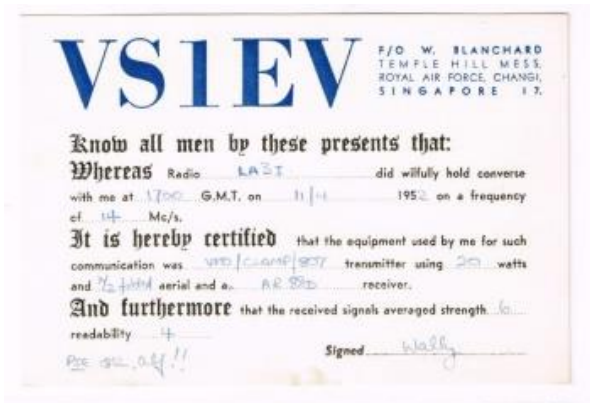


# DX'ing from Singapore in the Fifty's

By Walter Blanchard, G3JKV.



Joining the R.A.F. in 1949 I volunteered for Aircrew ending up some 15 months later as a fully qualified navigator. One of the navigation courses was all about Radio and Radar which kindled my interest in Radio and it's never lessened since. I wanted to see the world and somehow got myself onto Dakotas in Transport Command which was still flying them in the Far East although they were being phased out in favour of Valettas elsewhere.

So I soon found myself heading to 52 Squadron based at Changi (Singapore), the last operational R.A.F. squadron still flying Daks. Never having been abroad before I had no idea what I was letting myself in for by volunteering to go out to a sweaty tropical paradise like Singapore, but after about three months I got acclimatised in spite of the total lack of air-conditioning – the R.A.F. didn't believe in cossetting anyone. Being stripped-down wartime versions the dear old Daks had no air-conditioning either and if they had been left out in the open getting up into the cockpit was like scrambling into an oven. No sissy stuff like sun-shields for us!

It was a great relief to get airborne as soon as possible and climb up to our normal cruising altitude of 8000 ft with the cabin windows open and a beautiful cooling breeze blowing over us. Supply-dropping was something else – no cooling breeze since it was low down and frequent manoeuvring up and down narrow valleys meant only those with cast-iron stomachs could stand it. As many as one-third of our aircrew complement couldn't do supply-drops because of this which meant the rest of us got more than our fair share of low-flying. Funny how this sort of “real-life” problem rarely gets into official histories.

Before leaving the U.K. I'd bought myself a little short-wave radio, an “Emstonette” (which I still have), because someone told me that the BBC broadcast on the shortwaves to furrin' parts including Malaya and Singapore. It was small enough to go into my duffel-bag and on the way out, while delayed at Habbaniya (near Baghdad) – good old Hastings! – I got it out to see what might be heard.

To my delight I found it could pick up not only lots of short-wave stuff but also the BBC long-wave home service on 200 kHz, although thunder-storm static was troublesome. At Singapore I found the BBC actually had some shortwave relay transmitters based on the Island, but I found direct reception gave me a better psychological link with home and Daventry on 15070 kHz was the mainstay with 21470 kHz being a good backup. Whenever I hear the old BBC interval signal of “Lilibulero” even now it makes me catch my breath a bit.

There was an amateur radio club at Changi and one of the keenest hams, Bill Hubbard, VS1DS, lived in the Mess only a couple of doors down from me. Soon we were great pals and I was very willingly being introduced to the joys of ham radio. I found it quite incredible that with a few watts of a.m. and what seemed to me to be a piece of random wire thrown up over a palm tree you could talk to hams in the U.K.

The Chief in charge of our aircraft radio equipment, Sgt Bill Dacre, happened to be of the talkative variety and many hours were spent chatting him up about the more esoteric mysteries of radios and radio propagation – he taught me an enormous amount about how to actually make them work. Eventually I decided I'd better get a ham radio licence myself and in those days in what was still largely Colonial Singapore that was done by going down to the Posts and Telegraphs office in the town, handing over a S\$ 10 bill, and getting a full licence in return - no nonsense with exams or Morse code! They seemed to think that if you were aircrew you knew all about that sort of thing already. And that was how VS1EV came into existence on 16th March 1952.

By then, I'd come across quite a lot of “real” radio gear courtesy Changi's communications office,

such as AR-88's, HRO's, and so on, and our Daks were fitted with the standard U.S. aircraft radio fit of BC-348 receiver coupled with the BC-375 transmitter. This combination was greatly superior to the British Marconi T1154/R1155 as we found when the new Valettas came along later.

