

When I Think Back...

by Neville Williams

Charles Slade and 'Calstan' meters

How many long-time radio engineers, servicemen and hobbyists, I wonder, will remember trouble-shooting valve equipment with an Australian-made 'Calstan' meter, or other test equipment produced by Slade's Radio, of Croydon NSW. And how many others will have purchased radio cabinets or built-up receivers from the same source? Or an FM tuner/receiver in the days of the PMG 'experimental' FM transmissions? Maybe you'd almost forgotten...

In the April '92 issue (page 47, col.2) I mentioned that, back in the 1920's, a Mr C.W. Slade had been appointed Technical Editor of the magazine *Radio in Australia and New Zealand*.

It had been taken over, shortly before, by Wireless Newspapers Ltd and had thereby become, at least temporarily, a stablemate of our own predecessor *Wireless Weekly*.

More or less prompted by the remote (publishing) family connection, I speculated whether this C.W. Slade was the same Charles Slade who was later involved in the manufacture of Australian-made test equipment, under the trade names 'Slade', 'Slade-Paton' and 'Calstan'.

To my somewhat rhetorical question, I received a resounding 'Yes!' from Colin MacKinnon (VK2DYM) of Glenhaven in NSW, who appears to have assembled an impressive personal database on Australian radio and related publications. More about that later.

A letter also arrived from Syd T. Clark, now retired at age 72 in Frankston Vic, whom I met in other days when we were both full-time members of the electronics industry workforce.

For those who, in turn, may speculate about Syd Clark, he mentions having served in the Australian Navy during WW2 and, for a period, in the Standardisation Section of the Dept of Defence.

He also mentions a job inspecting amplifier equipment installed in Victorian schools, and being employed by PMG Technical Services in Sydney looking after the ABC's 'experimental' FM transmitter, originally

built in the PMG's Melbourne Research Laboratories.

I subsequently met Syd when he was representing Electronic Industries Imports, of Melbourne. In Navy days, he had been a qualified telegraphist and is still an active amateur (VK3ASC), most likely to be found on weekdays at 08.30 EAST, on 7065kHz SSB.

Syd Clark says that he knew Charles Slade well, having served alongside him in the RAN during WW2. From these and other sources, a reasonably definitive word picture has emerged of the Charles W. Slade in question.



Fig.1: Charles ('Cap') Slade, as pictured in *Wireless Weekly* for May 24, 1935 when he had just left for an overseas trip. Framed pictures displayed in his Croydon headquarters mostly showed him in his naval uniform.

RN 'wireless boy'

Way back in 1909, I understand, he joined the Royal Navy as a 'wireless boy', subsequently rising to Petty Officer. Without knowing his exact year of birth, it would probably have been in the early 1890's.

Petty Officer Slade, RN, subsequently spent three years in Australia serving on HMA submarine J7, before being re-posted to the UK to work as a telegraphist.

He returned to Australia as a civilian in 1923 and took a job as an engineer with W. Harry Wiles, in those days a leading Sydney retailer of wireless components. A promotional item in the *Australasian Wireless Review* for January of that year gives Wiles' address as 60 Goulburn Street, Sydney — which would have been a prime retailing site at that time, within easy walking distance of Central Station, then the common terminus for interstate, country and suburban trains.

In the write-up, Harry Wiles is said to have been a keen experimenter over many years, carrying at the time (I quote) 'a large stock of double and single headsets, loose couplers, honeycomb coil holders, variometers, variocouplers, filament resistances, condensers and plates, terminals, switches and switch points, dials and knobs, crystal detectors, insulators and grid leaks. In fact, every requirement of the experimenter is catered for'.

Charles Slade had picked a good year to come to Australia. It was the year in which public broadcasting was launched, and he found a wireless workplace where it was all happening,

as far as experimenters were concerned. He must have made a good impression because, within two years, he had gained a position as Technical Editor with Wireless Newspapers Ltd, at the time publishers of not only our predecessor *Wireless Weekly* and *Radio in Australia and New Zealand*, but also the *Daily Telegraph Radio Supplement* (1925-26).

Following this stint as a technical journalist, he is said to have launched his own company in late 1926: 'Slade's Radio', selling both components and complete 1920's-style receivers. This was presumably from his long-standing residential address — a large two-storey house in suburban Croydon, with enough surplus space ultimately to accommodate a modest factory.

Slade's Radio

He did well enough to become involved, in 1931, in the manufacture of test equipment — ostensibly 'high quality' in the sense that it was intended to be a cut above the elementary meters and gadgets that epitomised a lot of service work in the battery set era.

That he was serious about the venture was evident from the fact that he travelled overseas to investigate world trends. This was at a time when travelling abroad was a very time-consuming exercise.

