

AUSTRALIAN NUMISMATIST



2009

Publication of the
NUMISMATIC ASSOCIATION OF VICTORIA
(Incorporating the Numismatic Society of Victoria, founded 1914,
and the Association of Australian Numismatists (Melb.), 1939)

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NUMISMATIC ASSOCIATION OF VICTORIA
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Cover: *Turks and Caicos Islands 5 crowns coin, 1994, issued to commemorate the 25th anniversary of the first lunar landing in 1969 by Apollo 11*

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RESEARCHING YOUR FAMILY'S MILITARY HISTORY

By Ross Wilkinson, NAV 1120¹

“Granddad, what did you do in the War?”

INTRODUCTION

Very often this question is left too late as our family veterans, who served in armed forces around the world, either die before they tell their story or become intellectually incapable of now answering our questions.

However, all is not lost. There are a variety of sources of information through public records, official war histories and military unit histories that are readily available. In today's computer age, there is more and more of this information being digitised and becoming available to us via the Internet, so where do we start?

There are any number of professional military or genealogical researchers available here and overseas to assist you for a fee. There are also some Internet genealogical sites that provide the means to build your family tree whilst accessing a range of information sources including military, but, also for a fee. One of the most popular is Ancestry.com. Also, if you have basic information about unit names or numbers, regimental numbers or the like, the RSL can provide some assistance or direct you to a unit association still in existence.

However, for the purposes of this paper, we are going to research the Wilkinson family through the Internet and see how far we get and what's readily available. We will look at medals that were awarded for service and how to look after them.

But, first, a warning! Our family, like others, has grown up with certain stories such as “great grandfather, Hugh Mackenzie (figure 1), was a Cameron Highlander who fought at the Battle of Omdurman in 1898 and

¹ Ross presented this paper at NAV meeting 956 on 17 April 2009 and with it won the Max Stern Trophy for 2009

should have been awarded a Military Medal in the First World War when he was killed.” Be prepared for family myths to be busted by the truth.

No, Hugh Mackenzie did not fight with the 1st Battalion Queens Own Cameron Highlanders at Omdurman. He was actually with the 2nd Battalion in Gibraltar when that battle was fought.² Yes, he was killed at Loos in France in 1915 but there is no evidence that he fought gallantly enough to win a bravery medal.

So, on with the chase. Search areas will include the National Archives of both the UK and Australia, the Australian War Memorial (AWM), the Commonwealth War Graves Commission and other relevant sources.

THE WILKINSON FAMILY



*Figure 1 – Corporal Hugh Mackenzie, 1st Battalion Queens Own Cameron Highlanders
(Approximately 1895)*

² Hugh Mackenzie was previously with the 1st Battalion and transferred to the 2nd Battalion on its formation in 1897

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

To provide a practical example to work from, we will examine the Wilkinson family.

Before he was killed, Hugh Mackenzie married Barbara Bishop and the union produced a number of children, one of whom was Barbara Mackenzie (figure 2).



*Figure 2 – Colour Sergeant Hugh Mackenzie and family (Barbara front left)
(Approximately 1912)*

After Hugh was killed at Loos in 1915, Barbara met an Australian serviceman, Sergeant William Thomas Wilkinson, who had been severely wounded at Bullecourt. They married in Edinburgh in 1918 and William took his new bride back to Australia. This union produced four children including three sons who saw war service in World War Two – Thomas Hugh, William Wallace and Ian Keith Wilkinson. This paper will show the research into the service history of all of these men.

Finally, I will touch briefly on my wife's grandfather, Lieutenant Commander Gerhard Heyen RD Legion of Merit (US) RANR(S), to highlight some difficulties that may be encountered in research.

COMPANY SERGEANT MAJOR HUGH MACKENZIE, QUEENS OWN
CAMERON HIGHLANDERS

SHORT SERVICE.

ATTESTATION OF

No. 2165 Name Hugh Mackenzie Corps Cameron Highlanders
Joined at Inverness 18th August 1882

QUESTIONS TO BE PUT TO THE RECRUIT

1. What is your Name? Hugh Mackenzie
2. In or near what Parish or Town were you born? Inverness
3. Are you a British Subject? Yes
4. What is your Age? 18
5. What is your Trade or Calling? Domestic Servant
6. Have you resided out of your Father's house for three years immediately preceding the date of enlistment? No
7. Are you Married? No
8. Have you ever been sentenced to imprisonment by any Court of Law? No
9. Have you ever been discharged from any part of His Majesty's Forces, with honour or dishonour? No
10. Have you ever been sentenced to any punishment by any Court of Law? No
11. Have you ever been sentenced to any punishment by any Court of Law? No
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98. Have you ever been sentenced to any punishment by any Court of Law? No
99. Have you ever been sentenced to any punishment by any Court of Law? No
100. Have you ever been sentenced to any punishment by any Court of Law? No

SUBSTITUTE OF MAGISTRATE OR ATTESTING OFFICER

The Recruit above named was examined by me and I find him to be a fit and proper person to be accepted as a recruit into the Cameron Highlanders.

Signature of Recruit Hugh Mackenzie
Signature of Witness James Macdonald
Signature of Magistrate or Attesting Officer James Macdonald

Date 18th August 1882

Figure 3 – Enlistment 1888 of Hugh Mackenzie

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

Hugh Mackenzie left his poor highland farming home and enlisted in the Cameron Highlanders in 1888. His regimental number was 2148. After 23 year's service he elected to retire in 1912 with the rank of Colour Sergeant. He was awarded the Long Service and Good Conduct Medal (LS&GC) in 1910, which included a monetary award of 5 pounds (figure 4).

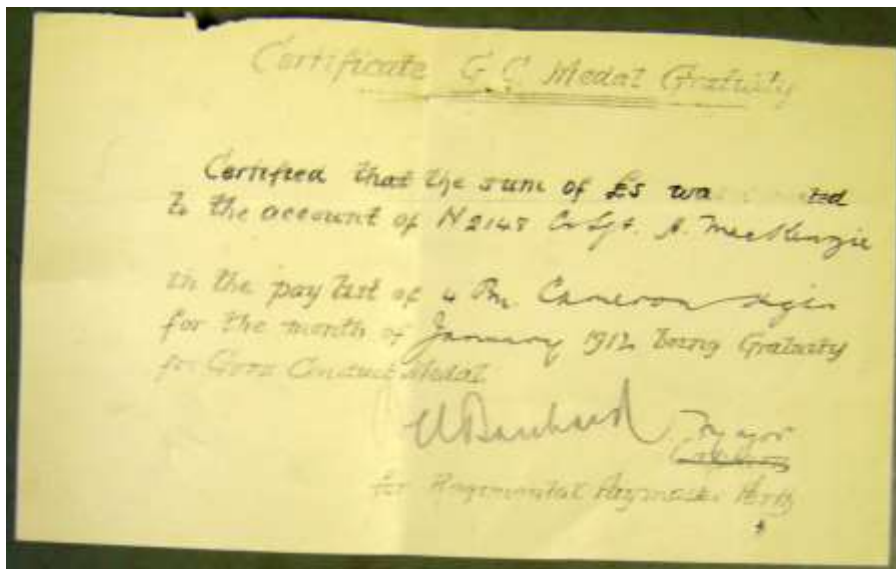


Figure 4 – Good Conduct Medal record

With the outbreak of World War One, he re-enlisted in 1914 in Kitchener's "New Army" as the first reinforcements of the British Expeditionary Force (BEF). His regimental number was 6118. He was immediately promoted to Company Sergeant Major (CSM) and posted to 5th Battalion Cameron Highlanders. This battalion was part of the 9th British Division that was the first division of the New Army to see service in France.

In September 1915, the Division was ordered to attack Loos as part of a general advance. It was famous for being the first time that the British Army used gas. The Highlanders were tasked with attacking and holding the Hohenzollern Redoubt. Enfilading fire decimated the attacking forces but they took the position. By the end of the day only 70 out of the original 700 Camerons were alive in the redoubt. They withstood several counter attacks until the third day when CSM Mackenzie, went forward with 35 of the Highlanders to form a counterattack. He never returned and his body was never found or identified.



Figure 5 – Commonwealth War Graves Commission Record for Hugh Mackenzie

The family of every member killed in action received a bronze memorial plaque inscribed with the deceased's name without rank to show all were equal in death. The plaque came with a certificate and letter from the King. It was more commonly referred to as the "Dead Man's Penny" (figure 6).

A search of the National Archives of the United Kingdom identifies the existence of Hugh Mackenzie's pre-war service from 1888 until 1910. Unfortunately whilst I could identify that it existed, including his award of the LS&GC medal, I couldn't view it. At this point I did an on-line search and engaged a researcher in UK to look all this up for me. I was provided with a CD record of his findings that consisted of a photocopy of Hugh Mackenzie's pre-war service record, the entry of his award of the LS&GC and the War Diary of the 5th Battalion for the immediate action at Loos at the time of his death.



Figure 6 – Commemoration Plaque for Hugh Mackenzie

It is published knowledge that many World War One records were destroyed by fire in the World War Two London Blitz and I have done searches that show some digitised records with burn or scorch marks. Hugh Mackenzie's records of his re-enlistment do not exist and are believed to have been totally destroyed at this time.

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5th Battalion The Queen's Own Cameron Highlanders.

(No. 2 Form 100, 1916, Revised 1917)

DATE, TIME AND PLACE	SUMMARY OF EVENTS AND DISPOSITIONS	ARMED AND EQUIPPED TO OPERATE
26.9.16 1.55 AM	By and during the night many of the strongest of the company were ordered to go first and help of the 15th Battalion was 26th Inf Bde being relieved by 73rd Bde. Relief was carried out without much trouble.	
27.9.16 8 AM	The batt ⁿ moved into its old position. Yet but once. The 15th machine gunners were now called up, which made the strength of the batt ⁿ in the trenches about 100 rank of file, also four officers of the batt ⁿ were brought up.	
27.9.16 9 AM	The 26th Bde were asked to send some 100 men into the Redoubt to stiffen up the 73rd Bde. This was done about 10 AM. 20 men going from this batt ⁿ . German bombers reported in front of us to be progressing, a bombing party from this batt ⁿ was organised which at- tively blocked the advance of the many bombers.	
27.9.16 2.51 PM	The 26th Inf Bde were ordered to charge again to DUNDEE TRENCH at 3 PM. This was carried out, & the remnants of the brigade reached the Redoubt but were finally blocked by the 73rd Bde.	