It made me realise how badly I needed a proper receiver to take the place of the poor little Emstonette, I was still using in my bunk. I thought perhaps the good Sgt Dacre might be able to wish across something decent for me and after a few weeks he came good and let me into a secret. It turned out that it had been decided on-high to re-equip all the R.A.F. communications offices world-wide with brand-new British HF receivers and transmitters to replace the mainly American wartime lend-lease stuff they had been using so far. That meant junking all their AR-88's, HRO's, and so on, replacing them with Marconi R1475's, GEC BRT-400's, T1509's, *etc.*

All the old American stuff was to be sent to a central R.A.F. stores depot at Seletar, next to the Naval Base, for disposal, meaning it would be auctioned off to the highest bidder as scrap metal – there was a large number of keen Chinese scrap dealers in Singapore, who were making a fortune out of selling war-surplus, just like their friends in London. The Americans were apparently not keen on taking it back themselves since they were busy establishing their new electronics industry with new designs and understandably did not want their market ruined by cheap war-surplus kit.

An interesting sidelight on this is that almost the entire early production of RCA's AR-88 receiver, a 1939 design, had been collared by the Brits in WW2, and those we didn't get were Lend-Leased to the Russians so they never appeared on the U.S. domestic market. This is why American hams never became universally equipped with AR-88's *etc.* as U.K. hams did and in fact were rather envious of us getting these really excellent receivers while they couldn't.

Our little club did not have the money or the expertise to go counter-bidding against the Chinese professionals, but there was a loophole. It turned out that, if an R.A.F. organisation thought that any of this gear might be of use "for educational purposes", they were entitled to go over to Seletar and take whatever they wanted free of charge.

As soon as we appreciated what this meant we declared ourselves to be an "educational" establishment, got the necessary written authorisations and hastened off to Seletar in a 3-ton

truck. At Seletar we saw an astonishing sight – quite a large hangar stacked high with all sorts of radio and radar kit, not only ex-R.A.F. but ex-Army, Navy and captured Japanese stuff as well. We couldn't believe our eyes! After a few hours the truck was down on its springs laden with all sorts of lovely receivers, transmitters and test gear, chitties were signed and we were off back to Changi.

We had no idea whether any of it worked, or even how it worked, but we had plenty of technician friends to help. Out of this lot I managed to purloin for my own use an AR88D, an AR88LF, two BC-221 frequency meters, and a RCA ET-4336 transmitter. Later on I also "acquired" an ex-aircraft T1154/R-1155 setup that had been declared "beyond economical repair" for some reason, but which actually worked perfectly well.

This lot was dumped in my room in the Mess and after re-arranging things, so I could get my bed back in, I got the AR-88 wired up, switched it on, and was delighted to see nice warm glows from the valves. Surprisingly it more or less worked and I soon had it tuned to the BBC Overseas Service on 15070 kHz (or kc/s as it was then). Sgt Bill came round to see it and decided it needed a bit of realignment and a set of new valves which he said he would "organise"; I thought it better not to ask him how. A week later I got it back cleaned up, re-aligned, new valves, and even with a copy of the official Operating Manual. Magic!

That was fine, but I soon found I'd overstepped it with the ET-4336, which was a real monster using 813's in the final and capable of producing 200-300 W of RF. Very impressive when switched on with its 866 mercury-vapour rectifiers glowing a brilliant blue as they generated its 3 kV HT line!

Unfortunately it took so much electric power that all the lights in the Mess flickered up and down in sympathy with transmissions and large sparks came off the bits of wire I was using for an aerial which didn't make me very popular. Reluctantly I decided it had to go so I offered it to the civilian Singapore Amateur Radio Club, who came up one day with a lorry and took it away.

That left me with only the T1154 which I didn't like at all; it was unstable in the tropical heat and produced awful a.m. Not having had to do a Morse test to get my licence I could only do the 6 w.p.m. all aircrew had to learn so was lost when other hams who were ex-Wireless Operators rattled away at 25 w.p.m.



