

Volume 32 No. 1 August 2022

S.A. Group Newsletter



Above: The Eddystone "Atlantic Two" (2 valve) Model short-wave receiver from 1927



Above: The Eddystone "Orion 7000" DSP HF Model transceiver from 1996

This month we are featuring EDDYSTONE radio receivers and transceivers in all their glory at our August meeting. But where did they originate?

<u>See Inside:</u> "The Eddystone Story".

Historical Radio Society of Australia Inc. – S.A. Group

Web Site: www.hrsasa.asn.au

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South, S.A. 5045.

New Committee for 2022-23

President:	Graham Dicker	0414 323 099	<u>pres@hrsasa.asn.au</u>
Vice President:	Keith Ellison	0407 304 028	vicepres@hrsasa.asn.au
Secretary:	Ian Smyth	0488 488 776	sec@hrsasa.asn.au
Treasurer:	John Crawford	8344 4978	treas@hrsasa.asn.au
Public Relations:	Alan Taylor	0417 859 074	alantaylor47@bigpond.com
Committee Member:	Warren Lane	0400 272 556	warren@hrsasa.asn.au
Committee Member:	Peter Howard	0424 563 732	peter@hrsasa.asn.au

Co-Opted Additional Members/Responsibilities:

Centenary of

Broadcasting in SA:	Tony Bell	8269 4092	antony.k.bell@gmail.com
Shop Keeper:	Rob Olding	0422 096 341	shop@hrsasa.asn.au
Valve Bank Manager:	John Crawford	8344 4978	vbm@hrsasa.asn.au
Newsletter Editor:	Ian Smyth	0488 488 776	sec@hrsasa.asn.au
Website Editor:	Ian Smyth	0488 488 776	sec@hrsasa.asn.au

Planned Meetings for the Remainder of the Year:

Sunday 28th August

1:00pm to 3:30pm

EDDYSTONE TRANSCEIVERS - "SHOW & TELL"

Members who have any model of Eddystone are invited to bring them along and talk about their history, restoration and performance.

- St Cyprian Church Hall, 70, Melbourne Street, North Adelaide, SA, 5007

Wednesday 14 September

12noon (for 12:30pm start)

MEMBER'S LUNCHEON

Formerly known as the "Retirees" Luncheon, it is open to non-retirees and partners of members - The Earl of Leicester Hotel, 85 Leicester Street, Parkside, SA, 5063

Sunday 25th September

1:00pm to 3:30pm

AUDIOPHILES DAY - HOME VISIT

This meeting is the re-scheduled visit to Warren

Lane's home that was postponed from last year.

- The address will be given directly to members closer to the date.

Sunday 30th October

1:00pm to 4:00pm

CLUB AUCTION

Members wishing to book a table (max. 20 items) please contact the Secretary in advance.

- St Cyprian Church Hall, 70, Melbourne Street, North Adelaide, SA, 5007

Wednesday 12th November

12 Noon (for a 12:30 start)

MEMBER'S LUNCHEON

Formerly known as the "Retirees" Luncheon, it is open to non-retirees and partners of members

- The Reepham Hotel, 273 Churchill Road, Prospect, SA, 5082

Sunday 27th November

1:00pm to 3:30pm

"ASTOR" BRAND RADIOS - "SHOW & TELL"

Members who have any model of ASTOR Radio are invited to bring them along and talk about their history, restoration and performance - St Cyprian Church Hall, 70, Melbourne Street, North Adelaide, SA, 5007

Saturday 10th December

12 noon (for a 12:30 start)

CHRISTMAS LUNCH

Our annual Christmas Luncheon - Wives and partners are very welcome to attend

- The "Maid of Auckland" Hotel, 926, South Road, Edwardstown, SA, 5039

Wanted to Buy, Sell or Exchange

Are you looking for a hard-to-get part? A strange knob, or a replacement coil? Have an item that you'd like to sell? Why not place a free, classified advertisement on our website? Go to the TRADING POST page of our website at: https://hrsasa.asn.au/page-16/ and have a look at what's on offer right now and help a fellow member. It changes frequently. Why not make use of this resource yourself?



