

When I Think Back...

by Neville Williams

Vincent Stanley: A family involvement in AWA, during its vital formative years

Prompted by the 'When I Think Back' series in *EA* and by stories reprinted in *Australia's Radio Pioneers*, Gerald ('Gerry') Stanley and his sister Phyl Alston (nee Stanley) decided that their late father Vincent Stanley should also qualify for a mention, because of his role at AWA's pioneering wireless centre at Pennant Hills, NSW — as a contemporary of George Cookson and Sydney Newman.

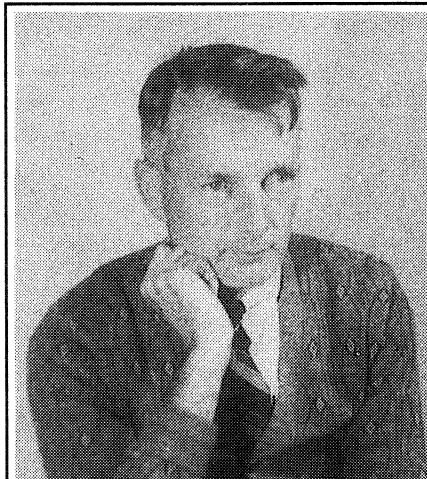
Personally, I had no difficulty in 'Thinking Back' afresh to the period in which the Cookson and Newman stories were set. The site, what's more, is a mere kilometre away for my home, although occupied these days by a couple of schools and a community centre.

And yes, with the benefit of hindsight, Vincent Stanley most definitely qualifies for inclusion in the Pennant Hills story. It remains for me to reset the stage and add another player. (With acknowledgment to W. Shakespeare.)

Back in the early 1930s, when my parents moved from 'the bush' to the suburbs of Sydney, my father continued his habit of taking the family for 'a run' in the car on Sunday afternoons. As often as not he would head for the 'hills' district, to seek out fresh farm produce. En route we would pass a big fenced paddock dotted with an assortment of buildings and towers, comprising what was then referred to as the Pennant Hills wireless station.

Who did exactly what there was not apparent — beyond the knowledge that it had been set up by the Federal Government, years before, to provide wireless/radio communication with other countries and with ships at sea, mainly in Australian waters.

Much, much later, I got to write a story about the complex (*EA* September '91), which included an historic aerial photograph of the Pennant Hills countryside as it would have been in my teenage years. Chosen as the site for Australia's newest and most power-



The late Vincent ('Vin') Edward Stanley, as the Engineer-in-Charge of the Pennant Hills Wireless Station. A contemporary of George Cookson and Sydney Newman, he had an active role in promoting AWA's expansion into wireless communication and public broadcasting.

ful wireless centre, it offered the necessary accessible space at the time — far enough from the coast not to present a too-easy target for a prowling enemy warship!

Authorised in 1910, the station had been opened in 1912 using equipment variously supplied by Telefunken and Father Shaw's Australian Wireless Company, based in Randwick, NSW.

In 1922, the Federal Government purchased a controlling interest in AWA, a

rival company under under E.T. Fisk, and delegated to it responsibility for maintaining and operating the Australian Coastal Radio system. Included were the existing facilities at Pennant Hills.

Cookson and Newman

Under the new arrangement, a technician — George Cookson — was among those posted to the Pennant Hills Centre. A young Queenslander, he had studied wireless by correspondence through ICS while earning a living as a bread carter. He had also gained practical experience during the war as a coastal radio operator in Cooktown, attached to the Royal Australian Navy.

At about the same time, facilities at Pennant Hills were extended by adding short-wave equipment, including a telephony transmitter (2ME) which gave Australia a human voice on the international air waves.

Cookson was later sent overseas to study trends and equipment. On his return, he was appointed as engineer-in-charge of the Pennant Hills complex, with the Cookson family living on site.

Later, with the commencement of public broadcasting, George Cookson was assigned to the installation of several radio stations in Australia and New Zealand, and rounded off his career by supervising installation of the then-huge HF receiving centre at Doonside in NSW.

Born in 1898, some 11 years after Cookson, Syd Newman (see *EA* January

'91) did not get caught up to the same extent in primitive arcs and sparks, low transmission frequencies and tedious telegraphy. A resident of Melbourne, he was influenced rather by the amateur radio movement in that city, and passed through the amateur ranks on his way to becoming a professional engineer for AWA.

As such, his technical background fitted the Fisk concept of shortwave propagation, valve technology, 'Beam' Wireless and increased reliance on telephony. He did much to update the thinking and equipment in the coastal service and, amongst other things, personally supervised the design and installation of the aforementioned 2ME transmitter at Pennant Hills.