Thinking back on those days, when I was still a schoolboy enthusiast in the making, I remember acquiring a couple of 'Readrite' meters from my grandfather, who couldn't think of anything better to do with them. Rather like

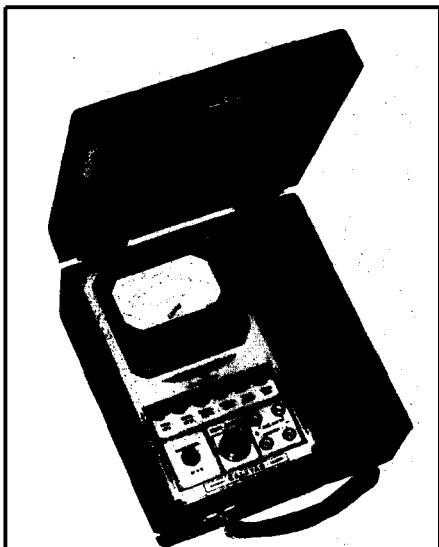


Fig.2: A Calstan multimeter, as advertised in 1939. It was available in three versions: DC only; DC convertible to DC/AC; and DC/AC.

a pocket watch with flying lead(s), they were moving-iron types, similar to the then automotive dashboard instruments and with no special attributes to confirm their ability to 'read rite'!

In fact they were so limited in their application that I still preferred to perform continuity checks with a dry cell and a pair of headphones, listening for the rewarding click that signalled a continuous circuit — even if of high resistance.

Higher quality moving coil, multi-range meters were available in brands such as Weston and Jewell, but the more accessible ones — for a school kid — were still too insensitive for general testing.

Once I became seriously involved in radio, one of my first major investments was — yes — a 'modern' fan-shaped moving coil meter, with a full-scale sensitivity of one milliamper and bearing Charlie Slade's brand 'Calstan'.

It was to become the basis of a 1000 ohms per volt portable multimeter, which I set about building up from scrap plywood, leatherette and a black bakelite panel, hand-lettered with white lacquer. I gave it away some years ago to a young relative but, in chatting recently to Arthur Spring, designer of the once popular Precedent B&W TV receivers, he exclaimed "I still have a meter just like that under my bench"!

It says something for Calstan ruggedness that they survived all those years — because, in the distant 1930's, we lacked the know-how and the technology to protect sensitive meter movements from inadvertent overload. If you bent the pointer, you dis-assembled the case and gingerly straightened it again!

Why both Arthur and I should have chosen Calstan I'm not sure, but it may well have been a matter of chance. As I recall, Australian-made Paton ('Palet') meters were on sale about the same time, so similar that they could easily have been the end product of shared technology or a joint production facility.

Syd Clark's understanding is that Charles Slade had, in fact, worked for a time in partnership with J.W. (Jack) Paton, and Colin MacKinnon apparently shares the same impression. I have not, however, been able to clarify the exact details or duration of any such association.

The pre-war years

Slade's own large two-storey house-cum-factory has since been described to me by a retired engineer as 'a vaguely Spanish conglomeration of pillars and arches'. Another described it as a



Fig.3: A Calstan valve analyser, intended to operate in conjunction with the multimeter shown in Fig. 2. The name 'adman' was said to be a contraction of 'Calibrated to Standard'.

'huge, sandstone structure, more reminiscent of an English country castle than a house in Croydon'. Both stressed that it was a very old building, with out-buildings and its own 'beehive' water well, indicating that it had been erected before reticulated water was available in the area.

Meter movements aside, it was there that Charles Slade manufactured mains-powered receivers throughout the 1930's — some unbranded, some to be sold as 'Calstan', others for 'a Mr Alberti' to be marketed under the 'Zenith' label.

That Slade was still involved in test equipment is evidenced by a full page advertisement in *Radio and Electrical Retailer* for July 27, 1939.

Fig.2, from the advert, shows a push-button Calstan multimeter which was available in three models: model 140, DC only; model D141, convertible to DC/AC; and model 141, AC/DC.

Fig.3 shows a companion instrument for valve evaluation, with a multiplicity of sockets, adaptors and switching to take account of differing pin connections.

Contemporary advertisements in the early issues of *Radio & Hobbies indicate*, however, that the test equipment field was becoming very competitive during 1939 — even before the Asian imports flooded in.

The May 1939 issue carried a full-page advertisement for Paton showing an extensive range of 'Paler' instruments. In the June issue *Radio Equipment* advised readers that they were

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distributors for both Calstan and Palec but, by September, they were offering their own alternatives, in kit form.

In the 'Xmas 1939' issue, the kits had given place to built-up 'University' brand instruments, in direct competition with the other two.

Following the outbreak of World War II, Syd says, Charlie Slade enlisted in the Royal Australian Navy where they both served on the staff of Lt. Nap Harding, Port Wireless Officer on Signal Hill, Garden Island, Sydney. It is there that Syd picked up in casual conversation some of the foregoing information.