The old Emstonette, AR-88, BC-221, R1155, another BC-221, BC-348, ET-4336

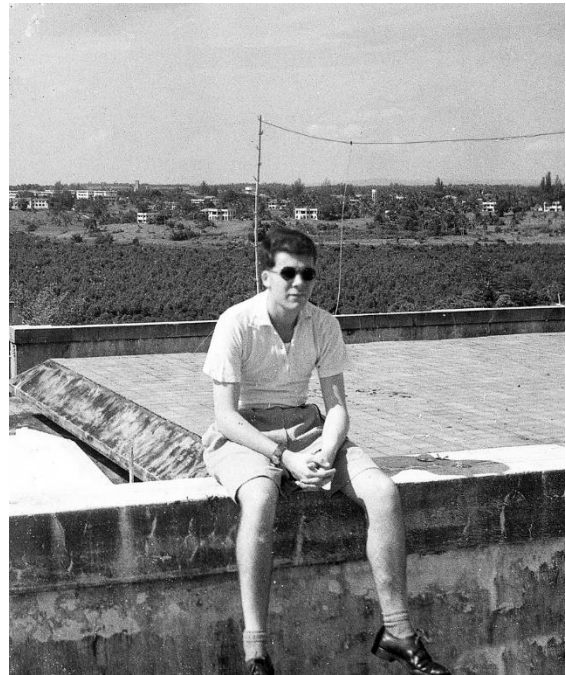
Anyway, propagation was so good that all you needed was a little bit of a.m. and there was no incentive to speed up my c.w. In those days the Japanese radio industry hadn't got going and the new American transceivers from Collins and the like were much too expensive even if you could find one, so it was a matter of building one yourself.

I got hold of a 1951 edition of the A.R.R.L. Handbook, read it cover to cover and decided an 807-based 50 W a.m. transmitter described therein was just the thing for me. Now came the difficult bit. Having been educated at a (rather second-rate) grammar school I knew nothing at all about mechanical or electrical engineering and hadn't a clue on how to handle even basic tools; a big handicap when it came to chassis bashing. However, one of my new-found friends in the Singapore Club ran a metalworking shop and kindly volunteered to make me a chassis. What he didn't tell me was that they only worked in steel and when the chassis arrived I discovered it was made of cadmium-plated 16 g steel plate. A few weeks later and after the loss of a lot of skin I learned how to make holes in it more or less where I wanted them and I was away.

Sgt Bill was a goldmine of knowledge, teaching me how to use a soldering iron as well as letting me use his workshop and a month or so later I was the proud possessor of a working transmitter. Many of the components were Japanese in origin, salvaged from our treasure trove, and it was then I began to dimly realise that not all Japanese stuff was cheap rubbish. In fact some of the meters I got then are still in use in pieces of test gear I've built over the years since.

This transmitter was a single-band device because the early 1950's were close to a sunspot maximum and it was easy to work the world on 20 m. a.m. All I had to do was go on the air at around tea-time (1700) call CQ once on 20 m and that was that until I got tired and went to bed, often well after

midnight. The big kick came when only a week or so after got my licence I worked G3FUT, John, in Bovey Tracey at 1615 on 23<sup>rd</sup> March 1952, my first G ever from VS1. My aerial at that time was nothing special, just a half-wave dipole about 15 ft above the flat concrete roof of the Temple Hill Mess, fed with 300 ohm flat twin because someone told me it had less loss than co-axial. I knew very little about tuning and loading then (still don't!) so how the RF got out I don't know.



Me and my aerial. The infamous Changi Jail can be seen in the background if you have sharp eyes!

After a few weeks I had a surprise visit from the Station Signals Officer who demanded to know, what I was up to. Apparently, I should have got all sorts of permissions before firing up a radio transmitter at an active military station like R.A.F. Changi, things weren't as relaxed then as they are now. Luckily it was late afternoon when he turned up and propagation was excellent to the UK, so I showed him how easy it was for me to talk to UK hams. This amazed him, because he said his own staff had considerable difficulty making contact with the UK, and would I have a look at what they were doing and see if it could be improved. This gave me a problem, since I was totally unqualified professionally in radio matters and, being only a mere squadron navigator, I thought it would be quite improper of me to try to tell him what to do. I made some excuses and recommended they should read the A.R.R.L. Handbook. Many months later he told me, he'd done exactly that and his staff's performance had improved considerably.

