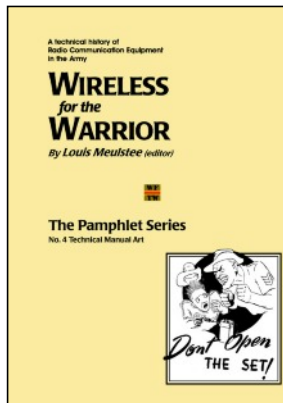
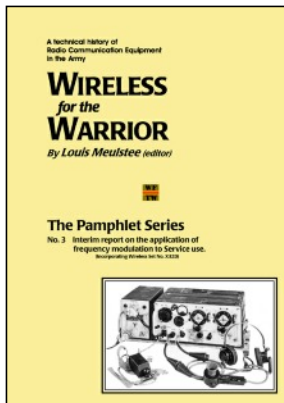
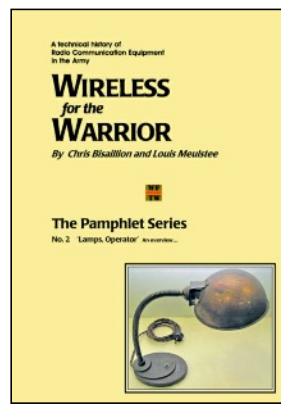
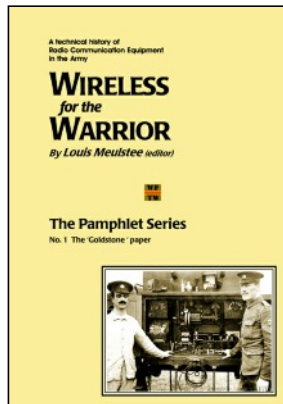
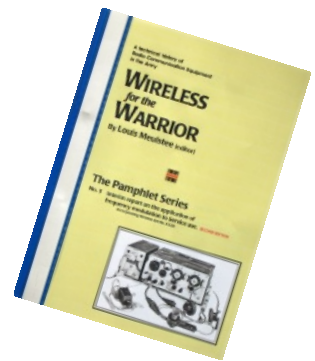
STRAIGHT THRU' PROCEDURE