Figure 7 – 5th Battalion Cameron Highlanders War Diary

276 SERGEANT WILLIAM THOMAS WILKINSON, 2ND MACHINE GUN BATTALION AIF

William Thomas Wilkinson enlisted in the First AIF on 17 January 1916 at the age of 35 years and 11 months and was posted to the 15th Machine Gun Company. He was promoted to Sergeant but was later wounded severely with gunshot wounds to the face, left leg and arm on 22 April 1917 at Bullecourt whilst serving with the 22nd Machine Gun Company. He lost the sight in his left eye.

[illegible]

3702	Pte.	William	William Robert	56th Battalion	20.9.1916	
3071	Pte.	William	William Robert	2nd A.S.W.	22.12.17	W.F.A. 20.9.16
307	Pte.	William	Walter Scott	Stationers	11.1.16	W.F.A. 20.9.16
	Lieut.	William	William Stanley	A.S.W.	1.9.16	W.F.A. 20.9.16
	Sgt.	William	William Thomas	5th Battalion	1.9.16	W.F.A. 20.9.16
3644	Pte.	William	William Thomas	18th Battalion	17.9.16	W.F.A. 20.9.16
3617	Pte.	William	Walter Frank	9th Battalion	9.8.16	W.F.A. 20.9.16
3686	Pte.	William	Charles	10th Battalion	9.8.16	W.F.A. 20.9.16
3698	Pte.	William	William Delville	10th Battalion	9.8.16	W.F.A. 20.9.16
3698	Pte.	William	Robert	56th Battalion	20.9.16	W.F.A. 20.9.16
3698	Pte.	William	Robert	18th A.S.W.	18.9.16	W.F.A. 20.9.16

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AUSTRALIAN IMPERIAL FORCE—WORKING ROLL—continued.															
No.	Name in full.	Rank.	Date in service.	Regiment (No.).	Location at date in service.	Date of last return.	Date of release.	No. of months' service.	On					Remarks.	
									Leave Extension.		Leave Extension.				
									From 1st day of month to 1st day of month.	To 1st day of month.	From 1st day of month to 1st day of month.	To 1st day of month.	To 1st day of month.		
101	Reilly, David Joseph	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
102	Williams, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
103	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
104	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
105	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
106	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
107	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
108	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
109	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
110	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
111	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
112	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
113	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
114	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
115	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
116	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
117	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
118	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
119	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
120	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
121	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
122	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
123	Reilly, William Thomas	Private	1918	18th Trench Company	France	1918	1918	1918	1918	1918	1918	1918	1918	1918	1918
124	Reilly, William Thomas	Private	1918	18th Trench Company</											

After meeting and marrying Barbara Mackenzie in Edinburgh in 1918, William Wilkinson's records show that he was demobbed from the AIF in the UK and undertook to return to Melbourne with his new bride at his own expense and absolve the Australian Government of any liability arising from this venture.



Of interest, William Wilkinson volunteered as one of 5000 Special Constables during the 1923 Melbourne police strike. This force was made up of mainly ex-servicemen under the Command of General Sir John Monash. I have an English pattern military helmet painted black and with the word "Police" painted on it as a relic of this time.

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RESEARCHING YOUR FAMILY'S MILITARY HISTORY

VX 39689 BOMBARDIER THOMAS HUGH WILKINSON 2/4TH ANTI-TANK REGIMENT

8TH DIVISION AIF

Hugh Wilkinson grew up in Eaglemont but travelled to Queensland to work as a jackeroo. With the outbreak of war he enlisted in the 5th Queensland Light Horse (CMF) with the registration number 76563 (figure 12). He returned to Melbourne in 1941 and transferred to the AIF where he was posted to the 2/4th Anti-Tank Regiment in the 8th Division.



Figure 12 – Private T Hugh Wilkinson in Queensland Light Horse uniform

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The 8th Division was sent to Malaya shortly after to shore up the British forces there. Most of the 2/4th A/tank were sent to Malaya but a Battery was sent to Darwin. The regiment achieved success at Bakri when it ambushed and destroyed nine Japanese tanks during the withdrawal down the peninsula towards Singapore.

Bombardier Wilkinson went into captivity and Red Cross records show that he died of illness, whilst working on the Burma – Thailand railway, on 20 March 1944.



Figure 13 – Search at Commonwealth War Graves for T Hugh Wilkinson

VX 26621 CORPORAL WILLIAM WALLACE WILKINSON EM 2/14 BATTALION

7TH DIVISION AIF

William Wallace Wilkinson, the second son of William Thomas Wilkinson, enlisted in the 5th Battalion Victorian Scottish Regiment (CMF) in 1938. With the outbreak of war in 1939 and, with the fear that the CMF would

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

not serve overseas, he transferred to the AIF. William was initially posted to 2/2nd Heavy Anti-Aircraft Regiment but transferred to 2/14 Australian Infantry Battalion in 1940 where he was posted to the Carrier Platoon as a driver (figure 14).



*Figure 14 – Corporal William W Wilkinson
(taken after return from Middle East and wearing Africa Star ribbon)*

The battalion was part of the 21st Brigade in the 7th Division and after initially serving in Egypt, saw action against the French Foreign Legion in Syria. With the outbreak of the Pacific war, the 7th Division were the first Australian troops returned from the Middle East to meet this threat. The 2/14 Battalion was the first AIF unit to climb the Kokoda Track in Papua to relieve the CMF troops already there and meet the Japanese threat.

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After being bombed in Port Moresby and then seeing action at Gona in Papua and the Markham-Ramu in New Guinea, William was repatriated to Australia after suffering severe recurring bouts of malaria. He saw out the remainder of the war attached to Land Headquarters (LHQ) at Victoria Barracks in St Kilda Road, Melbourne. He was awarded an Efficiency Medal for his continuous CMF and AIF service.

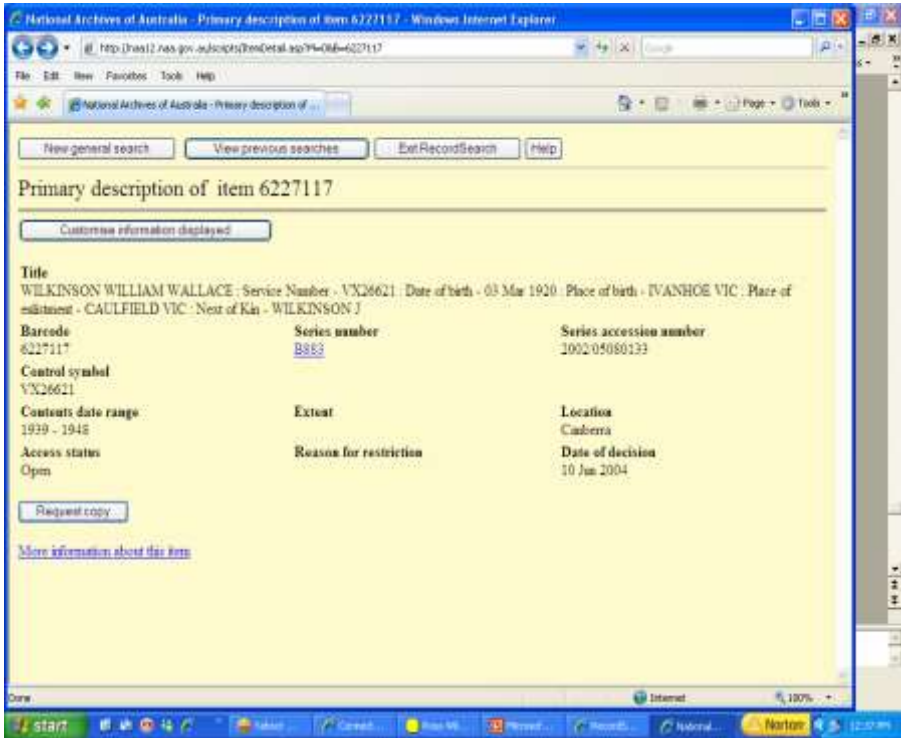


Figure 15 – NAA records search for William W Wilkinson

431233 WARRANT OFFICER IAN KEITH WILKINSON RAAF

Ian Wilkinson was the youngest son of William Wilkinson Senior and enlisted in the RAAF in 1943. After qualifying as a Wireless Operator and Air Gunner (WAG) he was promoted to Warrant Officer and posted to a top secret Liberator squadron that flew clandestine operations behind Japanese lines dropping supplies to units such as the Australian New Guinea Administrative Unit (ANGAU), Allied Intelligence Bureau (AIB),

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

Far Eastern Liaison Office (FELO) and other Coastwatchers. The Squadron had a 33% return rate from missions.



The screenshot shows the RAAF Nominal Roll website. At the top, there is a header with the RAAF logo and a navigation menu with links: Home, Navy Canteen Staff, WW2 Overview, About this Nominal Roll, Glossary of Ranks, and Contacts and Links. Below the header, there is a table with columns: NAME, SERVICE NUMBER, HONOUR, and PLACE. The table contains one row for Ian Keith Wilkinson. Below the table, there is a section titled "Service record" with a list of links: produce a certificate of this service record, get help with the certificate, view an explanation of the service record details, and request a full service record from the National Archives of Australia. Below this, there is a "Service Record" table with the following data:

Service Record	
Name	WILKINSON, IAN KEITH
Service	Royal Australian Air Force
Service Number	431233
Date of Birth	29 May 1925
Place of Birth	IVANHOE, VIC
Date of Enlistment	14 Jun 1943
Locality on Enlistment	Unknown
Place of Enlistment	MELBOURNE, VIC
Next of Kin	WILKINSON, WILLIAM
Date of Discharge	16 Feb 1946
Rank	Warrant Officer
Posting at Discharge	ASGRS
WW2 Honours and Gallantry	None for display
Prisoner of War	No

At the bottom of the page, there is a copyright notice: Copyright Commonwealth of Australia 2002. and two links: Acknowledgements and Disclaimer.