And now.....some reports from our AGM, held at the July meeting

President's Report for 2021-22 by Graham Dicker:

The year that was at HRSASA



Well, another year has passed us by, most have rotated some of our treasures from one member to another, our wives not understanding our addiction to add more stuff to the collection, many of them curiosity pieces to tinker with, in our long-term interests in self-education. After doing the deceased estate clear out for my wife's parents, "she who must be obeyed" has worked out that next year I will be 70 and as such, now classified as an oldie who is no longer a collector, but a **hoarder !!!!!!** - I am not sure how that works, but regardless, she worked out I have about 100 cubic metres of stuff that now needs to go before I am too old to carry it.

The plan is, that if we downsize in the next few years about 1 cubic metre is permissible!! It has come to me several times that our club has members of all interests in electronics and particularly radio, and some collections are of somewhat size, volume, mass, weight or lastly quantity. MY Rola/Byer/Plessey tape machine collection is now around 250 with about half restored, and with a long-term school friend, Peter O'Neil, we have around 350 collectively in our custody. That is more tape machines at any one time than ROLA did in their factory, a very sobering thought.



Above: Part of the refurbishment "production line" of tape recorders.



Above: Part of the collection of Plessey, Rola and Byer tape machines.



Above: A rare stereo Byer 77 recorder



Above: One of a few CEI77 MKIV stereo machines ever built



Above: A Rola 33b



Above: My first Byer 66 that I purchased back in 1996

All photos by Peter O'Neil and Graham Dicker

On the other side of things is Greg Lamey's collection of restored ex-broadcast transmitters. My favorite is an STC 2.5kw AM job, on which I cut my teeth as a young Broadcast Engineer. These machines needed skill and brute force to move, let alone the fortitude required for working with EHT in the realms of 3.3KV.

For me, it has been a pleasurable year to work with a very experienced committee, with special thanks to our secretary Ian Smyth, who has made my job so much easier.

In passing I would encourage all members to take a few photos of their collections and write a few lines about them, so we call all share our experiences by way of the SA newsletter. - **Graham Dicker.**



Finance Report 2021 – 2022 John Crawford

John reported that the HRSASA's financial position was greatly improved over the past 18 months, mainly due to several donations from the sale of Don Hosking's collection (through

the generosity of Tony Bell); an increase in sales through both the Valve Bank, and our Store, managed by Rob Olding, and less overall expenditure due mainly to Covid -19 affecting our programme.

Overall, our Profit & Loss Balance Sheet recorded a balance increase from \$8,994.98 at the end of the last financial year to \$13,293.41 at the end of this financial year.

Items of note raised in the report were:

- Unpaid membership fees still outstanding for 2022-23 by many members
- The donation box at meetings is still not covering the \$49.50 rental fee for each use of the Hall.
- The Financial records of the HRSASA will be audited this year by Graham Dicker. A sincere vote of thanks was made to Craig Jackson for his auditing of the books for many years.

A copy of the PROFIT and LOSS Statement for 2021-22 as presented at the AGM is reproduced below for your information.

	OCIETY OF SOUTH AUSTRALIA	
	Balance Sheet.	
July 1, 2021	1 to June 30, 2022	
INCOME	2021-2022	2019-2020
Interest	6.62	39.00
Donations	180.00	
Auction & Sale Income	3,527.00	3,593.00
Shop Sales	500.00	598.40
Valve Bank sales	2,831.60	965.14
Functions/ Meetings	540.00	840.2
Rent cash box	348.30	
Other Income	2,103.00	2,180.50
Total Income	10,036.52	
	10,036.52	8,216.24
EXPENDITURE		
Bank Service Fee		4
Postage & Newsletters	849.70	905.25
Shop Stock	344.00	492.60
Functions/Meetings	1,577.39	1,288.00
Valve Bank	=	7.50
Web Name/ Hosting	120.00	260.00
Auction Vendor Payment	2,847.00	2,942.00
Sundry	-	298.09
Total Expenditure	5,738.09	6,193.44
Transfer and closure of Term Deposit to	5,312.97	
Bendigo Account on 16-07-2021	5,512.37	
Carried forward from 30 June 2021	22.10	
Plus Income	8,994.98	6,972.18
Less Expenditure	10,036.52	8,216.24
Balance 30 June 2021	5,738.09	6,193.44
	13,293.41	8,994.98
BALANCE SHEET	2020 2024	
Bendigo Bank Cheque Account	2020-2021	2020-2021
Bendigo Bank Term Deposit	13,093.41	3,487.46
Cash on hand (Float)		5,307.52
BALANCE 30 June 2022	200.00	200.00
	13,293.41	8,994.98
	Sig	ned: John Crawford
		Honorary Treasurer



