



AWM photo PAIU2011_165_01
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'Winnie the War Winner' (pt.1) Country of origin: Australia.

'Sparrow Force', a small Australian force, was sent to Dutch and Portuguese Timor in 1941 to defend Koepong and the airfield at Penful against expected Japanese attack. In February 1942 a large Japanese force landed on Timor and swiftly overwhelmed most of the island's Australian and Dutch defenders. Over 1100 Australians, most of the 2/40th Battalion went into captivity. Although the main body of Sparrow Force

was captured, the 2/2nd Independent Company fought on, conducting a guerrilla war in the hills. Relying on the local people for food, transport and support, they tied down an entire Japanese division. Australian headquarters did not realise that any of the Sparrow Force had survived until the independent company made contact using an improvised radio affectionately known as 'Winnie the War Winner', named after the

British wartime Prime Minister Winston Churchill. By late 1942 the Japanese had terrorised the local Timor people into withholding support from the Australians. Unable to fight on, the Australians were taken off the island by the Royal Australian Navy in early 1943.

The photographs are courtesy of the Australian War Memorial, individually marked with their AWM serial number.

Introduction

Long before the event of Internet I had read the story of 'Winnie the War Winner' in 'Signals', a book I bought in a London second hand bookshop in the early 1980s. This was rather puzzling as the pictures showed a unit which was apparently only a push-pull RF amplifier, but no mention of a driver, frequency of operation etc. It was only much later, after the most helpful assistance from the Australian War Memorial, that I was able to learn more on the composition and technical details of this transmitter. Although there are good quality photographs available of the RF amplifier and associated items, from war time to present day, but so far I never came across a photograph taken in Timor showing a complete set with a WS No. 101 as driver. A film taken in Timor shows just a small shot of operating the RF amplifier, and a group of soldiers looking at operating a transmitter of what appears to be just props.

This supplement is divided into two parts:

Part 1 (Chap. 328) The story of a group of Australian soldiers fighting in Timor as guerrillas against an overwhelming enemy. They built a wireless set from salvaged components and eventually manage to maintain contact with Australia. As this story has been

told in many publications and hardly could add anything, I just copied the full 1944 article (which appeared to me as probably the first detailed narrative) published in 'Signals, the story of the Australian Corps of Signals'. Attached are acknowledgements and references; in the appendix scans of the original signals officer report, plus an interesting report on charging the accumulators.

Part 2 (Chap. 329) Technical developments which led to the success of contacting Darwin on the 19th of April 1942, based on official records, reports and photographs. It includes a technical description of the RF amplifier with scans of original drawn circuit diagrams. A scan of the WS No. 101 handbook can be downloaded from the WftW website. (*See references*). This combination was affectionately known as 'Winnie the War Winner', currently on display in the Australian War Memorial.

'Winnie the War Winner'

In the dark days of 1942 when the tide of Japanese successes engulfed the islands of the Pacific practically down to the shores of Australia, very few people held out any hope for the troops who formed the garrison of Portuguese Timor.

No word from them had reached the mainland for fifty nine days and yet during that time the tiny force of less than 400 men had been waging a ceaseless and successful war of their own against some 15,000 crack Japanese troops. They continued to do so for almost twelve months altogether.

When the Japanese landed at Dilli on the 19th of February, twenty men of the 2/2nd A.I.F. Independent Company managed to blow up the airstrip and fight their way back into the hills to join the other units of the garrison in a bitter guerrilla war against the enemy despite the fact that contact with the mainland had been severed.

It was vital to re-establish communications with Australia and for this purpose men of the Independent Company, the Fortress Signals section on the island and members of Signals 8 Aust. Div. pooled their resources to build a wireless set which would be capable of reaching Darwin. They had to start from scratch without spare parts or new batteries. The sets they had were too weak; scrounging, the recovery of buried and damaged equipment and raids by fighting sections in enemy camps for materials all played part in the construction of the set which finally saw the light of day and served the Commandos



Map of the Timor Sea showing the distance of about 700km between 'Winnie' and Darwin.

well and faithfully under the name of 'Winnie the War Winner'.