Figure 16 – AWM records Ian K Wilkinson

LIEUTENANT-COMMANDER GERHARD HEINRICH HEYEN MBE RD MID LEGION OF MERIT (US) RANR (S)

Lieutenant-Commander Heyen was a merchant sea captain sailing square-rigged ships to various Pacific islands when he enlisted in the Royal Australian Navy Reserve (Seagoing) [RANR(S)] in 1935. He was called up for active service by the Navy in 1939 and initially served on HMS *Kanimbla* where he was awarded a Mention in Despatches for outstanding service.

In 1943 he was seconded to the United States 5th Amphibious Fleet to lead a group of British, Australian and New Zealand officials, known as the “Foreign Legion”, who were tasked with the local planning of the invasion of Tarawa.



Figure 17 – Legion of Merit Certificate for Gerhard Heyen



Figure 18 – Lt Comm Gerhard Heyen RANR(S) (centre) on lead landing craft at Okinawa

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Lt-Commander Heyen remained with the US Navy, under the command of Admiral Kelly Turner USN, until the end of the war and was heavily involved in the planning for the invasion of Okinawa (figure 18) and Operation Olympic, the planned invasion of the Japanese home islands. For these operations he was awarded the United States Legion of Merit (Officer Division) (figure 17).



Figure 19 – Captain Gerhard Heyen Master Mariner, Master of Barque Polly Woodside

As far as the family is aware, he is the only non-US citizen to command a US warship in combat.

Of interest, after the war, Captain Heyen was appointed as Marine Superintendent for the Territory of Papua New Guinea and in retirement was appointed Master of the restored Barque *Polly Woodside* (figure 19). He was awarded the Member of the Order of the British Empire (MBE) for his work on the restoration.

MEDALS – IDENTIFICATION, STORAGE AND DISPLAY

This is one of the most contentious problems of any family when an ex-serviceman dies – what to do with his medals and memorabilia. Donate them to the Australian War Memorial or to the local RSL or keep them in the family? If the latter, do you split them up or elect one family member as the custodian. Once an individual's awarded medals are split amongst family members, it is very hard to get them back together.

The medals worn by ex-service persons are divided into two groups being:

- Honours and Awards to recognise bravery or exceptional service
- Service medals to recognise areas and length of service.

Bravery awards are worn before others and foreign awards are worn after all Australian medals.

HUGH MACKENZIE



*Figure 20 – Hugh Mackenzie's Medals
(the Long Service and Good Conduct Medal is shown second instead of fourth)*

Hugh Mackenzie's medals are as pictured (figure 20) and comprise:

- 1914-15 Star
- 1914-18 British War Medal
- Allied Victory Medal
- Long Service and Good Conduct Medal.

These are held by a cousin in a mounted presentation case.

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

WILKINSON FAMILY MEDALS

The Wilkinson family medals have been collected in two presentation cases and are held by the eldest grandson/son, my elder brother.

Case One

These medals are shown in figure 21.

William Thomas Wilkinson:

- 1914-18 British War Medal
- Allied Victory Medal

Thomas Hugh Wilkinson:

- 1939-45 Star
- Pacific Star
- Defence Medal
- 1939-45 War Medal
- 1939-45 Australian Service Medal

William Wallace Wilkinson:

- 1939-45 Star
- Africa Star
- Pacific Star
- Defence Medal
- 1939-45 War Medal
- 1939-45 Australian Service Medal
- Efficiency Medal



Figure 21 – Wilkinson family Medals (Case 1)

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

Case Two:

These medals are shown in figure 22.

Ian Keith Wilkinson:

- 1939-45 Star
- Pacific Star
- 1939-45 War Medal
- 1939-45 Australian Service Medal



Figure 22 – Ian Wilkinson's Medals (Case 2)

GERHARD HEYEN

The Heyen medals are currently held privately by my wife while the family decide how to preserve them.

Gerhard Heinrich Heyen (figure 23):

- MBE
- 1939-45 Star
- Africa Star
- Pacific Star
- 1939-45 War Medal (with Oak Leaf for mention in despatches)
- 1939-45 Australian Service Medal
- Reserve Decoration
- Legion of Merit (Officer)



Figure 23 – Gerhard Heyen Medals

ON-LINE RECORD SEARCHES

For people searching Australian ex-servicemen, the Australian War Memorial website is the best starting point with a help area for people embarking on family military research. This can be found by putting the following in your browser:

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

<http://www.awm.gov.au/research/family.asp>

The next area of search is the nominal roll to determine the family member's enlistment and service details. The World War One rolls are very faint and difficult to read. The following link in your browser will connect you to the nominal roll search field where you will need either the name or regimental number:

<http://www.wv2roll.gov.au/>

The following link provides information on when and what ships World War One servicemen left Australia:

http://www.awm.gov.au/research/people/nominal_rolls/first_world_war_embarkation/³

If the family member died on active service the following link will provide the information on when the serviceman died and where he is buried. It may provide a link to the Graves Registration cards to show where initial points of recovery and burial were. This site also shows the location of the family member's name at the Australian War Memorial:

http://www.awm.gov.au/research/people/roll_of_honour/

If the person was awarded an honour of some description it may be located by using the following link:

http://www.awm.gov.au/research/people/honours_and_awards/

There are a variety of items that have been acquired and catalogued into the War Memorial's collection such as photographs taken by war photographers of people or locations. These may be accessed on the following website link:

<http://www.awm.gov.au/search/collections/>

Information about specific unit actions in the First and Second World War can be collected from the copies kept by the War Memorial of the War Diaries required to be kept by all military units. They may be found at:

http://www.awm.gov.au/collection/war_diaries/

The Official Histories of conflicts, commissioned by the Australian Government, may be accessed through the following page at the War Memorial:

<http://www.awm.gov.au/histories/>

³ Note that there are no spaces in website addresses (URLs); apparent spaces are actually underscores (ie _) which have been hidden by the underlining of the URL. These occur in several of the URLs given here.

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Finally, the Australian War Memorial has a collection of all military unit histories that have been written along with other publications. Unit histories may contain more information on individuals than is available in the Official Histories. To find out what information is available put the following address in your browser and, using the resulting search facility, type in the name of the unit. Most of these publications can be found at State Libraries or State RSLs in the capital cities or at the AWM itself:

<http://www.awm.gov.au/collection/books/>

Individual service person's records may be sought through the National Archives of Australia (NAA). Entry at the home page will provide access to the records search page where the researcher can register as a "Guest" to gain access to the search page. Details including full names, dates and regimental numbers will reveal whether a record exists or not. If a record exists, an associated symbol will identify if the record has been digitised or not. If it has it can be downloaded and copied immediately for no fee. If it is not digitised, then the payment of a \$16.50 fee will authorise the NAA to digitise the file and make it available online. Alternatively, for a payment of \$28 NAA will photocopy the file and mail it to you. All this can be arranged by putting the following in your browser:

<http://www.naa.gov.au/collection/recordsearch/index.aspx>

Records of the final burial location of servicemen who died on active service, details of the cemetery and grave location can be sought from the Commonwealth War Graves Commission. If the serviceman was killed but his body not recovered, then this record will advise where the serviceman's name is recorded on a memorial:

http://www.cwgc.org/debt_of_honour.asp?menuid=14

Up until 1975, if the service person was awarded bravery or exceptional service honours and awards, these were under the imperial honours system and were published in the London Gazette upon recommendation by the Australian Government to the King or Queen. The link is:

<http://www.london-gazette.co.uk/>

Australian honours and awards can be checked through the Australian Government website "It's an Honour". A simple search by name readily provides whether such an award exists or not and the link is:

<http://www.itsanhonour.gov.au/honours/awards/index.cfm>

RESEARCHING YOUR FAMILY'S MILITARY HISTORY

If your family search involves British service personnel then a similar search can be conducted through the United Kingdom archives at:

<http://www.nationalarchives.gov.uk/>

SEARCH DIFFICULTIES

There are a number of factors that inhibit family research including:

- Family myths and misconceptions;
- Is the name spelt correctly?
- Is the right name used?
- Do we have enough detail to start a search?

Also, the search may result in a “warts and all” record of service. For example, can we accept that our relative was less than perfect and may have numerous misdemeanours such as being “absent without leave” (AWL)? Or, is it worse and our relative has been confined because of a sexually transmitted disease or has been court martialled for desertion or a self-inflicted wound.

The records will reveal this and, if already digitised, are there for the world to see!

Many servicemen in both world wars enlisted under fictitious names or those of their relatives for a number of reasons. Bulk enlistments during war provided the opportunity for people to “lose” themselves from those seeking them. False names create barriers to research and we must be creative and look for name variations or misspellings.

Certain information may not be current and needs to be cross-checked against actual service records. For example, the service certificate available from the Australian War Memorial and taken from the Nominal Roll has provision for the unit at discharge to be noted. So after World War Two ended, soldiers were asked what unit they wanted shown and many would respond with the best unit they served with regardless of which one they were actually with at discharge. This information can only be checked from the actual service record of the soldier through the National Archives.

Finally, in seeking my wife's grandfather's United States records, we have reached bureaucracy at its maximum. Access is restricted to certain immediate family members that do not include grandchildren. We are

looking to commission a book on his life but need to find a family member who falls within the defined access limitations to get access.

CONCLUSION

The Wilkinson military history has not ended there. My elder brother spent twenty seven years in the regular army after being conscripted in the sixties and I spent several years in a CMF regiment in the late sixties. What happens to our respective medals and information has not been decided yet.

The search goes on. We are learning more and more. This is a brief outline of where family military research can take you. There is much more.

We have expectations but need to grapple with the truth. I attend many funerals of World War Two ex-servicemen to deliver eulogies. Much of my information comes from battalion histories or from information supplied by my father. I have been known to embellish the truth slightly but base the story on fact. The most common reaction is to have relatives, wives and children come to me afterwards and say, "We never knew that, Dad never talked about the war."