Secretary's Report 2021-22 Ian Smyth

It is very pleasing to note that despite the 3 or 4 home/garage sales we have held for deceased estates in the last 12 months, the past financial year has seen the biggest jump in our club membership for many years! (Only one sale was for a member and two were for members downsizing, the rest were requests from the public for help.)

We have gained 14 new members, with 4 of them joining in the last 6 months. They are:

George Kis – Mark Bainbridge - Scott Tremethick - Shane Ceglar - Darryl Sampson - Gavin Dowling - Graham Evans - Kenneth Palmer – Craig Maitland - Gavin Bakkelo - Paul Simmonds - Brian Cox - Ian Schomburgk – and Colin Lark. Some of these names and faces are already well known, but we'd like to formally acknowledge your membership of the HRSA-SA Group and say WELCOME. We hope to get to know you all personally, and that you get the opportunity to contribute to this Association in your own way over the next few years.

As Secretary, it's my job to highlight some of the successes of the past year. While it has been difficult complying with the changing COVID-19 regulations, our schedule of events went very close to plan. Our first "home visit" was a huge success when we visited Phil Flaherty's farm at Goolwa and explored his "Radio Shack" and collection of Military radios and transceivers, all lovingly restored and working. Phil's partner Cathy gave a great demonstration of working dogs in action. The BBQ was a welcome addition as was the presence of wives, partners, and children. A great family day out.

Events at the Hall have included two workshops on wooden cabinet restoration and two Instructional workshops where members bring along projects and get help from 3 very experienced members. We've had a book sale, a fixed-price sale and every 2 months, a Members Luncheon at either the Reepham Hotel or the Earl of Leicester Hotel, all of which have been well attended.

The Valve Bank (as stated in John Crawford's Financial Report) has benefitted from several large donations this year and now houses well over 10,000 valves. It's a daunting task for the volunteers who gather at Aztronics every Thursday morning to sort, collate and shelve these valves for purchase.

The Knob Bank too has been progressing slowly. The initial purchase from Rob Bruce's father's collection has been sorted and collated. Currently they are being photographed but help is needed with this task. The catalogue will be uploaded to our HRSASA website where members will be able to purchase knobs at VERY reasonable prices.

The Association website continues to grow with more resources being added. The homepage is updated at least fortnightly (often weekly) keeping the upcoming events Calendar updated. We have had 41 enquiries from members of the public via the "Contact Us" page, each of which has been personally followed up.

The monthly Programme of Events has, we hope, met the expectations of members. From the survey that was carried out in 2020, we have tried to include activities for all 3 of the major interest groups within our membership (a) the "amateur radio" or "Ham" group, (b) the domestic radio collectors/restorers, and (c) the HI-FI or "Audiophiles" group, who probably have been the most neglected! - In 2002-23 we hope that the balance can be restored by the new Committee.

It has been a pleasure to serve you, the members of the HRSASA. I hope you have not been overwhelmed by the constant stream of emails from me, but I feel that good communication is vital to the success of this Association. I have enjoyed reading and sending out the various Newsletters from our interstate colleagues through their local newsletters (as well as the glossy stuff in "Radio Waves".) A personal highlight for me was seeing the article written by Christopher Ratcliff get published in the latest Radio Waves. 18 months ago, when we gave Chris his first modern computer, he could barely download an email let alone use a Word Processing program. Now he's a published author, and expert in the use of You-tube! A living example of the benefits of "lifelong learning". *Ian Smyth Secretary – HRSASA*



A BRIEF HISTORY OF EDDYSTONE RADIO

by Graeme Wormald, (Eddystone user's group, UK)

The story of Eddystone Radio is forever linked with the City of Birmingham, in the Midlands of England, 100 miles (160km) north-west of London. Birmingham is one of Britain's "newer" cities, having grown enormously after the introduction of the canal system in the late 18th century. Metal goods of every description were produced, and it was rightly known as *the city of a thousand trades*.