Vincent Stanley

Now we come to Vincent ('Vin') Edward Stanley, who was born at Balnarring on the Mornington Peninsula in 1896, making him both a fellow Victorian and a close contemporary of Syd Newman. As a teenager, raised on a small sheep property, he would frequently ride his bike — later motorbike — from the family home to the naval base at Hastings, where he had his first encounter with the practicalities of wireless.

A handyman/hobbyist by nature, rather than an academic, he set to and built his own crystal set — the first step in countless wireless careers, around the 1920s.

With the outbreak of war Vin Stanley joined the AIF, only to succumb to rheumatic fever while still in



At home in one of the staff cottages Vin Stanley, his wife Annie (left) and daughter Phyllis — who later held a secretarial position in the AWA office in York Street. Behind the group is the family 'Radiola'

the Broadmeadow Camp and be discharged as medically unfit. Towards the end of WW1, however, he enrolled with the Marconi School of Wireless and, on gaining his certificate joined the Commonwealth Shipping Line as a radio operator on its 'Austral' cargo ships.

Married in 1923, he abandoned his sea-going job for a position as a technician on the staff of the new broadcast radio station 2FC, established by the Farmers store in Park Street, Sydney. This opened the way to a position as sec-

ond-in-charge to George Cookson at the AWA centre at Pennant Hills, thereby freeing George for assignments on behalf of AWA's Commercial Engineering section.

In the early 1930s Vin Stanley was himself promoted to Officer-in-charge at Pennant Hills and, in turn, was also given special assignments for AWA, such as setting up new radio stations at Goulbourn (2GN) and Katoomba (2KA).

He also had dealings with Charles Ulm and 'Scotty' Allen, who visited Pennant Hills to inspect and discuss what could be the base station for their communications link. He also made several test flights with them, to check on the airborne end of any such link.

In 1938, Vin Stanley turned accumulated leave to good purpose by signing on as radio operator for the *M.V. Merkur* for a round trip to Singapore. It gave him the opportunity to refresh his experience afloat and to visit shore installations in Java, at that time under Dutch control. After that it was back to Pennant Hills...

The Stanley kids

Looking back over the days that they lived on site as 'the Boss's Kids', Gerald and Phyllis Stanley recall that the Pennant Hills centre occupied a paddock of some 400 acres. Large enough to have its own creek, it was located at the intersection of Pennant Hills Road and North Rocks Road. Nearby properties were occupied by peach orchards and poultry farms.



The original 'Telefunken' building, which still carried the badge on an inner wall, long after it had been pensioned off. Vin Stanley set up his office in the front left corner, the remainder of the building servicing as a storeroom. The main central antenna mast remained in use.



The Engine Room, intended to keep the station on air in the event of a mains failure. Gerry Stanley says that the much patched leather driving belt indicated plenty of work in other days, but he could not remember it ever having been run while he lived in the station.

Station equipment

In the centre of the block was a large, guyed, lattice steel mast 300 feet (91 metres) tall, with two smaller masts to support the main antenna diagonally across the block (NE to SW). Various other small masts and antennas were scattered around the property, some of them presumably left-overs from earlier experiments.

The main mast was fronted by what was probably the oldest building on the site. Its role had been to house the original Telefunken transmitter, and Gerald recalls that, while a much larger equipment centre had since been erected, the old building was still referred to as the 'Telefunken' house when the Stanley family lived on the site. One section had been taken over as his father's office, with the rest of the space doubling as a store.

About 50ft (15m) away was another relic of the past — the engine room, plus a workshop. As he recalls, the engine room contained a four-cylinder Gardiner kerosene (?) engine, driving a generator via a (very) wide leather driving belt.

To the best of his knowledge, the system had never been used during their term of residence; but it had the appearance of being capable of responding in an emergency. Certainly, from the number of repairs to the belt, it had seen plenty of service in other days.

The associated workshop facilities were fairly routine — drills, lathes, equipment for sheet metalwork, welding and hand tools.

The new transmitter room, according to Gerald, was a long rectangular build-

identifiable electrical effect. The Stanley bathroom was fitted with a wood burning chip heater!

One other memorable occasion was when 'Dad' — Vin — bought a second-hand refrigerator. It was 'non-operational' but although he knew nothing about refrigerators, he was still confident that he could fix it.

Unfortunately, regular refrigerant gases were virtually unobtainable during wartime but, having learned how the thing functioned, Vin set about converting it, as Gerald remembers, from ammonia to sulphur dioxide! Right or wrong, "it did work, and we were one of a very few families in the area with a refrigerator".

The site was also large enough to present its own fire hazard, from a thick covering of dry grass. Not only did it pose a risk for neighbouring properties, but many of the smaller masts and feeder supports were of wood.

In his day, and with his rural background, Vin was very conscious about this — but was denied the easy option of grazing cattle on the property because the feeder cables were at just the right height for cattle to blunder into them. So Vin suggested running sheep instead, but officialdom withheld permission on the grounds that Pennant Hills was not considered appropriate sheep country!