My own father is now dead and friends of his are also dead. I have many unanswered questions. The World War Two ex-servicemen are now like the World War One ex-servicemen of a few years ago and it won't be long before there are none of them left.

Don't leave it too late. Ask the questions while you can, read the books and seek answers. Don't let myths perpetuate.



MICHEL DE RUYTER

By Jerry Plones, NAV 1143¹



*Figure 1 – Dutch banknote of 100 guilders with portrait of Michiel de Ruyter
Design by R.D.E.Oxenaar – Issued from 1970 to 1985*

EARLY CAREER

Michiel de Ruyter was born in 1607 at Vlissingen in the southern Province of Zeeland in Netherlands². During his boyhood years he climbed the Church spire as a dare. Zuytdorp coinage was minted in Vlissingen.

He went to sea at the age of 11 with the Lampsin Brothers (who were merchants), working initially in a rope factory.

In 1622, at the age of 15, he was fighting in the Dutch army, under Prince Maurits of Nassau, at Bergen op Zoom against the Spanish. After this he rejoined the merchant navy.

From 1623 to 1625, he was an agent for Lampsin Brothers in Dublin working as a book keeper. While in Ireland, he picked up the Gaelic

¹ Jerry gave this talk at NAV meeting 957 on 15 May 2009. Jerry died suddenly on 7 August 2009. As Jerry's talk was in point form, I have taken responsibility for its conversion to this final text format – Ed.

² Jerry was also born in Vlissingen

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language – he had a phenomenal memory and learnt a total of six languages.

The Company traded in wheat, rye, furs, and butter. He travelled as supercargo to the Mediterranean, Barbary Coast (Morocco), and Caribbean. From 1633 to 1635 he was whaling in Greenland as first mate. In 1636 he became skipper. From 1637 to 1640 he was hunting for Dunkirkers, who had been raiding Dutch merchant shipping, and taking booty for Lampsin Brothers.

In 1641 he served under Admiral Gijzels at Cape St Vincent, against a Spanish-Dunkirker fleet, where he commanded the *Haze*. In 1642 he bought the *Salamander*. From 1642 to 1652 he sailed as a privateer as well as for the Lampsin Brothers in the Mediterranean and Caribbean where he was liberating Christian slaves and fighting corsairs; this resulted in him becoming wealthy.

NETHERLANDS

A timeline of relevant Netherlands history follows:

1384 to 1477 – Netherlands was ruled by the Burgundians (east-central France).

1477 to 1556 – Habsburg Netherlands – duchies, counties and bishoprics (some under Holy Roman Empire).

1556 – Spanish Habsburg rule under Phillip II (son of Charles V).

1568 – Uprising against Spanish rule was led by William the Silent, Prince of Orange; this was the start of the 80 Years' War.

1579 – “Act of Abjuration” saw Northern provinces ally with Utrecht. In 1581 they declared their independence from the Spanish as Republic of the Netherlands.

1584 – William I of Orange assassinated.

1588 – The Provinces became a Republic.

1648 – Treaty of Munster – Spain recognises independence of United Provinces of Netherlands.

1650 – William II of Orange dies. Republican government is formed (Johan de Witte becomes Raadpensionaris) – no stadtholder. De Ruyter

MICHEL DE RUYTER

was to form an excellent relationship with the Raadpensionaris and his brother Cornelis (who on occasions came aboard De Ruyters flagship, a deputy for his brother – even at the time of battle).

BACKGROUND & REASONS FOR WAR

Charles I of England was beheaded in 1649; Oliver Cromwell then became the effective head of government and Protector of the "Commonwealth of England". Five new commissioners were appointed to the Naval Board under the *Naval Act* of 1551. Oliver St John went as ambassador to Netherlands to form an alliance. English started building large "Capital" warships (ie with a large number of guns and men). Appointment of Generals at sea. This would have a direct impact on the Dutch and their Navy.

The Netherlands was a strong maritime trading power and the English wanted to take over a significant share of this trade. England passed a law requiring that only English ships, and ships from countries of origin, could import goods into England. Cromwell also revived an ancient English requirement that all foreign ships in the North Sea and the Channel to strike their flags in salute to English ships – something that Dutch ships were loath to do.

Before the outbreak of the first Anglo-Dutch war, Holland had very few warships *per se*, forty four merchant ships were converted as men of war. Holland was principally concerned with trade, not war. During the course of the first war, De Ruyter (a prodigy of Maarten Tromp) was to back Tromp in recommending that the war fleet be rebuilt; this, as events unfolded, had become imperative.

FIRST ANGLO-DUTCH WAR 1653-54

At the outbreak of the first Anglo-Dutch war De Ruyter entered Naval service under the Admiralty of Zeeland. The first skirmish took place at Dover. This action commenced the first Anglo-Dutch war. Maartin Tromp was given the charter to protect Dutch shipping. He met an English fleet under Robert Blake in the Channel – two Dutch ships were sunk and Tromp resigned from the battle. In this battle, Robert Blake used a line ahead of fleet (maximum use of broadside) – he was the most tactical and innovative English Admiral ever.



Figure 2 – Jan van Galen served as Commodore of the Dutch Fleet in the Mediterranean during the First Anglo-Dutch War; he was killed by a cannonball in 1653 (69 mm)

THIRD BATTLE

At the **third battle** at the Duins (battle of Kentish knock) – the two fleets sailed through each other twice while firing broadsides. Admiral De With was refused to allow to board Tromp's old flagship *Brederood* by its crew. He signalled the fleet to attack and thirteen captains sailed away. De Ruyter and Evertson persuade Admiral De With to withdraw with great difficulty; the result was an English victory.

FOURTH BATTLE

Battle of Dungeness – After this battle the Dutch controlled the Channel in winter. Legend of Tromp tying a broom to head of mast. However it didn't last long!

FIFTH BATTLE

Before the **Battle of Portland** the English fleet was refitted, naval instructions were rewritten and better rates of pay for the men were introduced. Tromp had 80 warships and a convoy of 200 merchantmen and was opposed by Blake, Monck, Deane, Lawson and Penne. There was a running battle in which Tromp's rearguard held off English. Several Dutch warships and 40 merchant men were lost. In a masterful stroke, Tromp escaped at night. English Naval supremacy was restored.

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PENULTIMATE BATTLE

At the **battle of Nieuwpoort**, Tromp set out to sea with 98 warships and six fireships. Monck, Deane, and Lawson had 110 warships and five fireships. Deane was killed by a Dutch cannonball. Blake joined in later. Eleven Dutch ships were sunk and nine were captured, no English ships were lost. Monck imposed a blockade which brought overseas commerce to a standstill. Hundreds of Dutch merchant and fishing vessels were captured.

LAST BATTLE

Battle of Ter Heide – Tromp sought to join up with With de Witte's fleet against Monck's blockade. Tromp died at Ter Heide and De Ruyter was appointed Commander-in-Chief. Ten ships were sunk.

De Ruyter, De With and Evertsen formed a rearguard action. The English were unable to maintain the blockade and returned to port; this was a strategic victory for the Dutch. Tromp's death was a blow for several reasons.

The war ended with the **Treaty of Westminster** in 1654.



Figure 3 – Cast bronze medal of Maarten Tromp (70 mm)

1654 TO 1666

In 1654 Johan de Witte offered supreme command of the Dutch fleet to De Ruyter who refused. Colonel Jacob van Wassenaer Obdam was then appointed supreme commander – a decision that Johan de Witte would later

regret. De Ruyter accepted an offer to become Vice Admiral from the Admiralty of Amsterdam; he then moved his family to Amsterdam.

During 1655 he was on convoy duty to the Mediterranean to protect Dutch trade; in doing so, he captured corsairs. Met Commodore Lalande again.

NORTHERN WARS

In **1656**, during the Northern Wars, Gdansk was under siege by the Swedish. King Charles X of Sweden had invaded Poland in an attempt to set himself up as King of Poland. The Dutch relied on grain imports from the Baltic region which came through Gdansk. The Dutch intervened by sending a fleet which liberated Gdansk.

In **1658** Sweden invaded Denmark. Copenhagen was liberated in a bloody melee giving a Dutch victory (the Dutch were supporting the Danes). De With was killed in the battle for Copenhagen. At the time, De Ruyter was blockading Lisbon (Portugal).

In **1659** De Ruyter commanded an expeditionary fleet which liberated Nyborg from the Swedes; De Ruyter was knighted by Frederick III of Denmark.

AMERICA

In **1664** De Ruyter recaptured slave forts on Gold Coast of Guinea from the English. The next year he crossed the Atlantic with secret orders to raid English colonies on the American east coast and to recapture New Amsterdam³ (which the English had recently seized). He initially attacked Carlisle Bay in Barbados; he then went to French Martinique for repairs before sailing north. He captured several English vessels and delivered supplies to the Dutch colony of St Eustatious. He then captured several English fishing vessels off Newfoundland.

SECOND ANGLO-DUTCH WAR 1665-67

The underlying cause of the second Anglo-Dutch War was again mainly about dominance of trade. In 1665 England declared war on Holland. The war resulted from two incidents – the capture of Dutch slave forts and secondly the taking of New Amsterdam by England.

³ later renamed as New York

1665

Initially English fortunes appeared to be changing at sea and Samuel Pepys wrote to his sister in Holland.

On his return to Holland, De Ruyter learnt of disaster at the **Battle of Lowestoft** – this was the worst defeat in Dutch naval history.

Cornelis Tromp⁴ was expected to be made Commander of the Fleet; however De Ruyter was made Lieutenant Admiral (a rank he shared with six others) of the Amsterdam Admiralty.

1666

The **Four Day Battle** ends in a Dutch victory⁵ – *Royal Prince* became stuck on a sandbar. During the course of the battle Tromp was to change ship four times. A wag on the English side was said to have called out “Are there five or six Tromps in the fleet?” Admiral George Ayscue on the *Royal Prince* struck his flag when threatened by Dutch fireships. The ship was subsequently plundered by Captain Sweers. De Ruyter denied Tromp the glory of towing the ship back to Holland.