The first plan was to build an oscillator with a stage of amplification to work on the frequency previously used in communication to Australia. Without a receiver and with no instruments this was a tall order, but under Capt. George Parker (Signals 8 Aust. Div.) four men—Cpl John Sargent and L/Cpl John Donovan (2/1st Fortress Signals Section) and Sigm Max ('Joe') Loveless and K. Richards (2/2nd Independent Company)—tackled the job. Loveless in civil life had been a technician with broadcast station 7ZL Hobart.

He started by building a transmitter, using a crystal which by luck was close to the required frequency. Power supply became a problem and the couple of available accumulators were nearly flat. News was received of a charging plant in a nearby village and off went the accumulators under escort to be charged. This procedure occurred quite a few times until it was naturally became known as a 'boong' charger. This instrument of native torture consisted of a system of wheels, a belt driving a motorcar generator and, as the name implied, was turned by natives. Their enthusiasm for the job fluctuated and so consequently did the charging rate.

A broken down 109 Set was discovered and the transmitter was stripped for parts to provide an additional amplifier for the oscillator—more punch, stronger signals, better chance of being heard. (See note 6 at page 5). Three days after they had commenced to construct the new set, a Dutch sergeant stumbled into the camp with what he thought was a transmitter-receiver. It proved to be nothing more than the usual commercial medium-wave receiving set - and out of order too. The sergeant's effort in carrying this set over forty miles through some of the worst country in the world was not in vain for there were many good parts in it which could be used in the new set. ('Portuguese receiver', note 2). Loveless planned to build a transmitter, powerful enough to reach Darwin, from all the spare parts on hand. He planned the circuit and asked all the commandos to keep their eyes open for any parts that might be at all useful. Cpl Donovan went on a scrounging trip to Attamboa, on the north coast, and

returned with the power pack from a Dutch transmitter, two aerial tuning condensers, some sixty feet of aerial wire and a receiving set.

The task of building 'Winnie' moved ahead without delay. Coils were wound on bamboo formers, accumulators were recharged, points were soldered and valve sockets were made. Just about everything had to be guess work in the absence of precision tools and instruments, even to the perusal of a Portuguese radio manual to determine the colour code of resistors and condensers. A battery



Artist impression of the construction of 'Winnie', published in 'Signals'.

charger was recovered from the enemy when fourteen Commandos went through the Japanese lines to the old Australian H.Q. at Villa Maria. Only a hundred yards from the Japanese they dug up a charger which had been buried there when the H.Q. had been forced to move. The set was ready to go on the air by the 13th of April when the operator tried to raise Australia with 'C.Qs' and 'Xs' but no reply was heard. Turning the dial of the receiver, the sounds of music floated into the small shack. Some troubadours were amusing the listening public with a song about 'The Last of the Hillbillies'.

The transmitter was revised and on the 18th April another attempt was made to contact the mainland. No reply was received but the disappointment of the men would have been allayed had they been aware that their signals had been picked up and passed on to Darwin. All Australian transmitting stations were

warned to keep off the air and listen for Timor on the following night.

Some days prior to the 19th of April the H.Q. of 'Sparrow-force' (as the Commandos were known) had given the operators a couple of encoded messages 'just in case'. On that fateful night, 'Joe' Loveless tuned up the rig and everybody stood by listening to the chosen group. With suppressed excitement the 'brass was pounded' and the highest priority put into the call. The operator was prepared to do this for a couple of hours but a hefty answering signal came back in reply. He was so nervous that he could not tap out the answer fast enough. Although he did not know it, all Australian stations on the group were ordered to stand by and after some hours the messages were passed. A tin of Australian tobacco which had been kept for such an occasion was opened in celebration and a toast in coffee was drunk to 'Winnie'. On the following night contact was established again but this time Darwin was suspicious and demanded proof of the guerrillas' identity. Questions and answers were flashed across the Timor Sea: *)

'Do you know Jack Sargent?'