IN THE BEGINNING

In the year 1860, Stephen Jarrett of Gloucestershire joined in partnership with Charles Rainsford of Birmingham. The former was a pin manufacturer and the latter a commercial traveller, and so began the firm of Jarrett & Rainsford.



Premises were taken at No 7 Broad Street, Islington, Birmingham, but unfortunately, the site no longer exists.

Stephen Jarrett was also a manufacturer of jewellery of all descriptions, but the main business was the manufacture of pins. Business settled down well and in 1870 the firm moved to larger premises at 48 Broad Street, near the present-day Symphony Hall.

Here they were to remain for the next 39 years until early in the 20th century. In the meantime, the company acquired a new office boy in 1898.

A NEW KID ON THE BLOCK

He was 15-years old George A. Laughton who had two years' previous experience in a coal merchant's office. By all accounts, G.A.L. (as he was always thereafter described) was a bright lad and soon showed the entrepreneurial instinct which was to create an empire. By 1904 he was an assistant manager with the firm.

In 1909 the move to Kent Street took place, near the Birmingham markets area and just round the corner from the Bromsgrove Street location of Balmoral Works; later to become famous as the home of Eddystone Radio.

THE STRANGE ORIGIN OF STRATTON & CO

In the year of the Coronation of King George V, 1911, G.A.L. was running a small section of Jarrett & Rainsfords, (J&R) selling coronation badges and flags.

Components were bought in from a small supplier who suffered from the ravages of alcohol and supplies were erratic. To cut a long story short, G.A.L. bought the business for £50 and acquired four hand presses and two girl workers. He named this enterprise Stratton, reputedly after the hero in a novel his wife was reading. (In practise this is slightly questionable, as his eldest son, also named 'Stratton', who was probably about 7 years old by then!)

The following year, 1912, G.A.L. was elected a director of J&R. He would then have been 29 years old. The two companies followed their parallel courses, with Stratton & Co concentrating on men's jewellery. During the First World War the firm manufactured parts for the famous SE5 British fighter plane and acquired much experience in the use of aluminium and duralumin alloy. This was to be of great value in the radio business.

TWO FIRMS AMALGAMATE

In 1919 J&R became Jarrett, Rainsford & Laughton Ltd., (J.R.&.L.) and the following year acquired Stratton & Co Ltd. Although artificial jewellery was back in production, pins were still a staple part of the company's output.

NEW TECHNOLOGY ARRIVES

In November 1922 the British Broadcasting Company (BBC, and forerunner of the present Corporation) was formed and started broadcasting with low power transmitters in major British cities. The best known of these stations was 2LO, the London station. The Birmingham station (5IT) was opened the next day. Young Stratton Laughton became a 'wireless fan'. Equipment was expensive. Home construction was widespread.

HOLLYWOOD STRIKES



Although talking pictures were not to arrive until the late 'twenties, the cinema had become a major source of entertainment during the First World War.

The 'Roaring Twenties' were created by this media, especially by the film "Flaming Youth" starring 'Jazz Baby' Coleen Moore.

She introduced the 'pageboy' haircut, which needed no hairpins at all. Stratton's market dwindled overnight from six tons to one.

This happened towards the end of 1923 and Stratton Laughton suggested to his dad, George (Abe) Laughton that the shortfall in sales be made good by entering the radio component field.

This is where we enter a slightly grey area in the company's history. Following total loss of records due to enemy action during 1940 there is very little hard evidence to go by.

Stratton Laughton claimed that the company started manufacturing components for home constructors in 1923, shortly followed by complete receivers in 1924. He also claimed that Stratton's was one of the first firms associated with the original British Broadcasting Company.