Figure 4 – Cornelis Evertsen the Elder was a Lieutenant-Admiral when he was killed by a cannonball on the first day of the Four Day Battle in 1666 (68 mm)

Disaster nearly befell De Ruyter in the subsequent two day battle which became known as the **St James Day Battle**. Much to De Ruyters anger, Cornelis Tromp lost sight of the squadrons commanded by De Ruyter and

⁴ son of Maarten Tromp

⁵ both sides claimed victory

Van Ness, with almost catastrophic results. During the battle De Ruyter signaled Van Ness to come aboard the *Seven Provinces* – a conversation ensued between the two.

The two day victory by the English in the St James Day Battle had dire consequences for the Dutch. The subsequent attack by English Vice-Admiral Robert Holmes, known as the "**Holmes Bonfire**" resulted in a great loss of ships, warehouses and life when he sacked Terschetting Island. Even De Ruyters house in Amsterdam was sacked by irate locals. Riots and hunger in the Netherlands.

Thereafter the situation in England also appeared to change rapidly. "The Plague", followed by the "Great Fire of London" ("God's vengeance") had dramatic effects on English fortunes at sea. The Great Fire of London resulted in an inability to collect taxes. There were no wages for soldiers and seaman. From the end quarter of 1667 to January 1672, dock workers did not receive pay. Samuel Pepys had predicted that the nation would go bankrupt. The ongoing war with the Dutch is the greatest single cause of poverty in England.

1667

Due to a lack of funds, the English fleet was laid up in the Medway and at Chatham dock yards. The Duke of Abermarle's concerns were overruled. The financial state of the King and the Navy had become deplorable; sailors were unpaid for a significant amount of time.

De Ruyter launched an amphibious attack on the English fleet in the Medway and at Chatham.⁶ Fort Sheerness was taken and the defensive chains at Gillingham were broken (giving access to the Medway). This resulted in the burning of the *Royal James*, *Royal Oake* and *Loyal London* in Chatham dockyards, and an amphibious assault carried out under the leadership of Lt Admiral Willem Joseph van Ghent. *Upnor Castle* was shot up. The *Royal Charles* and the *Unity* were towed away.

The diarist John Evelyn was to write – "a dreadful spectacle as ever Englishmen saw and a dishonour never to be wiped off". Samuel Pepys wrote extensively on the matter and, much later, Rudyard Kipling penned a "scathing" poem on the whole affair.

⁶ south side of the Thames estuary

Samuel Pepyes' comment: "King Charles II and his Lady Castlemaine stay where they are as a disorderly evacuation of the Chatham area commences". To this day the stern section of the *Royal Charles* can be seen on display in the Rijks museum in Amsterdam.

A golden chalice was presented to De Ruyter in 1667 with a depiction of the Raid on Chatham. Others were presented to Van Ghent and Cornelis De Witte also.

The **Peace Treaty of Breda** was soon signed between England and The Netherlands. Not much was particularly addressed so much so that five years later war broke out between the two nations again. The question of striking the flag remained unresolved.

THIRD ANGLO-DUTCH WAR 1672-1674

The **Secret Treaty of Dover 1670**⁷ between Charles II of England and Louis XIV of France required France to assist England in rejoining the Catholic Church and required England to assist France in conquering the Netherlands.

Implications of this Treaty included the partition of the Dutch empire and the demise of Holland itself. England and France aimed to blockade Dutch ports and deny the Dutch access to the Channel.

1672

A **land invasion**, via the Rhine River (and thus bypassing the Spanish Netherlands and south-eastern Dutch fort of Maastricht) was launched by the French – two eastern provinces were taken. However William of Orange flooded the area south from Amsterdam (the Dutch Water Line⁸) and rallied his troops.

At the same time (in June), the combined Anglo-French fleet was surprised by the Dutch at **Solebay** (on the Suffolk coast of England). A shift of wind favoured the combined Anglo-French fleet in putting out to sea. The Duke of York escaped catastrophe by the skin of his teeth. There was a great loss of life on the *Royal James* which was burnt by one of three Dutch fireships.

⁷ This Treaty did not become public until 1830

⁸ A defensive system of shallow flooding of land between the Zuiderzee and the River Waal to protect the economic heartland from an eastern invasion

During the Battle of Solebay, the Duke of York had to change his flag (ie his command ship) three times and thus spent a considerable time in a longboat whilst changing flag.

The French fleet split off and sailed to the south pursued by Banckert, and a long range duel took place. In the Solebay battle Holland lost three ships and the English one. The Earl of Sandwich, Sir Edward Montague and his son in law were killed as was Admiral Van Ghent who was hit by shrapnel. Although the battle was itself was indecisive, the result was a strategic victory by the Dutch as a blockade of Dutch ports was prevented.

In August 1672 the brothers Johan and Cornelis de With were unjustly murdered as they were blamed for Holland's ill fortunes. De Ruyter was horrified.

1673

Two subsequent engagements between the Dutch and English at Schooneveld (estuary of Scheldt River in the Dutch Province of Zeeland) in June turned out to be indecisive – men were lost but not ships, although Prince Rupert faced rebuke when he returned to England. An invasion fleet of 4000 men in troop transports on the English coast were once again thwarted by De Ruyter's actions.

The **Battle of the Texel**, the final battle of the Third Anglo-Dutch War, occurred in August. The aim of the Anglo-French fleet was to land an invasion force in North Holland near Den Helder (just south of the island of Texel). Although De Ruyter didn't want to leave his defensive position at Schooneveld, he was ordered to attack the Anglo-French fleet to save the Spice Fleet returning from the East Indies.

The *Royal Prince* was heavily damaged in a fierce fight with Tromp's ship and was taken out of the fight. Admiral Edward Spragge had to shift his flag to the *St George*, which suffered heavy damage. Spragge was killed when a Dutch cannon shot went through his lifeboat whilst he was shifting flag for the second time to the *Royal Charles* – all aboard were drowned.

The *Royal Prince* was dismasted during the Battle of the Texel. This ship was crippled after a two hour duel with Tromp's ship the *Gouden Leeuw*.

Tromp had to shift his flag also and wasn't successful in capturing the *Royal Prince* which was towed away by the English. The battle ended at 7 pm and neither side could claim outright victory, but it was a strategic

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victory for the Dutch. No large ships were lost but there were thousands of dead. Prince Rupert was furious that the French had sailed away from the battle once again (as was previously the case at Solebay).

De Ruyter thwarted Prince Rupert's attempt to destroy the Dutch fleet. The Anglo-French alliance failed to invade Holland. The Dutch nation was eternally grateful for De Ruyters feat of stopping the planned invasion.

Spain aided Holland in the land war and the French were driven out by the end of the year.

In **1674** England signed the **Treaty of Westminster** with Holland. However the Franco-Dutch War continued until 1678.

1676

De Ruyter's last battle with the French was to take place in 1676 in the Bay of Syracuse off the east coast of Sicily, near Messina, within view of Mt Etna. A revolt had taken place; French soldiers had seized Messina, and the Spanish had requested Dutch assistance. Two engagements took place between the Dutch fleet and the French fleet under Admiral Duquesne. A small Spanish squadron assisted the Dutch at the Battle of Agosta.

There were two battles, ie the Battle of Stromboli and the **Battle of Agosta**. It was at the Battle of Agosta that De Ruyter lost his life – he was hit by a French cannonball.

When his body was taken back to the Netherlands, King Louis XIV had cannons fired along the French coast as a mark of respect.

BURIAL, MAUSOLEUM, AND STATUE

De Ruyter received a State Funeral in Amsterdam with many important dignitaries in attendance. He was buried in the Nieuwe Kerk (New Church) in Amsterdam; this is now the home of De Ruyter's mausoleum.

2007 marked the 400th anniversary of De Ruyter's birth. Many celebrations were held to mark the event including the unveiling of a commemorative plaque at the base of his statue in Vlissingen. This was a tribute to his piousness and humanitarian qualities.



THE SPACE RACE – 40TH ANNIVERSARY OF APOLLO 11

By Frank Robinson, NAV 713¹

THE DREAM

Since ancient times, people have looked up at the moon and dreamt of going there. An ancient Babylonian seal depicts a man about to fly to the moon when lifted by a bird. Lucian of Samosata, in the 2nd century AD, has a sailing ship, lifted by a violent whirlwind and then flying through the clouds to the moon. Kai-Kā'ūs, mythical king of Persia, is depicted seated on his throne with four large birds flying it to the moon. In the early 16th century story *Orlando Furioso* by Lodovico Aristo, Astolpho travels to the moon in a horse-drawn coach. In Francis Godwin's *The Man in the Moone* (published in 1638) Domingo Gonsales travels to the moon suspended on a framework (which includes a sail) lifted by geese. David Russen, in *Iter Lunare: or Voyage to the Moon* (published in 1703) described a spring catapult on a mountain top to launch a seat (with a man) to the moon.

Other writers came up with various other ideas; these included antigravity materials and balloons. In his 1863 book *Voyage a Venus*, Achille Eyraud described a spacecraft powered by the reaction principle – this is the principle that rockets rely on.

In 1865, Jules Verne published *De la terre à la lune (From the Earth to the Moon)*. In this story, a vertical 275 m cannon in Florida, USA, is used to fire a cylindrical spacecraft (weighing approximately 10 tons). This spacecraft had a conical nose and carried three people. In his sequel, *Autour de la lune (Around the Moon)*, the spacecraft loops around the moon and returns to earth to splash down in the Pacific Ocean where it was retrieved by the American Navy. The popularity of Jules Verne's writings meant that the general public became engrossed in such science fiction adventures.² Two of the first three pioneers were influenced by Verne.

But how to turn a dream into reality?