'Yes, he is here.'

'What rank? Answer immediately.'

'Corporal.'

'Bring him to the transmitter.'

'What is your wife's name, Jack?'

'Joan.'

'What is your street? And house number?'

The correct answers were flashed back and the mainland accepted the fact that the Australians in Timor were still alive and fighting. Strengthened by the assurance that their homeland was making every effort to help them, the men in Timor fought on. They lived like natives, scrounged their food in the villages, out-fought the Japanese and mocked the surrender notes with which the enemy regularly assailed them. The Japanese commander paid them a hard-won tribute when he said: 'You, alone, do not surrender to us'. On the 26th of April, an Allied plane came over searching for the party but missed the smoke beacons. It returned just at dusk the following night and dropped parachutes with precious food and stores. Bush wireless took up the glad news and men who had been going barefooted to save their boots for more active work were issued with new pairs it was then that all knew that 'Winnie' had made good.

The mainland wasted no time in asking for bombing targets which were promptly and happily supplied. The men then enjoyed the sight of Allied bombers passing overhead on their way to give the Japanese a taste of their own medicine. A remarkable instance of co-ordination occurred when interference halted a message regarding bombing targets that was being passed one night to Darwin. When conditions improved at 7 o'clock the next morning, the message was completed.

*) It is now known that for security reasons, the actual names were not published in 1944.

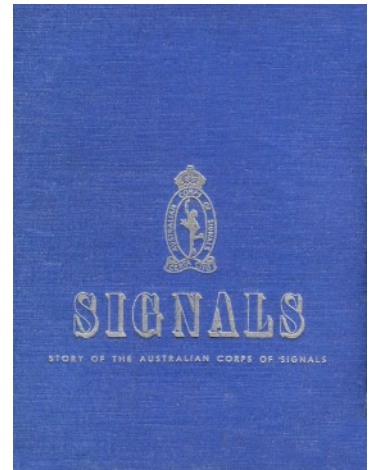
As the operator was receiving an acknowledgment from Darwin, our bombers were overhead on their way to the target. On another occasion, an enemy convoy of three ships was sighted and a message promptly dispatched to the mainland. The R.A.A.F. sank all three and relieved an ugly situation. 'Sparrow force' took fresh heart from such things. The men realised that they were no longer a lost unit but another link in the chain

that was then being welded for the final overthrow of the enemy. 'Winnie the War Winner' did noble work and as a fitting climax to a useful career guided the rescue party that eventually took the guerrillas home from Timor. This weird but wonderful set now resides in the Australian War Memorial where it occupies an honoured place as a relic of the ingenuity of signalmen in the face of odds and difficulties.