My own personal view is that these claims are slightly premature. Stratton's first radio-related patent was filed in February 1925, as was the Trademark "Eddystone" and the Lighthouse device.

The company's single £1 BBC share certificate (which escaped the blitz) is dated September 1925. By the end of 1925 there were 1716 members of the BBC. The first written reference to an Eddystone receiver (that I can find) is in the Wireless World listings for spring 1926. ("Eddystone Twin" – early version.).

It is my own belief that Stratton Laughton and his friends were involved in 'Wireless Mania', (as were most bright young men at the time) during 1923/4 and that towards the end of 1924 decided to produce simple components. I don't really think the first complete receivers were constructed until the end of 1925 and marketed in 1926.

In the meantime, we do know that Stratton's took on board Harold Cox and Arthur Edwards (both Amateur radio users) during this period and that these two were to provide a driving force for the next forty years. Their names crop up again and again in Eddystone history. Harold became Technical Director and Arthur became Sales Director, continuing with the firm until the late 1960's.

THE SHORTWAVE REVOLUTION

By 1927 short waves were well established across the world, due to the pioneering work of early radio amateurs. One of these was Gerald Marcuse, (G2NM), who obtained a permit from the British Postmaster General to transmit speech and music to the British Empire.





Power was to be 1 kW input, wavelengths 23 and 33 metres and the first transmission was on September 11th, 1927. The experiment continued for almost a year. The BBC also started experimental broadcasting on 20 metres from G5SW, Chelmsford (Marconi) in November 1927.

The result was a demand for shortwave receivers from expat British citizens all over the world. Stratton & Co were ready to fill that need and (in about)1927, produced what is believed to be their first short wave set, the "Atlantic Two" (featured on the front cover of this Newsletter.)

By 1930 the company had ceased making medium wave only sets and from then on everything was focused on the higher frequencies.

RAPID EXPANSION

Sets were produced by the company in bewildering variety. Eddystone receivers were used by many scientific expeditions of the 1930s, such as the British Arctic Air Route Expedition and the Hudson Strait Settlement Expedition.



In 1935 work started on VHF experiments and portable Eddystone fivemetre equipment was used by the 1936 Mount Everest Expedition.

During the years 1935-8 much effort was made demonstrating to the police and military to gain acceptance of VHF equipment for use in cars and tanks, but without success. It was not until after 1938, when war was looming, that Stratton's were to serve a purpose of national importance in this field.

WAR CLOUDS FORM

The London Metropolitan Police Authority covering some 95 police stations and Scotland Yard, sent an urgent request to Stratton & Co to tender for an automatic wireless telephone network. This was accepted, and work commenced day & night to complete the system for July 1939.

AFTER THE 1940 BLITZ

The installation worked perfectly throughout the war. Similar equipment was supplied to many prominent police forces including Birmingham, Glasgow, and Edinburgh. (We are dependent on salvaged ephemera for

all our information of the 'twenties and 'thirties. Virtually nothing survived the blitz bombing of Birmingham during October and November 1940.)

J.R. & L., in conjunction with the Air Ministry (for whom they were manufacturing radar IFF components) took over a disused swimming centre known as 'The Bath Tub' at West Heath on the southern outskirts of the city. All that remained of their old workshops were two signal generators, a beat frequency audio oscillator, and a Q meter! New benches and fixtures were made from timber taken from the swimming pool dressing cubicles; tools were purchased from local ironmongers and within three months production had outstripped pre-blitz figures. Type 358 receivers were back in full production. All this improvisation was done under the direction of Harold Cox as Arthur Edwards had joined the Fleet Air Arm.

During the war no further damage took place and over 4.5 million components for use by H.M. Forces were manufactured. Just over 4,500 transmitters, 7,264 receivers and 45,000 other supplementary pieces of equipment were supplied, for Police, Army, Royal Air Force, but mainly Admiralty requirements.

After the war ended times were difficult in the radio business. War surplus depressed world markets. A major decision, perhaps an error, was made not to re-enter the VHF two-way radio field. It was decided to concentrate on specialised communication equipment, well-constructed for performance and stability and selling on these points rather than price; a policy which brought success for many years.