¹ Frank presented this paper to NAV meeting 959 on 17 July 2009

² Von Braun, pp2-31

THE PIONEERS

I remember the following saying that I saw in the woodworking room when I was a student at Mildura Technical School:

*“Practice without theory is like a tree without roots.
Theory without practice is like a tree without fruits.”*

So it was with space travel. Before mankind could make the ancient dream come true, the theory of space flight had to be worked out. But the theory was no good on its own – machines that could travel through space had to be built, and tested.

THE THEORETICIAN – TSIOLKOVSKY (1857 – 1935)

A Russian school teacher, Konstantin Tsiolkovsky, was the first to work out the basics of the theory of space travel. He made a number of drawings of liquid fuelled rockets and suggested the use of liquid hydrogen as the fuel and liquid oxygen as the oxidiser to give the most efficient rocket. He came up with a number of designs between 1903 and 1914. He also realised that for a rocket to reach orbital velocity of 8 m/s, the amount of fuel at launch needed to be four times the total weight of rocket and fuel! To overcome this problem, he suggested a “rocket train” (or multistage rocket) with each rocket dropping off as its fuel was expended.

In 1907, he predicted that it would be 100 years before a rocket would travel into space. As it happened, this event would occur in just half that time.



Figure 1 – USSR 1 rouble, 1987 commemorating 130th anniversary of the birth of Konstantin Tsiolkovsky

Tsiolkovsky was a theoretician only and didn't do any experimental work on rocketry. However he laid down the initial theoretical groundwork to enable the pioneers to start their experiments (figure 1).

THE EXPERIMENTERS

Solid fuel rockets had been used by the Chinese for warfare since the 12th or 13th centuries. However the disadvantage of a solid fuel rocket is that once the propellant is ignited, it will continue burning until it is completely used up. The advantage of a liquid fuel rocket was that it could be started and stopped as required.

Goddard (1882 – 1945)

Robert Goddard spent most of his life in Massachusetts, USA. As a child, Goddard read Jules Verne's book *From the Earth to the Moon*. He became interested in rockets when he was a student. Not only did he work on the theory of rocket propulsion, he also constructed his own rocket motors and other components and tested them. He constructed the first liquid fuelled rocket which he launched on 16 March 1926. The rocket rose 12.5 m, covered 56 m, and the flight lasted 2.5 seconds. He continued experiments, including both static and flight tests, for the next 15 years.

Oberth (1894 – 1989)

Hermann Oberth worked in Germany and became interested in rocketry as a child after reading Jules Verne's book *From the Earth to the Moon*. In 1923 he published *Die Rakete zu den Planetenraumen (The Rocket into Planetary Space)*. This book included plans for a liquid fuelled rocket. He later expanded it to a larger book titled *Wege zur Raumschiffahrt (Ways to Spaceflight)* published in 1929

As a publicity stunt for a film called *Frau in Mond (Girl in the Moon)*, in 1929 he designed and constructed a liquid propellant rocket, but it was not capable of flight.

Also in 1929, he joined (and became president) of the Verein für Raumschiffahrt (Society for Space Travel) – which was a rocketry club that had been established in Berlin in 1927 to build and trial liquid fuelled rockets. Experiments were made with rocket sleds, rocket motorcars, and rocket planes.

One of Oberth's students who joined this club was Werner von Braun.

Rocketry and Space Societies

Various rocketry and space societies were formed, mainly in Europe, but also in the USA. During the 1920s and 1930s, they openly communicated

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their ideas with each other. To the general public however, they were considered crackpots.

USSR

In the USSR, there was the Central Bureau for the Study of Problems with Rockets (TsBIRP) and the All-Union Society for the Study of Interplanetary Flight (OIMS). Later these two groups were replaced by Gruppa Isutcheniya Reaktivnovo Dvisheniya (Group for the Study of Reaction Motion), known as Len-GIRD in Leningrad and Mos-GIRD in Moscow. In 1933, the Reaction Propulsion Institute (known as RNII) was formed from the Gas Dynamics Laboratory and Mos-GIRD.

Amongst the more prominent members were Fridrikh Tsander (1887 – 1933) and Valentin Glushko (1908 – 1989). Another member was Sergei Korolev (1907 – 1966) who would later become the mysterious “Chief Designer” of the Soviet space program.

Various experiments were conducted to try various engines and propellant mixtures – both liquid and solid. By the mid 1930s, various rockets were being built and launched. One of these was the Avianito rocket which reached an altitude of 5.6 km in 1936.

Von Braun (1912 – 1977)

Werner von Braun had started as a member of Verein für Raumschiffahrt about 1930 and quickly become a leading experimenter. He designed and constructed various essentials for liquid fuel rockets and was involved in the various test firings.

After Hitler came to power, he gave von Braun and his team assistance. During World War II, Hitler had von Braun’s team working on building a large rocket, which was referred to as the A-4 – this was better known to the Allies as the V2 (vengeance weapon 2).

Von Braun even drew up plans for a two stage rocket that would be able to cross the Atlantic Ocean – however he was not given approval to proceed with it. Von Braun’s dream was actually the conquest of space.

At the end of the War, von Braun and some of his team surrendered to the Americans who also captured many of his A-4 rockets. These were taken to Britain and the USA where various test firings were conducted.

Some others from von Braun’s team were captured by the Soviets and taken to the USSR.

POST WAR ROCKET DEVELOPMENT

Both the Soviets and Americans pressed forward with rocket development after World War II during the so-called “Cold War”. While the Americans involved von Braun directly in this work, the Soviets tended to extract as much knowledge as they could from the German scientists they had captured, then side-lined them.

The aim of both the Americans and Soviets was to build military rockets, in particular intercontinental ballistic missiles (ICBMs) which would have the ability to travel the long distances from one continent to another. These early ICBMs were developed directly from the German A-4 rockets.

INTERNATIONAL GEOPHYSICAL YEAR

1957-58 was decreed to be the International Geophysical Year (even though it was actually 18 months, starting on 1 July 1957). The USA felt that their rocket development was such that they could launch a satellite into orbit and made a public announcement of this intention in late July 1955.

The USSR made a similar announcement four days later on 2 August³, however in the West this was effectively ridiculed as it was thought that the Soviets were way behind the Americans in their rocket development.

THE SPACE RACE BEGINS

The Space Race had begun, but (to quote James Schefter), “Only one of the two participants had heard the starter’s pistol.”⁴

The USSR had set early October 1957 as the target date for the first launch as this would celebrate the 50th anniversary of the Bolshevik Revolution in Russia. On 4 October 1957, an R-7 rocket launched Sputnik 1⁵ into orbit around the earth; to allow the West to confirm this, the USSR announced the radio frequency that a series of beeps could be heard. The West, and particularly America, was shocked out of their complacency.

Four weeks later, Sputnik 2 was launched on 3 November. While Sputnik 1 was a simple metal sphere 58 cm diameter with a radio

³ Schefter, p4

⁴ *Ibid*, p5

⁵ Sputnik means “satellite” or “fellow traveller”

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transmitter inside it (and weighed less than 84 kg), Sputnik 2 was much larger (weighing 508 kg) and carried a passenger – a dog named Laika.

The Soviet Premier, Nikita Khrushchev, considered that a “Space Race” had started; on the other hand, the American President, Dwight Eisenhower, did not believe that there was any such race.

In America, there were two separate agencies – one from the Navy and one from the Army; while the Navy rocket was seen as being developed for scientific purposes (and the satellite by the Naval Research Laboratory), the Army rocket was very much a military one. As the Government was at pains to stress that space research should be for peaceful purposes, it wanted the first space launch to be by the Navy. As a result, on 6 December 1957, amid much publicity, an attempt was made to launch Vanguard TV3; unfortunately it only lifted for about one second and then blew up on the launching pad!! The Press had a field day – “Kaputnik” the papers called it. Five days later, von Braun’s Army team received approval to launch their first satellite; and Explorer 1 (weighing 14 kg) was launched on 31 January 1958 with a Juno I rocket.

Various rocket launches followed with more Sputnik and Explorer satellites being placed into orbit. As rockets became more powerful, satellites became larger and more complex. The Soviets also sent scientific probes to the moon (and hence became the first man-made objects to escape Earth’s gravitational pull); Luna 1 was launched on 2 January 1959 and passed the moon at a distance of approximately 6000 km. Luna 2 (launched 12 September 1959) impacted on the moon and Luna 3 (launched 4 October 1959) looped around the moon and took the first pictures of its far side.

While Werner von Braun was the man behind the American space program, his Soviet counterpart was simply known as the “Chief Designer”. His identity as Sergei Korolev would not become public knowledge until after his death in 1966.

FIRST ASTRONAUTS AND COSMONAUTS

The next big “first” would be to place a human in space. In April 1959, the USA commenced training a team of seven astronauts for the Mercury program – a series of one-man spacecraft. The USSR also commenced training a team of cosmonauts for its one-man spacecraft, called Vostok. The big question was who would get a man into space first?

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As a prelude to manned space flights, animals undertook space flights to test the systems – the Americans used chimpanzees while the Soviets used dogs.

Yuri Gagarin was launched in Vostok 1 on top of an SS-6 (Sapwood) rocket on 12 April 1961 and completed one orbit of the earth in a flight lasting 108 minutes. Once again, the Americans were furious that they had been beaten (figure 2).

On 5 May 1961, Alan Shepard was launched in Mercury MR-3 on top of a Redstone rocket and completed a suborbital flight that lasted 15 minutes (the Redstone rocket was not powerful enough to launch a manned capsule into orbit).

After the Soviets had once again beaten the Americans, USA President John Kennedy demanded Vice-President Johnson find a significant space achievement that the Americans could win. Thus on 25 May 1961 President John Kennedy addressed Congress and committed the USA to landing a man on the moon and returning him safely to Earth before the end of the decade. Considering the only two space flights to date, this was like saying immediately after the Wright brother's flights in 1903 that we will fly an aeroplane non-stop around the world in just a few short years!!

Over the next few months, the USA launched Mercury Redstone 4 on 21 July with Virgil "Gus" Grissom on another sub-orbital flight and USSR launched Vostok 2 on 6 August with Gherman Titov who made 17 orbits.