Change of direction

After the war, Charles Slade appears to have taken up his business from more or less where he had left off, but with little or no emphasis on test equipment.

In fact, in back copies of magazines to hand, I did not come across a single post-war advertisement for Slade/Calstan meters and the like.

I did note, however, one other subsequent and unique digression — into FM (frequency modulation) radio.

Shortly after the war the Australian Broadcasting Control Board had accepted a proposal by the PMG Technical Services to set up an 'experimental' FM broadcast transmitter in each of the major capitals, (see *EA*, February 1990, p.36), to provide experience in this — to Australia — relatively new technology. Those for Sydney and Melbourne came on air during 1947, carrying a program

'split' from one or other of the ABC's existing AM networks.

The transmissions were not in any sense covert, but they were not promoted to the public-at-large and no program schedules were ever published. In fact, while the program 'split' usually favoured quality music, the content was really at the whim of the duty engineer.

Charles Slade was one of the many hili enthusiasts who built up an FM tuner forthwith — and liked what he heard. More than that, he saw the opportunity of offering FM tuners to non-technical enthusiasts on a direct-order basis.

From a full-page advert in the February 1949 issue of *Radio & Hobbies*, Fig.4 shows a 6-valve FM tuner from Slade's Radio, housed in a 'mantel' style moulded cabinet. Priced at £25, it was promoted as a worthy companion unit to any existing high quality receiver/amplifier.

Fig.5 shows what purports to be 'Australia's first-ever FM/AM Radiogram'. Involving nine valves, it offered FM, AM and shortwave coverage, together with a high grade record changer. The price, including a special VHF dipole aerial, was £125 pounds ex factory.

Coincidentally, and as already mentioned, one of the 'techs' who had been delegated to supervise the Sydney FM transmitter and select the program feed was Charles Slade's old navy contact, Syd Clark.

Components, receivers

In a quick check through other back

copies to hand of *Radio & Hobbies*, I came across another full page advertisement for Slades Radio — itself an indication that his turnover was sufficient to support that level of expenditure on publicity. This time (April 1951) he was offering a full range of console and console radiogram cabinets, to dealers and/or private buyers.

A similar full-page advert in the December 1961 issue emphasised that, as well as cabinets, ready-built receivers were available, along with phono decks.

In between, the June 1954 issue of *R&H* carried an advert for Slade's 'most astounding achievement in 30 years' — a dual car and home radio. Able to operate from 6V or 12V DC or from 240V AC, it could reputedly be transferred from car to home use in 30 seconds. In its day, such a receiver would have been a real designer's nightmare!

Curiously, all of the adverts carried a reference to 'Established 30 Years' — which does not accord with the establishment date quoted earlier, 1926, or take account of the passage of time!

Anecdotal evidence from engineers who had occasion to visit Charles Slade suggests that, in the postwar years, he became progressively more involved in buying up new but surplus industry components which could conceivably be resold cheaply, used in kits or absorbed in unbranded receivers. Typical was a huge consignment of good quality record changers, unwanted by a major manufacturer.

It is probably for this reason that engineers and buyers from contemporary

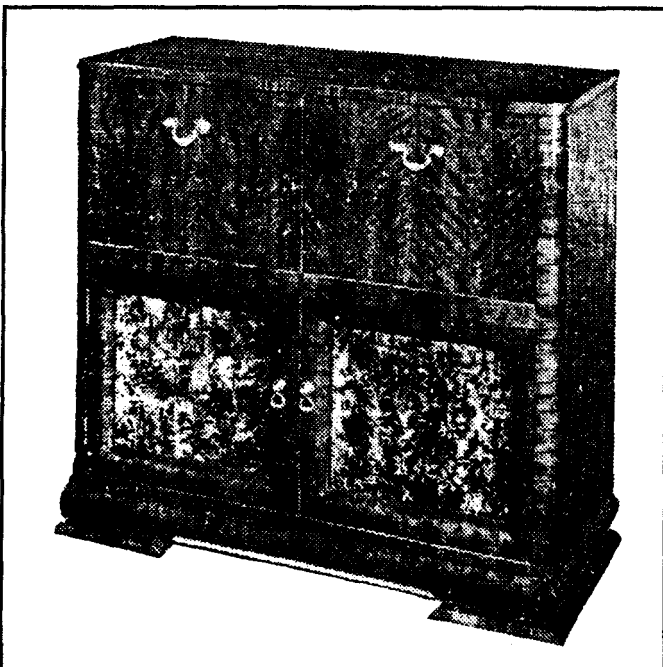


Fig.4: (above) An FM tuner offered by Slade's Radio in 1949, when the only signal to be heard was from a sole experimental FM transmitter in the major capitals.