Ref. No.	Title of document
1	Wireless sets No. 19 Mark I, II and III, Produced in North America, Working Instructions, Part I, ZA 21575, (PC Ref No. 65707), n.d.
2	Wireless sets No. 19 Mark I, II and III, Working Instructions, Part I, ZA 21575, (P.C. Ref No. 65707). n.d.
3	Wireless sets No. 19 Mark I, II and III, Produced in North America, Working Instructions, Part I, ZA 3109, (P.C. Ref No. 907727). N.d.
4	Radiotoestel Nr 19, (Model 1, 2 en 3), Verbindingsdienst voorschrift, Nr.1613, M.v.O., Oct. 1947.
5	Amplifiers R.F. No. 2, Mark I and Mark II, Working instructions, ZA 10396, WO Code 934, 1943.
6	Wireless Sets No. 46, Working Instructions No. 2, ZA 32900, WO Code 1625, May 1946.
7	Wireless Set No. 31 (Manpack), Working Instructions, ZA 33743, WO Code 4067, 1949.
8	Wireless Set X88B, Provisional Working Instructions, SRDE Provisional Pamphlet No. 637A, n.d.
9	Wireless Set No. 88 Types A & B, Working instructions, ZA 32897, WO Code 1869, Aug. 1948.
10	Transmitters Canadian No. 43 Mk.II, Instructions Working, ZA/CAN 5911, Mar. 1945.
11	Wireless Sets Canadian No. 52, Vehicle and Ground stations, ZA/CAN 00077, May 1944.
12	Antennae Vertical 34' Steel Mk I, Working instructions, ZA/C00079, WO Code 18994, Mar. 1944.
13	Antennae Vertical 34' Steel Mk I, Use and maintenance, WO Code 18996, Feb. 1943.
14	Wireless Set, Canadian No. 9 Mk.I, Vehicle and Ground station, ZAC 00008, Aug. 1943.
15	Radio Link S.R. Mark II, Working Instructions, ZA 21056, WO Code 983, n.d.
16	User Handbook (trials edition) for Wireless Sender A12, SRDE Handbook No. 916A, Jan. 1956.
17	User handbook for Station Radio A14, Army Code No. 13119, Oct. 1966.
18	User Handbook for Lightweight HF Patrol Radio X3145, SRDE Handbook No. 1154A, Oct. 1965.
19	User Handbook for UK/PRC-316 Lightweight HF Radio A.16, Army Code Nr. 14961, Nov. 1968.
20	User Handbook (Sec. trials edition) for Wireless Set No. A. 40, SRDE Handbook No. 843 B, Nov. 1954.
21	User Handbook (Provisional edition) for Wireless Set No. A40, SRDE Handbook No. 843 (Prov), Oct. 1957.
22	User Handbook for Wireless Set No. A40, WO Code No. 12045, Oct. 1957.
23	User Handbook for Wireless Set A41, WO Code No. 12336, Aug. 1960.
24	User Handbook for Transmitter-Receiver, Radio, A41, No. 2, WO Code Nr. 13123, Jan. 1964.
25	User Handbook for Transmitter-Receiver A.43R, Mk.2, Provisional Edition, WO Code No. 12790, Jan 1963.
26	User Handbook for Radio Rebroadcast Equipment TR A41/A42, WO Code Nr. 13951, June 1964.
27	User Handbook for Elevated Aerial (36 to 60 Mc/S), WO Code No. 12060, Mar. 1961.
28	User Handbook (Trials edition) for UK/PRC-350, SRDE Handbook No. 1174, Sep. 1969.
29	Preventief Onderhoud, Voorschrift Nr. 1325, M.V.O., Feb. 1954.
30	Radio-Installatie RC-1, WS 88, M.V.O., Voorschrift Nr. 1639 (TH11-168), 3e Druk, Mar. 1954.
31	User Handbook (Trials edition) for Mast, Telescopic, 27ft., SRDE Handbook No. 877A, July 1955.
32	Towers, 66 ft. No. 1, Erecting instructions, ZA25012, WO Code 1518, Mar. 1945.
33	Wireless Set No. 42, Prov. Working Instructions, SRDE Pamphlet No. 461A, Mar. 1945.
34	Wireless Set Burndept, C.N. 348, Working Instructions, ZA 29751, Oct. 1945.
35	Perforator No. 44 Mks. 1 & 2, Working Instructions, YB 05759, WO. Code No. 1953, Feb. 1948.
36	Reperforator No. 7TR (W.D.) Mks. 1 & 2, Working instructions, YB 05758, WO Code No. 1936, June 1948.
37	Apparatus Cable Laying No. 11, Working Instructions, YA 8156, WO Code No. 1674, Oct. 1947.
38	DF Station Transportable Adcock, No. 2, Working Instructions, ZA 29008, WO Code No. 1588, Dec. 1945.
39	DF Station Transportable Adcock No. 3, Provisional Working Instructions, SRDE Provisional Pamphlet No. 659B, Feb 1951.
40	Provisional Working Instructions and Description, D.F. Station P.E. No. 1 Mobile, in Trailer Light Cargo Amphibian ¼ Ton, SRDE Handbook No. 612A, n.d.
41	Signal Training Vol. 3, Australian Pamphlet No. 6, June 1943.
42	Signal Training (All arms), Pamphlet No. 10, Signal Tactics Part II- The Infantry Battalion 1945, (Provisional), May 1945.
43	Signal Training (All arms), Pamphlet No. 10, Signal Tactics Part III- The Motor Battalion 1946, WO Code No. 7125, Jun. 1946.
44	Signal Training Pamphlet No. 7-Training, Part 1, How to Instruct 1945, WO Code No. 7016, Sep. 1945.
45	All informed or A Staff Officer's Guide to Signals, Reprinted with Amendments (No. 1), Oct. 1943.
46	Signal Training Pamphlet No. 3, Maintenance of Signal Equipment in the field, Part 1 General Principles of maintenance for operators, SRDE Oct. 1947.
47	Signal Training Volume III, Maintenance of Signal Equipment in the field, Pamphlet No. 1, General principles of maintenance 1950, WO Code No. 8505, Aug. 1950.
48	User handbook for the Wireless Set No. 62, Australian Military Forces, 76/AMF/00005, 1955.