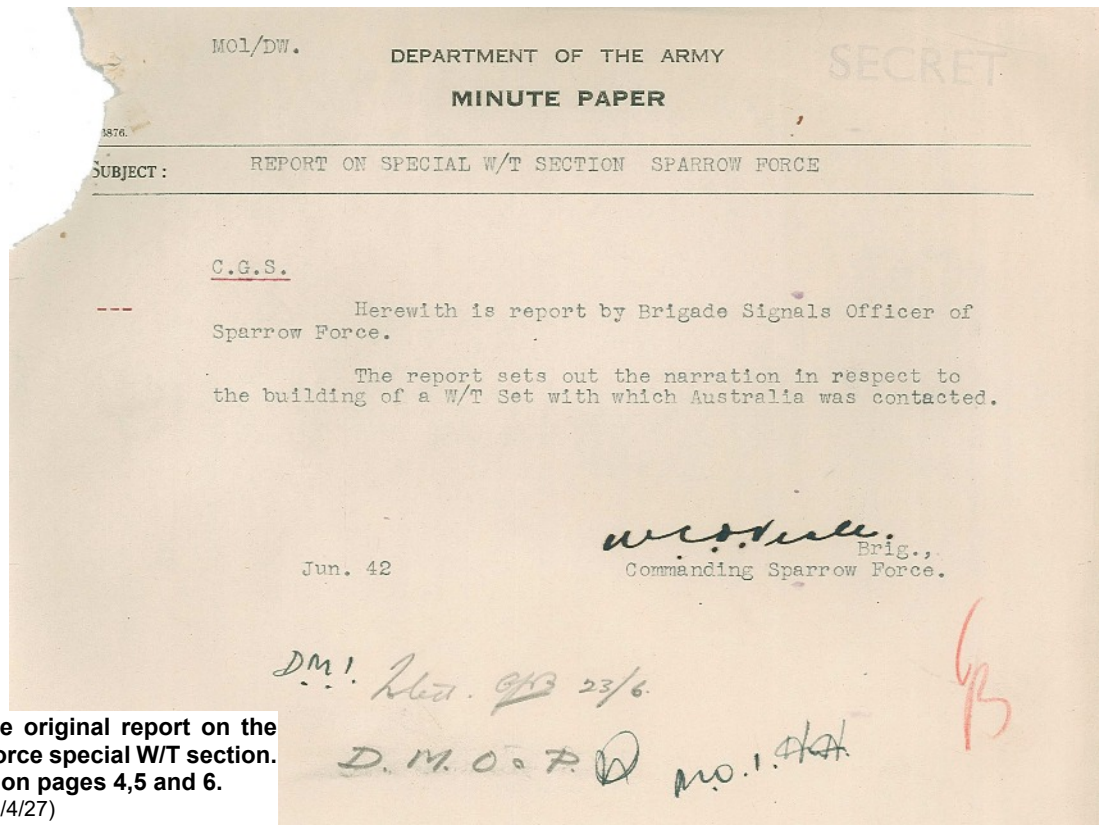
Photo of operating 'Winnie the War Winner' in Timor (above). It showed, apart of a prop transmitter, the ruggedness of the country with steep mountain ranges. (AWM 013764)

Part of the text for this chapter was retrieved from 'Signals, the story of the Royal Australian Corps of Signals'. A recommended book with many illustrations and photographs.



An Australian Wireless Set No. 101 was used as a driver for a RF amplifier, comprising the 'Winnie the War Winner' (right). This set was undamaged but not powerful enough to contact Darwin.

Appendix: Report on Special W/T Section Sparrow Force.



Scan of the original report on the Sparrow Force special W/T section. Continued on pages 4,5 and 6. (AWM54 571/4/27)

REPORT BY CAPT. G.E. PARKER

BDE. SIG. OFFICER
SPARROW FORCE.

Report on activities of Special W/T Section

2 Mar 42 - 19 Apr 42.

The original party to leave ATAMBOEA on 2 Mar 42 were -

NX34821	Capt G.E. Parker	8 Div. Sigs.
QX18071	Cpl. J. Sargeant	2/1 Fort Sigs.
NX38634	L/cpl J. Donovan	"
	Sigman D Bailey	"
	" L. Shadlow	"
	" E. Wilson	"
VX32491	Pte. F. Dennis	2/40 Bn.
VX26937	Sigman E. Liversidge	8 Div Sigs.
VX22091	" W. Larkin	"

The transmitter and receivers had been smashed the crystals from the transmitter were taken by two of the party.

On 4 Mar. 42 the party was contacted by Capt. B. Callinan 2 Ind Coy and we joined that officers party at LAHOEROES and proceeded to CAILACO.

Note 1) The Ind Coy had recovered a W/T set 109 from the forward area and we endeavoured to contact YCD DARWIN with this set on the old YC frequency. The transmitter of this unit was too low powered and no success was had.

L/cpl Donovan, Sigman Liversidge and Pte Dennis were instructed by me to proceed to ATAMBOEA to salvage as much wireless equipment as had been left. This party departed from CAILACO on 17 Mar. 42.