(Gerald added that, while Vin lost that particular battle, he did not lose the war. When a new receiving station was erected at Doonside, he argued successfully that all feeder cables and structures should be cattle proof!)

Three brick cottages had been erected along the Pennant Hills frontage to house the on-site staff and their families, with a shared tennis court behind. These, too, held long-time memories for Gerald and Phyllis.

That the houses were subject to strong RF fields was evident from the fact that the neon pilot lamp in the Stanley kitchen power point lit up when a certain antenna was in use — even with the associated power switch turned 'off'.

More curious was the situation when a nearby antenna was being used to transmit a regular program for the armed forces. Standing under the shower, one could hear the transmission quite clearly — but not demodulated because of any



More spacious and better ventilated than the old Telefunken cottage, the 'new' transmitter building accommodated the transmitters around the walls, with control and switching facilities in a centre aisle. At this stage, the facilities were manned 24 hours per day.

ing with lots of windows, obviously intended to dissipate heat from the equipment. Entry was via a large roller door, often left open for the same reason.

Transmitters were arranged along the four walls of the main floor. To the youthful Gerry, they were "massive grey structures of sheet steel and angle iron, housing enormous valves that lit up like giant light globes. Their anodes would glow dull red, changing in intensity with the modulation."

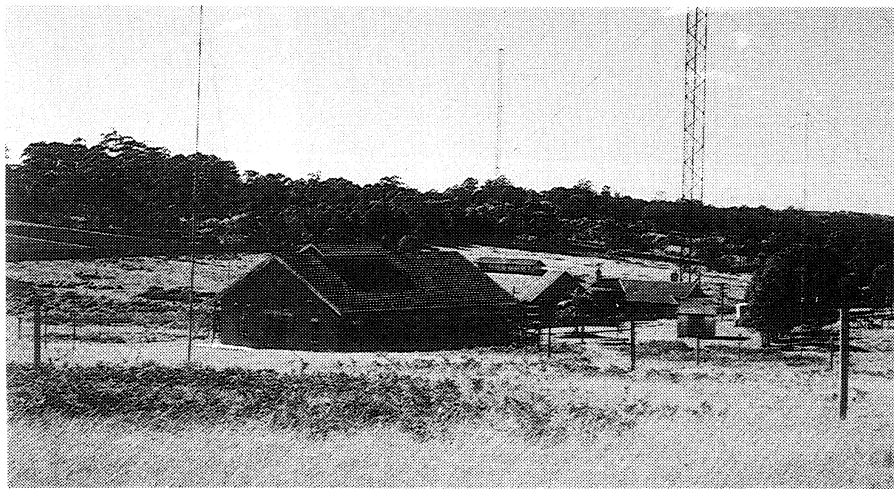
"Large chrome-plated hand wheels adjusted the transmitter operation, controlling large edge-wound tuning coils (as he remembers) about 10" — 25cm — in diameter and comprising about eight turns of copper strip."

Additional equipment

"In the centre of the room was the control equipment — more grey panels covered with knobs, switches and meters — the latter dancing with the modulation."

"In a sort of basement under one end of the transmitter hall was a collection of motor-generator sets suggesting, as I recall, that the system had been fitted out to operate from an emergency supply drawn from Railway Department's DC system."

"The station appeared to be operational for 24 hours per day, in contact with equivalent stations from around the



Looking out over the Wireless Station from the back door of the Stanley cottage, roughly as it would have appeared to motorists on Pennant Hills Road. For the Chief Engineer, troubleshooting on dark, wet nights would have been an uninviting prospect.

world on telephony or Morse Code. A common subject for discussion was the relative effectiveness of radio contact, compared with cable links."

"At the other extreme, one of the transmitters in the system operated a service for the local Hornsby Shire Council, under the call sign KKK7, providing one of the first ever mobile radio services. A staff of two operated the system for each of three eight-hour shifts, plus the outside staff needed to respond to emergency situations."

In the 1930s AWA operated a separate listening centre at La Prouse, with multiple landlines linking it to Pennant Hills. Among his father's effects is a photograph of a social tennis day between the respective staff members, held at the Pennant Hills court.

During this period AWA also managed the technical facilities for Sydney's religious broadcasting stations 2CH and 2SM. The catholic station (2SM, Saint Mary's) operated from a site just across Pennant Hill Road from the transmitting centre. Its protestant counterpart (2CH, Council of Churches) had been set up on property owned by Sir Frederick Stewart at Dundas, close by the present Lottie Stewart hospital.

As an economy measure, AWA arranged for both stations to share a common mast adjacent to the Pennant Hills complex — much to the amusement/annoyance of the rival listener groups. How could the electrons dance simultaneously to the catholic and protestant tunes?