The AR-88 performed beautifully, the only snag being one day when the aerial changeover relay

failed, and the poor receiver got the benefit of a full 50 W of a.m. being fed into it. It melted the RF amplifier coil which was made of an early variety of polystyrene, but luckily easily replaced, and ever since I've been very careful over r.f. switching. It covered the medium-wave broadcast bands as well as all the ham frequencies, and I was amazed early one morning to find that the BBC Light program was coming in quite well on 1215 kHz.

Following this up, I discovered several other BBC medium-wave stations were quite consistently audible for several hours from as early on as 1600 GMT in October and November, although they were often spoiled by local thunderstorm static. Thinking this would be a revelation to the BBC, I told them about it only to get a reply that they'd had lots of reception reports from even further afield, Australia and New Zealand not being uncommon. Unfortunately large numbers of Japanese and Australian stations also appeared on the medium-wave band after dark, and it wasn't until they'd switched off for the night the European DX became really audible. I tried to pick up the long-wave 200 kHz transmission, but there was a very strong Russian station on the same frequency 24 hrs/day, and I never heard it.

At Seletar I'd picked up a couple of BC-221 frequency meters, which had very stable and accurate master oscillators covering 2 - 4 MHz, and it occurred to me that it would be a much better VFO to drive my transmitter than the one I'd built, which tended to drift rather a lot as its temperature changed. Since I was using 20 m almost exclusively, I had to build something to change its 2 - 4 MHz up to 14 MHz, so I could use its 4<sup>th</sup> harmonic ( $3550 \times 4 = 14200$ ), and that's when I learnt about harmonic amplifiers.

I managed to make it work eventually, and it was beautifully stable, but unfortunately it also put out far too much power on the 3<sup>rd</sup> harmonic, 10650 kHz, which happened to be one of the frequencies used by the R.A.F, and I got clobbered for jamming official communication channels. While thinking about how to get rid of this out-of-band stuff, it came to me that what I really needed was a new transmitter altogether, getting rid of a number of problems that had become apparent in addition to the spurious problem.

There was a nice design in the Handbook using two 807's in the final, which would give me a bit more power, so that's where I went. This time, it was to be an aluminium chassis, and modulation was to be by the plate-and-screen method, not grid as before, so it was a serious project and took me a couple of

months to get going, ignorant as I was of practically everything. Oddly enough, one of the sticking points was the power supply; it took a long time, before I finally achieved a reasonably stable 600 V supply.



The new transmitter and its BC221, VFO AR88 and spare BC-221

Having by now also learnt a bit more about aerials, the combination of this new kit with a proper aerial strung up at 60 ft between two palm trees meant that at last I had a "proper" station, although still stuck on the 20 m band. Actually, without realising it, I'd struck lucky by entering ham radio at a sunspot maximum; I thought the sort of propagation I was experiencing on 20 m was normal and would be the same every year.

I tried experimenting on other bands using the club gear, but only 40 m showed any promise; both 160 m and 80 m being smothered in thunderstorm static most of the time. The weather in Singapore meant that the "duty" thunderstorm appeared every afternoon without fail; the display of lightning often being truly awesome. It was so consistent that we did very little flying in the afternoons, all supply drops being scheduled for early mornings just after sunrise. We had about an hours' gap between the overnight mists clearing out of the valleys and the cumulus building up and obscuring everything. Of course this also meant that after doing the days' drops, we could have a decent curry lunch and retire to the beach or do a bit of sailing in the afternoons. We thought that this was perfectly justified after having to get up at 4 a.m. or even earlier to sort out the morning's drops.

One of our regular runs in between supply drops was to Hong Kong via the huge American airbase at Clark Field in the Philippines, not far from Manila. There was a very active ham radio club there, and one day, while having a beer in their Officers' Club, one of the American "Lootenants" mentioned, they were having a clear out of obsolete radio kit, and would we like any of it? Would we? Somewhat like Seletar, they showed us a hangar,

full of BC-610's, BC-348's and 375's and much else. No forms to fill in, just take it and go. We arranged that on our return trip from HK we would ensure we had enough empty space in our Dak to take "a few items". At HK we refused to accept any freight on the pretext we had a slight problem with the aircraft and wanted to return empty to Singapore.

On arrival at Clark we suddenly discovered a minor mechanical problem with the aircraft that luckily we were able to fix ourselves at the expense of a days' delay. Amazingly, while there Father Christmas arrived and dumped a lot of old radio gear in the cabin. We got it through the freight handlers at Changi by buying a lot of beer, and together with our earlier windfall it was enough to set up the Radio Club for several years to come. It was like that in those days, but I wouldn't be surprised to hear that similar things might have happened more recently in Iraq and Afghanistan.