TIMES CHANGE

In 1964 the death of George Abe Laughton brought the company to a crossroads. Eddystone Radio was the odd man out in a family company that produced goods for the cosmetic market and the "Woolworth's" trade. The family felt that the communication business had grown in complexity beyond their understanding. A decision was made to sell the radio business to one of their largest customers, Marconi, in 1965.

Solid state was just starting. It was to overlap valve production by about a decade and the last valve set was manufactured in 1973. At about this time Marconi made a policy decision that their subsidiary, Eddystone Radio, should pull out of the High Street market and concentrate purely on professional receivers.





The H.F. receiver market was starting to shrink as competition from Asia and Japan started to bite. The size of merchant and passenger ships grew, requiring fewer radios. The ocean liner 'cabin set' market vanished in the new 'air travel for all' regime. Satellite communication became a practical reality.

Around 1980 the company entered the broadcast transmitter field in partnership with the BBC. This was very successful and took things into the '90s when Eddystone and the BBC pioneered the new Digital Audio Broadcasting (DAB).

END OF AN ERA

In 1995 the lease on the premises at the Bath Tub expired and the company relocated on a small industrial estate in Selly Oak, within the City of Birmingham, ready to take up the digital challenge. Unfortunately, the expected expansion didn't materialise.

The end of the cold war had seen a big drop in government orders and the increase in satellite communication further reduced the demand for professional HF receivers. Combined with an economic crash in Malaysia, where a large VHF/FM broadcast transmitter order was cancelled, this spelled the end of Eddystone's ownership by Marconi, itself in a parlous state.

In 1999 the firm was bought by Megahertz Communications. After three years, Megahertz themselves went into receivership and Eddystone Radio (radio receivers) was sold to Ring Communication. The Transmitter section was sold to SBS (Sound Broadcast Systems) who took the production down to Hastings but then moved them back to Alcester after a couple of years. They moved again a few years later and ended up on a science park at Pitchill near Evesham. A few years later they went bust again and were bought out by their main creditor who did the production of PCB's etc for them. He set them up again on the same estate as they were originally on in Alcester and they look to be a much better operation now, selling FM transmitters to the BBC World Service and other overseas broadcasters.



From: "The Advertiser" – 14th. April 2022

Good things come to those who wait....

One of the best pieces in my collection is this Byer 77Mk II stereo, with auxiliary spooling unit, which came from the ABC at Collinswood.

Back in the late 1970's, Graham Dicker worked for the ABC and gave me a guided tour of the building. He showed me this and another identical machine and said that they were be sold at the Pennington auctions. Back then, the pace of life was a bit slower, so we fast forward to 1980 and the day of the auction. I arrived a few minutes too late and both machines had been sold to separate bidders. This machine had been bought by a friend for \$100, and I tried to encourage him to sell it to me, but no! - he planned to keep it and make transistor amplifiers for it!!!

Ten years later in 1990 I caught up with that friend and I mentioned that I just bought another Byer 66 Mk II and he said, "Are you still interested in that stuff?", I said "Yes, I'm still collecting." Then he told me that the stereo machine had been sitting in a cupboard, untouched for 10 years and if I wanted it I could have it for what he paid, \$100. Good things come to those who are prepared to wait.



Submitted by Peter O'Neill - 25/07/2022. (A friend and colleague of Graham Dicker.)

Component Corner

Many new members are probably wondering where to obtain components and valves. The following is a list in order of preference:

HRSA-SA Group Shop: We are working towards a publishable catalogue. Contact our Shopkeeper, Rob Olding on 0422-096-341 to enquire, or place an order. Rob's email address is: shop@hrsasa.asn.au

AZTRONICS, 170 Sturt Street, Adelaide. Houses the HRSA-SA Group valve bank and modern components. Will source components for members. Great supporters of the HRSASA.

HRSA Melbourne (see *Radio Waves*) Houses the Victorian HRSA valve bank and odd passive components and kits, plus resource books written especially for members.

WES Components, Sydney. The catalogue is viewable on-line, and orders can be placed through the Shop Keeper or Secretary, as the SA Group has an account, through which we get "trade discount". Go to: https://www.wes.com.au