After finally establishing the safety of the somewhat troublesome Atlas rocket, the USA launched Mercury Atlas 6 with John Glenn on 20 February 1962 making three (instead of a planned six) orbits.

Both the Mercury and Vostok programs continued throughout 1962 and 1963. The USSR achieved another first in August 1962 with two manned spacecraft in orbit together for the first time.

The USSR had yet another surprise for the world when they launched Vostok 5 on 14 June 1963 and followed up on 16 June with Vostok 6 carrying Valentina Tereshkova, making her the first woman to be launched into space! It would be 20 years before a second woman rode the fire^{6 7} (figure 2).

⁶ Sally Ride became woman number two and first American woman in space when she was launched in the Space Shuttle "Challenger" on 8 June 1983.

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Figure 2 – USSR 1 rouble coins issued in 1981 and 1983 commemorating two space firsts – 20 years since Yuri Gagarin became the first spaceman in 1961 (left) and 20 years since Valentina Tereshkova became the first spacewoman in 1963 (right)

A listing of all the single person manned space flights from this first phase is given in Table 1.

Table 1
Single Person Space Flights

Year	Country	Spacecraft	Astronaut / Cosmonaut	Flight
1961	USSR	Vostock 1	Gagarin, Yuri	1 orbit
	USA	Mercury MR-3	Shepard, Alan	sub-orbital
	USA	Mercury MR-4	Grissom, Virgil	sub-orbital
	USSR	Vostock 2	Titov, Gherman	17 orbits
1962	USA	Mercury MA-6	Glenn, John	3 orbits
	USA	Mercury MA-7	Carpenter, Scott	6 orbits
	USSR	Vostock 3	Nikolayev, Andrian	64 orbits
	USSR	Vostock 4	Popovitch, Pavel	48 orbits
	USA	Mercury MA-8	Schirra, Walter	6 orbits
1963	USA	Mercury MA-9	Cooper, Gordon	22 orbits
	USSR	Vostock 5	Bykovsky, Valery	81 orbits
	USSR	Vostock 6	Tereshkova, Valentina	48 orbits

⁷ “Riding the fire” was a term used to describe being launched into space atop a rocket.

TWO AND THREE MAN SPACEFLIGHTS

With the conclusion of the Mercury Program, the Americans were anxious to move to their next phase – the Gemini Program. This was to be a series of two man spacecraft to work out how to dock two spacecraft in orbit – an essential requirement for the moon landing flight.

VOSKHOD

While the intended American program was on public record, the Russian program was kept secret until successful flights occurred. Once again the USSR achieved a first. If the USA is going to launch a two man spacecraft, why not have the USSR launch a three man spacecraft first?

A Vostok spacecraft was modified to squeeze three men in, however there insufficient room for them to wear their pressurized spacesuits. To ensure that the design would work, Feoktistov (the engineer who designed it) was told that he would be one of the cosmonauts! Voskhod 1 made a successful spaceflight of 16 orbits on 12 and 13 October 1964.

As the USA had announced that one of their early Gemini spaceflights would include a “spacewalk”⁸ (ie an astronaut leaving his spacecraft while in space), the Soviets again decided to get in first.

A second Voskhod spacecraft was prepared, this time for two men, but with a removable inflatable bellows on the side of the capsule. During the flight of Voshkod 2, Alexei Leonov left Voshkod 2 via the bellows and floated in space for 10 minutes – yet another space first for the USSR!

Table 2
Voshkod Space Flights

Year	Country	Spacecraft	Cosmonauts	Flight
1964	USSR	Voskhod 1	Komarov, Vladimir Feoktistov, Konstantin Yegorov, Boris	16 orbits
1965		Voskhod 2	Belyayev, Pavel Leonov, Alexei	17 orbits

⁸ more correctly termed an “extra-vehicular activity” (EVA)

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GEMINI

Less than a week after Voshkod 2, Gemini 3 was launched and the USA manned space program dominated the news for the next 20 months with ten Gemini flights. These spaceflights had mixed success; however they included a number of important achievements:

- the first spacecraft to manoeuvre from one orbit to another;
- the first American spacewalk (figure 3);
- the first rendezvous with another spacecraft;
- the first docking with another spacecraft;
- the first use of a target vehicle for propulsion after docking; and
- two duration records for manned spaceflight (the second, Gemini 7, was longer than any of the Apollo spaceflights).



*Figure 3 – USA 10 cents Military Payment Certificate, Series 681, (110 x 55 mm)
showing an astronaut walking in space;
apart from the clouds, this picture is identical to a photo of
Edward White taken during his spacewalk in June 1965⁹*

Of course, not everything went according to plan, eg flights were delayed and postponed and intended early dockings did not always work. On one occasion, the Agena rocket target vehicle did not properly shed its nose shroud and it became known as the “angry alligator”. However, by the end of 1966, NASA was confident that it had the knowhow and experience to go to the next stage and prepare for the moon flights.

⁹ Von Braun, p196e

Table 3
Gemini Space Flights

Year	Country	Spacecraft	Astronauts	Flight
1965	USA	Gemini 3	Grissom, Virgil Young, John	3 orbits
		Gemini 4	McDivitt, James White, Edward	62 orbits
		Gemini 5	Cooper, Gordon Conrad, Charles	120 orbits
		Gemini 7	Borman, Frank Lovell, James	206 orbits
		Gemini 6A	Schirra, Walter Stafford, Thomas	16 orbits
1966		Gemini 8	Armstrong, Neil Scott, David	6.5 orbits
		Gemini 9A	Stafford, Thomas Cernan, Eugene	45 orbits
		Gemini 10	Young, John Collins, Michael	43 orbits
		Gemini 11	Conrad, Charles Gordon, Richard	44 orbits
		Gemini 12	Lovell, James Aldrin, Edwin	59 orbits

APOLLO AND SOYUZ

EARLY APOLLO SPACEFLIGHTS

Of the several possible methods of travelling to the moon, the one chosen was known as “lunar orbit rendezvous method”¹⁰. This involved launching a large rocket into an initial earth parking orbit before heading to the moon

¹⁰ The other two methods were the “direct ascent from earth” and the “earth orbit rendezvous”

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and going into lunar orbit. Two astronauts would transfer to a landing craft (known as the “lunar module”) and descend to the moon. After an EVA on the surface of the moon, they would launch the upper part of their lunar module back into lunar orbit and dock with the command module. The command module then returns to earth on a direct flight.

To do this would require a much more powerful rocket than had previously been used. Von Braun developed the Saturn 5 rocket which is still the biggest and most powerful rocket ever launched. This was a direct descendant of the A-4 rocket of World War II.

The Saturn V rocket consisted of three stages. The biggest was the S-1C first stage, followed by a somewhat shorter S-2 second stage, and the smaller S 4-B third stage. On top of the third stage was the Apollo CSM (Command Service Module) which included its own rocket engine. An earlier version was the Saturn 1B, with a Saturn 4-B second stage, which was used for earth orbital testing.

By January 1967, all seemed set for a start of the Apollo manned mission flights. After successful unmanned launches, the first manned launch with a Saturn 1B rocket was scheduled for 21 February 1967. However tragedy struck on 27 January when astronauts Virgil Grissom, Edward White, and Roger Chaffee died in a flash fire in the AS-204 Apollo module¹¹ during routine testing. The Apollo program was put on hold until investigations were completed and appropriate changes implemented. These investigations showed that an electric spark had ignited the plastic insulation in the 100% oxygen atmosphere used in American spacecraft.¹²

It seemed that once again that the USSR would gain the initiative. A new Russian spacecraft, Soyuz 1, was launched on 23 April 1967 with one cosmonaut, Vladimir Komarov. A number of problems with stabilization and communications developed and the mission was cut short the following day. During re-entry, the parachute tangled and Komarov was killed on impact. The Soviet space program was also put on hold.

¹¹ Von Braun, p224. Usually, but incorrectly, referred to as “Apollo 1”

¹² USA used an atmosphere of 100% oxygen in order to prevent any possibility of astronauts getting the “bends” from nitrogen bubbles in the blood. After this tragedy, USA spacecraft changed to a 60% oxygen and 40% nitrogen atmosphere for ground tests and launch, changing to 100% oxygen in space. USSR spacecraft successfully used a normal air atmosphere in their spacecraft.

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In November 1967, the Saturn 5 rocket was launched for the first time (Apollo 4 mission). Apollo 5 was launched by a Saturn 1B rocket in January 1968 and flight tested the Apollo Lunar Module (LM). In April 1968, Apollo 6 was launched by a Saturn 5 rocket; problems occurred with two of the five engines of the second stage preventing the correct orbit being achieved; the third stage rocket also failed to fire a second time, but other tests on the various spacecraft systems were successful. These three launches were all unmanned.

The first manned Apollo mission, Apollo 7 was launched on 11 October 1968 by a Saturn 1B rocket. It successfully tested various systems in earth orbit and the three man crew returned to earth on 22 October.

SOYUZ

After redesigning the Soyuz spacecraft, an unmanned Soyuz 2 was launched on 25 October 1968 followed the next day by Soyuz 3 with one cosmonaut. He returned to earth four days later.

Soyuz 4 was launched on 14 January 1969 with one cosmonaut followed the next day by Soyuz 5 with three cosmonauts. They achieved the first docking of two manned spacecraft; two the cosmonauts (Yevgeny Khrunov and Aleksei Yeliseyev) transferred from Soyuz 5 and returned to earth in Soyuz 4 with Vladimir Shatalov leaving Boris Volynov to return alone in Soyuz 5.

FIRST TO THE MOON

Towards the end of 1968, the USA had reason to believe that the USSR was preparing for a one man mission to the moon; this would be a circumlunar¹³ mission in a new spacecraft called “Zond”, which was based on the Soyuz spacecraft. The unmanned Zond 5 (but carrying turtles) had made a circumlunar mission to a safe landing in Russia in September 1968 and Zond 6 made a similar trip in November. It was expected that Zond 7 would be manned.¹⁴ The idea was to once again beat the Americans and take some of the gloss off the Apollo achievements.¹⁵

¹³ Circumlunar – looping around the moon without orbiting the moon.