Flying around the Far East gave good opportunities for Desert Island DX operation and, amongst others, I was able to spend short periods operating from the Nicobar Islands (VU5), Hong Kong (VS6), Ceylon, now Sri Lanka, (VS7), Penang (VS2), and Sarawak (ZC5). Practically, all these call signs have now changed, so some of these contacts must still be unique. There was little in the way of regulation to hinder it, and it was mainly a matter of finding an unused call sign to use for a few days. I also enlivened boring periods of circuit-bashing at Changi by swapping places with the radio operator and calling CQ on the 20 m band. Rather illegal, but nobody seemed to complain, and quite a few G's got VS1EV/airborne in their logs.

I made only one deviation from the 20 m "a.m." rule. Amongst the "junk" we'd been given by the Americans, I found a small transmitter (forgotten the type number) that could put out 100 W on the 160 m band. There was space at the Changi club site for quite big aerials, so I decided to see what this strange band could do and put up a half-wave dipole, 230 ft long, strung between the inevitable palm trees at about 60 ft up.

I couldn't hear anything much except static and was about to give up, when one night I heard a weak and watery signal replying to my CW CQ – I made a rare exception to my a.m. for this band! I couldn't make out what it was, but a week or so later got a card in the post from an MP4 on Masirah Is off the Arabian Peninsula, saying it was him. Can't be more specific because I've lost the card.

Thus encouraged I worked out the best times for contacting G stations (about 0400 in Singapore) and spent a few odd mornings, when I was up at that time calling CQ. I never worked anyone, but some years later, looking in an old copy of the RSGB Bulletin, I found a listener had sent in a report that he'd heard me, but thought it was a pirate. I didn't persist because 20 m was much easier and I never tried again.

Once I'd got into ham radio properly, I started entering contests and got as high as a first (foreign) place in a VK/ZL phone contest in 1953, but I didn't find listing large numbers of call signs all that interesting, so you won't find me in the CQ WW listings.

However, all good things come to an end, and on the 2<sup>nd</sup> November 1953 I made my last contacts from VS1 and said a sad goodbye to it all. I brought back most of my ham gear with me (three large crate loads!) and, after settling down to a new posting at R.A.F. Shawbury, the R.A.F. Central Navigation School, as Chief Instructor, Radio and Radar Navigation Systems, I re-installed it and went back on the air in 1954 with a nice new U.K. call sign, G3JKV.

Having been accustomed to instant pile-ups out in Singapore as soon as I called CQ, I was disappointed to find that I got very few replies doing the same in the U.K. and thought for some time there must be something wrong with my kit, but it turned out that the attraction of a "G" call sign was about 40 dB down on a "VS1". I never gave up my call sign, but later there were long periods of inactivity while I got married and raised a family. Now, well retired, I've found the time to re-awaken my interest and I've gone all digital. Shame!

I still have the original AR-88D that I had out there and it still works, mainly because I did a major restoration job on it about 20 years ago. Writing this piece encouraged me to disinter it from a mass of cobwebs and switch it on. It worked but of course not very suitable for SSB. I also still have the major parts of my 1953 transmitter but I'm not going to try rebuilding that!

Just as a matter of interest, here's a list of the VS1 stations that appear in my 1952 - 1954 VS1EV logbook. A query means that, for some reason, I didn't list their name. I don't pretend it's comprehensive, and I subsequently lost track of all of them, except John Osborne, VS1BO, who retired back to Braintree and passed away a few years ago. About half were civilian or Government employees and the others military personnel.

VS1AA	John McIntosh	VS1FF	?
VS1AG		VS1FH	?
VS1BO	John Osborne	VS1FJ	Tommy
VS1CZ	Ken	VS1FK	Jack
VS1DQ	?	VS1FN	Ken
VS1DS	Bill	VS1FO	Bill
VS1DU	Mike	VS1FP	Hugh
VS1EG	Dave	VS1FR	?
VS1EH	?	VS1FS	Al
VS1ER	John	VS1FT	Mike
VS1ES	Jim	VS1FU	Jim
VS1ET	Jack	VS1FX	Bill
VS1EU	?	VS1GA	?
VS1EV	(myself)	VS1GC	Derek
VS1FD	Bill	VS1GG	?
VS1FE	Dave		

Buried in my logbook, I found this complete list of VS2 amateurs for 1953.