Fig.5: Claimed to be Australia's first even AM/FM/SW radiogram, this receiver was available, on cash or terms, direct from the factory or registered Slade's Radio dealers.

companies used to visit Slade's Radio to see what was on offer. One of them indicated that, on such visits, he never addressed Slade as 'Mr' or 'Charles'. Arising from his long-standing navy background, he said, he was commonly known by his industry peers as 'Cap' Slade — an appellation that could as easily have referred to what another industry acquaintance describes as 'a shock of white hair'!

And there my story might have ended, if I had not been put in touch with Kevin Piggott, a long-time radio engineer who was involved in the final chapter of the Slade saga. Kevin heads up the Talking Machine Co (phone (02) 645 1836), a family company which specialises in old-time audio equipment ranging from mechanical music boxes to valve-based receivers and amplifiers.

The final chapter

Without knowing any of the details, Kevin said that, as Charles Slade was overtaken by age and other inhibiting circumstances, he was apparently unequal to the demands of his Croydon enterprise. He gradually dropped out of sight, and the already old premises became derelict.

Kevin Piggott became involved when those responsible for the Slade estate contacted him, presumably when they learned of his technical activities and his interest in electronics memorabilia. Would he be willing to look over the contents of the old building and suggest what might still have commercial value, what might be of historical interest and what was fit only for the tip?

A preliminary inspection, he said, revealed an enormous collection of what had once been new components. But unfortunately, the building had been penetrated by vandals and a lot of cartons had been ripped open for no apparent reason. Filing cabinets had been stolen — after their contents had been emptied onto the floor. Even more seriously, the vandals had gained access to the roof and ripped away a lot of the lead flashing, allowing rain-water to seep in.

He nevertheless made an appointment to meet a trustee on the premises on a particular date, on the understanding that they would preserve what he recommended, leaving it to the renovators to clear out the remainder so that they could get on with their restoration work.

Kevin said that, due to a last-minute hitch, he was not able to keep the appointment. By the time he arrived on the scene, the renovators had largely cleared the building on their own account, by the

simple expedient of opening the windows and hurling everything on to the concrete below — and out into the rain — ready for the bulldozers to load it on to **dumptrucks**, along with refuse from the overgrown grounds.

All Kevin could do was rescue what had miraculously survived the mass destruction and offer it to Sydney's Powerhouse Museum, along with a few pictures and documents that had also escaped. What use they make of it over the years will no doubt be dictated by the bugbear of all Australian *museums*: the funds needed to sort, catalog and display what is made available to them.

Such then is the somewhat fragmented story of the Royal Navy 'wireless boy' who will be remembered by his industry peers as 'Cap' Slade of **'Calstan'**; and by me as the man who produced the first decent meter that I ever owned!

Wireless publications

As mentioned earlier, some of the foregoing information was supplied by Colin MacKinnon, VK2DYM — not VK2DYN, as indicated in the April 1992 issue. In that same issue I remarked that 'a startling number of radio periodicals had been launched in Australia over the years, only to pass into limbo'.

Seeking to quantify that number, Colin MacKinnon appended to his letter a printout of a listing he once compiled of Australian radio periodicals, and directly related books that he had been able to *identify up to* the relevant time.

Being in the form of an index, it includes all the titles under which various publications have been known, so that this journal, for example, has been listed separately in all its variations from *Radio and Hobbies in Australia to Electronics Australia with ET*/. Even so, Colin's listing is nearly three pages long and, at a quick count, adds up to over 120 titles.

Without pausing to examine each and every one, I recognised a lot of them; others, I would not have seen, because their circulation was confined to other states. Our own offshoot *Videomag* from the early 1980's does not appear, nor did I notice many of our spin-off publications like *Basic Radio Course*, the *EA Log Book* or the *Hifi-Stereo Annual*.

Perhaps the simplest course is to agree that, however defined, the number of Australian radio-related periodicals was/is indeed 'startling'.

Mentioned in Colin MacKinnon's list is the *NSW Wireless News*, which I had not heard of before. At just the right time and by happy chance, a reader from Woden in the ACT who prefers to

be recognised only by his initials had come across a couple of issues of this very magazine, and posted to me colour photostats of the covers and of typical advertisements. Dated August 15, 1925 and October 3, 1925, the magazines are of normal bookstall ('quarto') size, with colour covers and provision inside for colour **advertisements**. The cover price is twopence!

Curiously, both covers use the same colour graphic, the only difference being in the date and volume number and the nature of the inset advertisement. The advertiser in each case is **P.H. Clark Ltd**, of 38-44 Carrington St, Sydney — of whom I have never heard before. The October advert features 'Tower's Scientific' headphones for 19/6d, while, the August issue offers a Lincoln folding loop aerial for Superhet and Tropicadyne receivers.

Which prompts me to ask: what on earth was a Tropicadyne receiver? P