Note 2) Further equipment had been salvaged comprising a few tools, spare wireless valves and in addition a receiver had been obtained from a Portugese together with 2 accumulators. This receiver was not in working order.

All equipment was transferred to MAROBO on 18 Mar. 42.

Sigman Bailey, Wilson and Shadlow, were detached from the party and attached to Sig. Sect. of the Ind. Coy and TX4745 Sigman J. Loveless, VX50708 Sigman K. Richards were attached to me from Ind. Coy. Both these men are technicians. Loveless had in civil life been with Station 7ZL Hobart.

An oscillator was constructed using a crystal from the ATAMBOEA transmitter and 2 6F6 valves from the Portugese receiver. The vibrator of the receiver was used as a power supply. The circuit of this oscillator is shown in Fig. 1.

On 28 Mar. 42 Donovan returned from ATAMBOEA with odd parts of wireless equipment. Very little had been left after the natives had been given carte blanche.

Note 3) Three alternatives were open to us at this stage. 1. To try and contact with the small oscillator already constructed. 2. To build an amplifier for this using 4307A valves in push pull. 3. To build this amplifier and use it on the W/T set 109. (This latter had been made available to us from Ind. Coy.)

On 1 Apr. 42 the party moved to MAPE and the school house (rice store) was given to us to continue our work.

On 3 Apr. 42 work was started on the amplifier using the spare

-2-

4307A valves for the 109 set.

4 Apr. 42 Sigman Liversidge and Pte Dennis returned from their A trip but had not recovered any further wireless equipment.

The amplifier was completed on 12 Apr 42. and the vibrator of the 109 set was used as the power supply for this. The tests however showed that this was not sufficient and the vibrator of the receiver was put into operation with slightly better results.

Note 4) In the meantime B Pls of 2 Ind. Coy had recovered a W/T set 101, complete, from the forward area and had been listening to Darwin. This set was passed over to us and Cpl. J. Sevantie VX4546 was attached to us from 2 Ind. Coy.

On the 13 Apr 42 we also listened to and identified DARWIN.

On 14 Apr 42 we tried DARWIN with the 101 but no results.

Note 5) The original PORTE receiver vibrator broke down on 16 Apr and we pulled the 109 vibrator to pieces and made up a vibrator by using the transformer and the vibrator (spare) of a 101 set. We had 1 rectifier tube type 80 but this could not handle the voltage so we tried a 4307 A valve as a rectifier; this worked O.K.

On 17 Apr 42 we endeavoured to contact DARWIN by using the 101 set as a drive for the small oscillator now converted to an amplifier using the 6F6 valves. Changed this for the amplifier with 4307A valves and changed the aerial to a ZEPP on a bearing of 110° mag.

On 19 Apr. we contacted DARWIN calling LOA - LOF - LOG - LOW from YCF. LOF replied to us and by using the code word of FIXED DEFENCES managed to get the first message through. Sigman Loveless has throughout shown the greatest initiative in this work and his efforts undoubtedly led to our success.

(sgd) G. PARKER (Capt.
13 May 42.

NOTES:

- 1) It is believed that this might be a typo or mistake as most likely a WS 101 was meant (See notes 3 and 4).
- 2) This was the receiver mentioned in 'Signals'.
- 3) WT set 109 must have been a typo again as a WS 101 was meant.
- 4) This is the WS 101 used as driver for the amplifier.
- 5) Porte most likely meant Portuguese. (Page 6)
- 6) Evidence that the receiver section of the broken down WS 109 was used to receive the signals from Darwin. This broken down WS 109 was also mentioned in 'Signals'.