VS 2 Stations.		
VS 2 AO.	Law Joe Chin.	5 Bukit Bintang Rd. K.L.
VS 2 AZ.	Harbak Singh	2088 Cochrane Rd. K.L.
VS 2 BA.	E.C. Sogara.	Telecoms Dept. Muar Johore.
VS 2 BD.	E.B. Powell.	2 Clifford Rd. K.L.
VS 2 BH.	Lim Thin Chan.	93 Ipoh Rd. K.L.
VS 2 BS.	Eu Kham Kew.	8 Perak Lane Penang.
VS 2 CB.	L. Babin.	1983 Cochrane Rd. K.L.
VS 2 CC.	P. Sathin,anickan.	147 Ring Rd. K.L.
VS 2 CL.	L. Rgn.	686 Rosario Rd. K.L.
VS 2 CN.	N. Lacom.	1316 Petaling Hill K.L.
VS 2 CP.	F. Zaid.	Dublin Estate, Karangan Kedah.
VS 2 CR.	J.E. Hampill.	Perak River Hydro Co. Batu Gajah.
VS 2 CS.	G. Isherwood.	Telecoms H.Q. Ipoh.
VS 2 CA.	W. Ash.	Police Offrs Mess, Vennong Rd. K.L.
VS 2 CU.	L. Ayre.	U.S.O. Bldg. K.L.
VS 2 CY.	Sgt Kendrick.	48 H.Q. Bde, Sigs Sqdn. Ipoh.
VS 2 DB.	S.A. Faulmer.	Inland Revenue Dept. K.L.
VS 2 DF.	Sgt Potton.	Malayan Sigs Regt. K.L.
VS 2 DG.	K.E. Jones.	Telecoms Dept., K.L.
VS 2 DH.	S.P. Upperton.	Idris Hydraulic Tin Mine Kampur Perak.
VS 2 DI.	V.E. Orchard.	37 Green Lane Seremban.
VS 2 DJ.	S.E. Aspinall.	1st Bn. Manchester Regt. Tapah.
VS 2 DK.	J.E. Anderson.	C.P.O Contigent R.Q. Kota Bharu.
VS 2 DL.	W. Sanderman.	A.C.T.(R) House Kota Bharu Kelantan.
VS 2 DM.	Loke Kok Keen.	189a Durmah Rd. Penang.
VS 2 DO.	Sgt Robertson.	R.M.Q. Malay Regt. Port Dickson.
VS 2 DP.	Sgt Pauline.	R.M.M.E. Malay Regt Port Dickson.
VS 2 DQ.	J.C. Perchouse.	Baling Estate, Kuala Ketil, Kedah.
VS 2 DR.	Tan Kim Hoo.	511 Tanjong Bungah Penang.
VS 2 DS.	L.H. Farris.	Malin Nayar. Perak.
VS 2 DT.	Solomon Amateur Radio Society.	Technical College, High Street, K.L.
VS 2 DU.	F. Bergelin.	Malaya Signal Regt. Kuala Lumpur.
VS 2 DV.	G.E. Salton.	Postal Services Dept. Penang.
VS 2 DX.	S/Sgt. D. Barry.	2nd Malay Regt. Batu Gajah.
VS 2 DY.	V. Rajloo.	8 Sillimbin Lane, Ipoh.
VS 2 DW.	Tan Bin Hussein.	c/o Supreme Court. Ipoh.
VS 2 EA.	Vladimir Klein.	674A. Jalan Straits View, J.Bharu.
VS 2 EB.	William Davies.	11G. Jalan Petri J. Bharu.
VS 2 EC.	Jose Soares.	69A, Chamberlin Rd. Ipoh.
VS 2 ED.	Lim Paul.	Telecoms Dept. (W/Shops) Johore Bharu.
VS 2 EE.	Sarjiet Singh.	392 Mason Rd. Raub Pahang.
VS 2 UF.	B. Lievens.	c/o Central Electricity Board. K.L.

Unfortunately I could not find one for VS1, interesting that no R.A.F personnel are listed although there was a good contingent of them based at Butterworth and Kuala Lumpur. Amongst the VS1's I believe about a third were R.A.F.

Walter Blanchard G3JKV.  
Dorking, June 2017.  
RAOTA 2399