Nowadays the stations have gone their own separate ways, with different shareholding and management. The common mast has disappeared, along with the original AWA communications complex.

The humour of the situation would not have been lost on Vin, who according to his son had a strong sense of humour and a partiality to harmless practical jokes.

On one occasion, a member of the staff discovered and killed a snake on the property. Vin's method of disposing of the carcass was to coil it carefully around the toilet seat, as a greeting to the next visitor.

COMMONWEALTH OF AUSTRALIA



Wireless Telegraphy Act 1905-1919

Commercial Operator's Certificate of Proficiency in Radiotelegraphy and Radiotelephony

FIRST CLASS

This is to Certify that Certificate No. 141 issued to

Mr. Vincent E. Stanley under the
RADIOTELEGRAPH CONVENTION OF WASHINGTON, 1927, is, subject to
the provisions of the Wireless Telegraphy Act and Regulations for the time
being in force, deemed to be valid during the currency of the INTERNATIONAL
TELECOMMUNICATION CONVENTION, MADRID, 1932.

Signature of Certifying Officer *M. Malou* Chief Inspector (Wireless)

Signature of Holder _____ Date 15th October, 1935.

Date _____

The original 'ticket' issued to Vin Stanley after a course with the Marconi School. After about six years as a shipboard operator and practical experience ashore, he became Officer in Charge of the Pennant Hills (NSW) Wireless Station.

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mantling and repairing a clock. His contribution to the process was to surreptitiously drop an extra cogwheel in the pile of 'bits'!

Then there was the time when he noticed a couple of technicians building up a piece of transmitting equipment in the workshop. To his practiced eye it was immediately apparent that it would not fit through the doorway. When the men later confessed their error and embarrassment, Vin said he had known about it all along, but had checked to ensure that the unit could be hoisted out over the partition!

Vic's pet aversion was pompous officials. On one occasion, just after the launching of the Russian Sputnik, a technician had measured and announced its orbital speed using the 'Doppler shift' effect on its transmitted frequency.

To some minor official the announcement sounded like an indiscretion, such that use of the term should perhaps be banned. Vic assured him in no uncertain terms that "even schoolchildren these days know about Doppler effect". When Gerald walked in that afternoon, "Dad bellowed at me: 'What's Doppler effect?' He was just trying to make sure!"

Vin Stanley retired in 1961 to a house quite close to Pennant Hills railway station, where he continued in his hobby of photography and history. He died in 1966.

FOOTNOTE: Phyllis Alston (nee Stanley) obtained a position in the Commercial Engineering Department of

AWA, which administered AWA Beam Wireless and Broadcasting facilities. At the first opportunity we will publish her own story, of life in the AWA tower building from a woman's point of view.

Studios revisited — just in time

Just as I was about to send this column to the Editor, the following letter arrived:

Dear Neville,

As a postscript to 'When I Think Back' in the December EA, I thought you might be interested to know that Dave Tapp, John Warren and I did manage to make a last nostalgic visit to the underground ABC studios, which you so accurately covered in your recent article.

I located the article in the SMH of August 28, 1995 (which incidentally I had not seen), and read that the ABC building was due for demolition in September. So realising that time was running out, I rang Harry Seidler's office and, thanks to the good graces of Gil Williams, I contacted demolition foreman Dave Waterhouse, who was on the site.

The demolition was already in progress. This, by the way was Friday, December 15. I explained our interest to him and he was most cooperative — arranging for the three of us to meet him at 2pm on Saturday, which we did.

The demolishers were already eating away at the upper floors of the 'new' building so, equipped with hard hats and torches, Dave Waterhouse led us down to our old wartime working area. A week later would probably

have been too late.

It was fantastic to walk through the old rooms and studios after some 40-odd years. I still have a clear mental picture of how it was in the 1940s and 50s, and it is sad to see the mess that was left.

Apparently since the ABC moved out it had become a refuge for derelicts and drug addicts, to judge by the junk and needles lying around. The big pity is that no one at the time saw fit to photograph the place, as far as I know, so an important part of broadcasting history is being lost forever.

One thing that I did discover was that my memory of the layout of the bunker, while not exact, was basically correct. The demolition foreman said that the site will be levelled by February, ready for the new 43-story building.

He was interested to hear about the dimensions of the bunker roof, and had been wondering as to whether it would pose a problem to remove — even though they have some impressive machines on the job. I will drive over that way in a few weeks time to have another look, by way of interest.

Thank you for your interest in committing the story to print. At least there is now some record of this bit of history. I rang Geoff Harris the ABC Archivist and told him of your article, and he was intending to get hold of a copy of EA to read it.

My best wishes for a happy Christmas and New Year.

George Paterson (VK2AHJ)

And thanks also to you, George. It's initiatives such as yours and of the Stanley family that makes it possible for EA to compile and publish social history relative to electronics. ♦