Ref. No.	Title of document
49	User Handbook for Wireless Station A.510, WO Code No. 12175, Nov. 1957.
50	Regimental Signalling Handbook, Part 2 Signal Training, Amy Code No. 70786, Apr. 1982.
51	Beskrivning av Radiostation 10W Br/4 m/39-43, Tc 91020, 1949.
52	Radiostation 105, Beskrivning del I, M7786-001780 (S 286/1), 1973.
53	Radiostation 105, Beskrivning del I, S 286, 1960.
54	Radiostation 120, Beskrivning del I, S 300, 1967.
55	Radiostation 122, Beskrivning del I, S 305, 1967.
56	Radiostation 121, Beskrivning del I, S 307, Tc 96121, 1957.
57	Radiostation 130, Beskrivning del I, S 310, Tc 96130, 1958.
58	Beskrivning over Markradiostation Mr II, Flygvapnet, 1951.
59	Beskrivning over 10 W KV-station M/44, Del 1. Handhavande, 1951,
60	Merkblatt zur Bedienung der Feldfunksprecher b und c, D 998/5, 1941.
61	Nachrichten-Fibel, (Na.Fi.), 8th edition, Berlin n.d.
62	Radio Set SCR-193, TM 11-273, May 1945.
63	Radio Set SCR-300-A, TM 11-242, June 1943.
64	Radio Set SCR-509 and 510, TM 11-605, Nov. 1943.
65	Radio Set AN/VRC-3, TM 11-637, Oct. 1944.
66	Radio Set AN/VRC-6, TM 11-283, July 1954.
67	Radio Set AN/GRC-106, TM 11-5820-520-12, Aug. 1964.
68	Radio Set AN/URC-4, TM 11-510, Nov. 1956.
69	Radio Sets AN/VRC-12, 43 to 49, TM 11-5820-401-10, Dec. 1961.
70	Radio Transmitters BC-610, T-213, BC-939-A, TM 11-826, Oct. 1952.
71	Frequency Meter Set SCR-211-Q, TM 11-300Q, Mar. 1943.
72	Radio Receivers BC-728 Repair Instructions, TM 11-4005, Apr. 1945.
73	Technical Manual Radio Set SCR-506-A, TM 11-630, June 1943.
74	Radio Set SCR-506-A, TM 11-630, Nov. 1944.
75	Radio Set AN/GRC-9, Mar. 1951.
76	Radio Set AN/GRC-9-GY, Dec. 1955.
77	Appareil de Radio SCR-609-A and 610-A, TM 11-615A (French), Mar. 1945.
78	Radio Set AN/CRT-3, T.O. 12R5-2CRT3-2, Sep. 1955.
79	Training text for Amplitude-Modulated Radio Sets, TM 11-496, Nov. 1944.
80	Der Funkgeratesatz GRC-9, TDv. 5820/003-14, May 1958.
81	Receiving/Transmitting Distributors TT-12 to TT-52, TM 11-2222, May 1951.
82	Sound Ranging Set GR-8, TM 11-2568, Sep. 1954.
83	Auxiliary Interphone Equipment AN/VIA-1, TM 11-704, Mar. 1951.
84	Public Address Set AN/UIQ-3, TM 11-2560, Jan. 1945.
85	Pulse Techniques, TM 11-672, Oct. 1951.
86	Fundamentals of Telephony, TM 11-678, Mar. 1953.
87	Field Radio Techniques, FM 24-18, Dec. 1949.
88	Signal Communications, FM 24-5, Aug. 1950.
89	Defense against radio jamming, TB Sig 5, Jan. 1944.
90	Instruction book for Remote Control Equipment RC-289, Mar. 1952.
91	Operator's manual Radio Sets AN/VRC-12 to 49, TM 11-5820-401-10-1, Feb. 1981.
92	Greetings from the Signal Service, Royal Engineers, C.R. Lown, 1918.
93	The Old Timer's Bulletin, Journal of the Antique Wireless Association, Inc.
94	Jimmy, the magazine of the Royal Corps of Signals in Middle East, 1941-1945.
95	Q-Code, Air Training Corps Gazette, 1944.
96	Signals, Story of the Australian Corps of Signals, 1945.
97	The Buzzer, Souvenir edition, Germany 1945-1946, Signals, 3 CDN Inf. Div. CAO.F.

A loose leaf folder for the WftW Pamphlet Series.