References:

- Photographs and scans courtesy David Pearson of the Australian War Memorial. These two chapters would not have been possible without his great and enthusiastic support! <https://www.awm.gov.au>
- The AWM object accession number of Winnie the War Winner is RELAWM20434.
- Two scans of original reports courtesy Australian War Memorial:
 - Sparrow Force (Timor), Account of action by Lt-Col. W.W. Leggett, AWM2018.8.8.759.
 - Report on Special W/T Section Sparrow Force, May 1942, including circuit diagrams AWM54 571/4/27.
- https://en.wikipedia.org/wiki/Sparrow_Force
- <https://youtu.be/quisMMLJRf0>
- <https://www.youtube.com/watch?v=M9HYMoEa-Bw>
- Signals - Story of the Australian Corps of Signals, Sydney, New South Wales, Halstead Press, 1944, pp. 128-132.
- Signal Training, Vol. III, Australian Pamphlet No. 3, Wireless Set No. 101, Mk.I and Mk.II, 1941. (Downloadable at www.wftw.nl/downloads.html)
- Signal Training, Vol. III, Australian Pamphlet No. 4, Wireless Set No. 109, Mark II* and Mark II**, 1941.

DATA SUMMARY

Organisation: Australian Army.
Design/construction: Sparrow Force.
Year of Introduction: 1942
Purpose: Establishing communication with Australia using salvaged equipment.
Transmitter: Australian WS No. 101, driving a locally constructed push/pull RF amplifier.
Receiver: WS No. 109 receiver section.
Frequency coverage: Around 4500kHz.
Operating modes: CW.
Aerial: Zepp.
Power supply: Makeshift power supply unit powered by galvanic separated 6 volt accumulators.

CONTINUATION OF REPORT ON ACTIVITIES OF W/T SECTION.

On 24 Apr. the following men reported to me for guard duties.

NX50064 Sgt. R. Pepper 2/1 Fort Engs.
 VX54809 Cpl. S. Roberts 2/40 Bn.
 VX53831 Pte. Stevens "
 TX2790 " D.W. Lee. "

All spare equipment was transferred to NOVA LUSA on 29 Apr. 42 and later transferred to VILA FILOMENA DE CAMARA. On 2 May we received from the forward area an A.W.A. transmitter AS9 2J2448 with generator A3080.

This unit has two crystal frequencies 6000 and 6590 K c/s. A message was sent to DARWIN regarding this. We have tested the second frequency to YED and received a strength report.

Note 6) Our total equipment comprises the A.W.A. transmitter a W/T set 101 Complete a 109 receiver with receiver vibrator only 2 - 150A accumulators 3 - 130A 1 - 100A 2 - 25A. We have asked for tools as our present kit is inadequate. 1 - 124 Zoon charger. Amplifier as previously mentioned.

It is impossible without actually being in TIMOR to visualise the entire lack of useful tools etc, and also the primitiveness of all machines such as there are.

Every assistance must be given to us in order to maintain the W/T link as it is impossible to use any local resources.

(Sgd) G. PARKER. CAPT.

A FEW NOTES ON BATTERIES AND CHARGING.

The Ind. Coy. had managed to salvage a 6 v 100 w charger. This was delivered to us on 2 Apr. 42 and there was still sufficient petrol of give it a run. It was found however that the generator was burnt out and batteries had to be sent from MAPE to BOBBNARA to be charged.

The method of charging was by means of a system of driving wheels down to a 6v generator the first wheel being turned by natives the others belt driven from this main drive. This type of charger has been called a boong charger for easy reference.

Signor Tenenti Lopes sent a 6v generator to us and also a large driving wheel and we endeavoured to make up our own boong charger. In the meantime the charger motor was put into service belt driving the 6v generator. A charging rate of 10A was obtained. As petrol ran out we tried kerosene and then Dieseline in this motor with some success.

On 6 May W.O.II G. Willersdorf VX28827 75 L.A.D. and Pte. J. Kingshot TX2609 2/40 Bn. were sent to BOBBNARA to construct a duplicate boong charger and this was delivered to us on 17 May 42.

In the meantime (8 May 42) a 12 v 200 w charger was delivered from AUSTRALIA.

Our battery worries are not yet over but it seems that they are well under control.

(Sgd) G. PARKER. Capt.