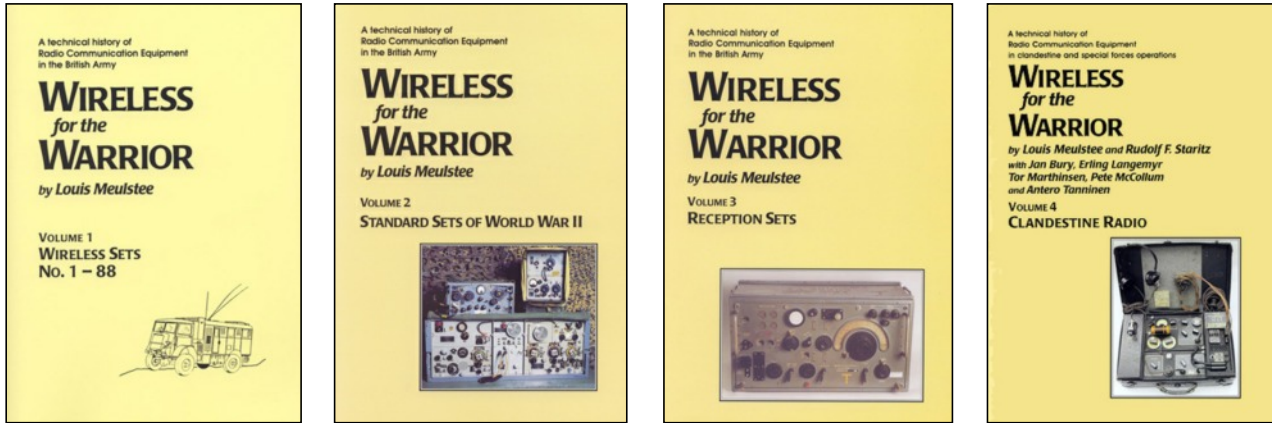
Shown right is a suggestion for a simple and inexpensive method to keep the printed pages together in a plastic clear view A4 document folder. Printable front and rear cover sheets, provided with the downloads, will give the folder an attractive appearance.



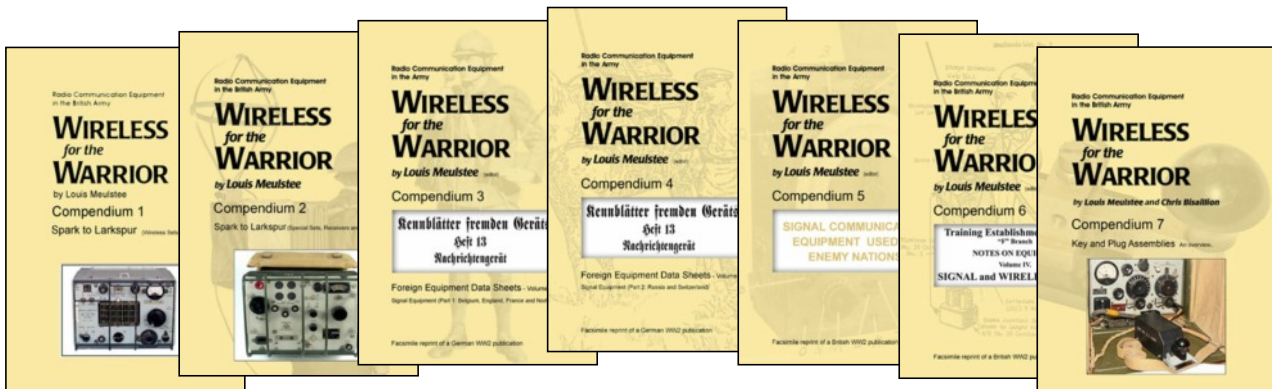
The **WftW Pamphlet** series is the latest addition to the Wireless for the Warrior range, created to accommodate a future range of reprints of articles and reports of historical importance, hitherto not published documents, and technical reports on British Army signalling. This new free to download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

About the Wireless for the Warrior books

The Wireless for the Warrior range of books (comprising the **Volume**, **Compendium**, **Supplement** and **Pamphlet** 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



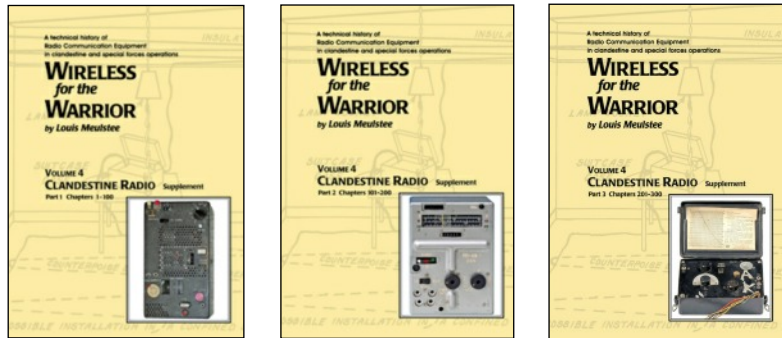
The books in the WftW **Volume** series are very detailed and include circuit diagrams, technical specifications and alignment data in addition to technical development history, complete station lists and vehicle fitting instructions. Generally no operational histories are given as these have been published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



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



The WftW **'Supplement'** series are full colour reprints of previously published WftW Vol. 4 Supplement 'Chapters'.