¹⁴ Kerrod, pp64-5

¹⁵ Schefter, pp270-1

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It was known that USSR had a large new moon rocket (designated as either G-1¹⁶ or N-1¹⁷). It finally got to the launch pad in early July 1969, but exploded on the launch pad on 3 July.

The next stage of the Apollo program had called for earth orbital testing of each of the Apollo modules followed by a circumnavigation of the moon. However there were delays with the LM and it was decided to reverse these two flights. Consequently, on 21 December 1968 Apollo 8 was launched by a Saturn 5 rocket¹⁸ and took three astronauts to the moon for the first time where they made ten orbits before returning to earth on 27 December. To me, highlights of this flight were the photos of “earthrise” above the surface of the moon, and a live transmission from lunar orbit on Christmas Day.

If the Russians had intended a one man Zond lunar orbital flight, the point of the flight disappeared with the success of Apollo 8.

Apollo 9 made a ten day earth orbital flight in March 1968 to test the LM. Next was Apollo 10 – the full dress rehearsal for the moon landing. This mission would do everything except land on the moon. (It has been reported that the LM crew of Apollo 10 were told not to attempt to land as they would have insufficient fuel to launch and they would be stranded on the moon!)

APOLLO 11

On 16 July 1969 the Apollo 11 mission blasted off from Cape Kennedy. Once in lunar orbit, Neil Armstrong and Edwin (“Buzz”) Aldrin transferred to the LM and descended to the surface of the moon. For each of the manned Apollo missions involving both a command module and a lunar module, the crew were allowed to name their spacecraft; for the Apollo 11 mission, these were *Columbia* (CM) and *Eagle* (LM). The official logo for the mission showed the American bald eagle flying over the surface of the moon with an olive branch (symbolising peace) in its talons. The intended landing sight was in the so-called Sea of Tranquillity.

¹⁶ Gatland, pp41, 273

¹⁷ Schefter, p282

¹⁸ All subsequent Apollo missions were also launched with Saturn 5 rockets

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Table 4
Apollo and Soyuz Space Flights 1967 – July 1969

Year	Country	Spacecraft	Astronaut / Cosmonaut	Flight
1967	USSR	Soyuz 1	Komarov, Vladimir	18 orbits crashed
1968	USA	Apollo 7	Walter Schirra Walter Cunningham Donn Eisele	163 orbits
	USSR	Soyuz 3	Georgi Beregovoi	61 orbits
	USA	Apollo 8	Frank Borman James Lovell William Anders	10 lunar orbits
1969	USSR	Soyuz 4	Vladimir Shatalov	48 orbits
	USSR	Soyuz 5	Boris Volynov Aleksei Yeliseyev Yevgeny Khrunov	49 orbits
	USA	Apollo 9	James McDivitt David Scott Russell Schweickart	151 orbits
	USA	Apollo 10	Thomas Stafford John Young Eugene Cernan	31 lunar orbits
	USA	Apollo 11	Neil Armstrong Michael Collins Edwin Aldrin	30 lunar orbits lunar landing

The USSR made one last attempt to get some glory by bringing samples of lunar material (ie moon dirt or rocks) back before Apollo 11 could. The unmanned Luna 15 was launched on 13 July and went into lunar orbit. NASA took the unprecedented step of asking the Russians for information on its trajectory and the Russians took the equally unprecedented step of supplying it! NASA then announced that its trajectory would not interfere with that of Apollo 11. Although Luna 15 twice responded to commands to

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lower its orbit, when the time came, it wouldn't land; on 22 July it crashed into the moon and was destroyed.

In eastern Australia, the landing occurred at 6:17 am on 21 July¹⁹. Like many others, I watched a live telecast from the NASA control room in Houston, Texas, USA. As the LM neared the surface, Armstrong and Aldrin were concerned about the large number of boulders in the landing area and were starting to run short of fuel in the descent stage of the LM. If they couldn't find a safe spot to land, they would have to abort the landing by firing the ascent engine. Armstrong took over partial control.

With less than 60 seconds of fuel left, a light came on to indicate that a probe dangling from the LM had touched the surface. Aldrin said "Contact light". There seemed to be a silence and Houston asked if everything was OK. Then Armstrong said, ending with a note of triumph in his voice, "Houston, Tranquillity Base here. The *Eagle* has landed."

Seven hours later, after delays in depressurising the *Eagle*, Armstrong began to back out. He pulled on a D-ring which opened a panel on the side of the *Eagle* and started a black and white TV camera. He then climbed down the ladder to the large circular dish at the bottom and then tentatively stood on the surface of the moon. We all waited to hear what his first words would be: "That's one small step for man, . . . one giant leap for mankind." Aldrin joined him 20 minutes later.

On the surface, they collected samples of lunar soil and rock, set up a flag, commemorative plaque, and scientific experiments. They then returned to the *Eagle*. Armstrong spent 2 hours 31 minutes on his EVA. Almost 22 hours after landing, they blasted off to rejoin Michael Collins in *Columbia*. After transferring their samples and scientific experiments to *Columbia*, they jettisoned *Eagle* and headed back to earth, splashing down in the Pacific Ocean 195 hours 18 minutes after launch.

A curved plaque was attached to the ladder of the descent stage of the LM. It showed a two hemisphere depiction of Earth with the inscription:

"HERE MEN FROM THE PLANET EARTH
FIRST SET FOOT UPON THE MOON
JULY 1969, A.D.
WE CAME IN PEACE FOR ALL MANKIND"

¹⁹ Both the landing and the moon walk occurred on 20 July Houston (USA) time

This was followed by facsimile signatures and names of the astronauts and USA President Nixon.

The Race was effectively over²⁰ and the ancient dream had come true. There would be another six flights to the moon, but only five would land.

APOLLO 11 NUMISMATIC COMMEMORATIVES

A large number of numismatic commemoratives were issued at the time, as well as later, for the Apollo 11 spaceflight. Following are a few which I have managed to collect.

AUSTRALIAN MEDALLIONS

A bronze medallion was issued by the Historical Medal Society of Australia & New Zealand. The central text on the reverse shows the text from the plaque the astronauts left on the moon²¹ (figure 4).



Figure 4 – Historical Medal Society of Australia & New Zealand medallion



Figure 5 – Adelaide Advertiser medallion

²⁰ The Apollo Soyuz Test Program (ASTP) space flight in July 1975 could be said to be the real end of the space race and heralding a new era of space co-operation.

²¹ Carlisle 1969/15

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The *Adelaide Advertiser* issued a cast medallion, in white metal, showing a bald eagle (with an olive branch in its talons) flying above the moon's surface with the earth in the background – this was the design of the Apollo 11 mission patch (as worn by the astronauts). The reverse of this medallion also shows the text from the plaque the astronauts left on the moon²² (figure 5).

Another Australian cast medallion, this time in bronze but by an unidentified issuer. It also shows the mission patch but with a full earth in the background. The reverse of this medallion shows the Lunar Module *Eagle* on the surface of the moon with the date 20.7.1969²³ (figure 6).



Figure 6 – Cast bronze medallion



Figure 7 – Armstrong Shoe Mart advertising medalet

NAV member Ian Armstrong of Armstrong Shoe Mart in Frankston issued a long series of advertising medalets. Struck in brass, the reverse of one shows Neil Armstrong stepping onto the moon's surface with his words "THAT'S ONE SMALL STEP FOR MAN, ONE GIANT LEAP FOR

²² Carlisle 1969/18

²³ Carlisle 1969/19

MANKIND”. Around is the legend “ARMSTRONG’S SHOES FIRST ON THE MOON” and “ARMSTRONG SHOE MART FRANKSTON”. Ian told us that he sent one to Neil Armstrong and received an appreciative reply (figure 7).

AUSTRALIAN PAPER COMMEMORATIVE

A Souvenir Moon Dollar note was issued by the Association of Retailers of Surfers Paradise on 21 July 1969. The front of the note shows the Moon (centre), the Lunar Module *Eagle* docked to the Command Service Module *Columbia* (upper left) with the Earth (below left), an astronaut floating in space (upper right), and the Saturn 5 rocket being launched (at right).

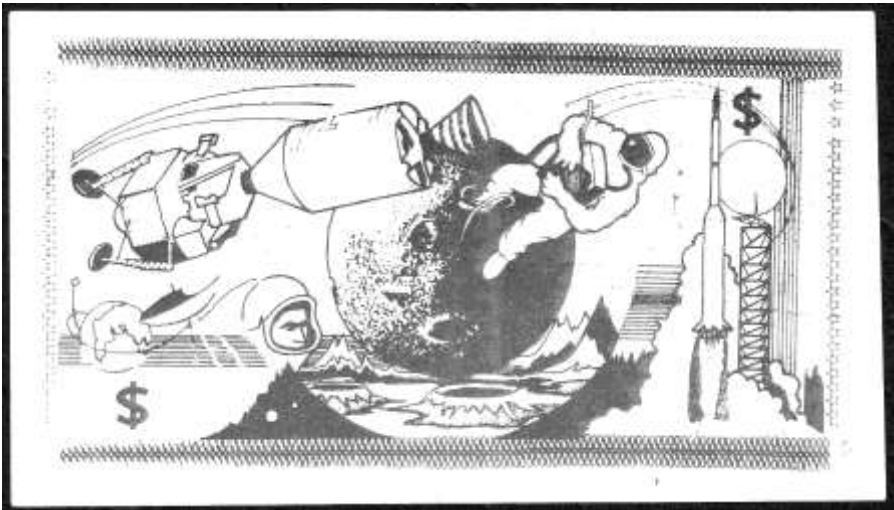


Figure 8a – Association of Retailers of Surfers Paradise Souvenir Moon Dollar – front

The main text on the back reads:

“THE ASSOCIATION OF RETAILERS OF SURFERS PARADISE (RESORT OF GREAT RENOWN ON PLANET EARTH) SALUTES THE INTREPID AMERICAN ASTRONAUTS AND WELCOMES PLANET MOON TO THE CONFRATERNITY OF UNIVERSAL RESORT AREAS. (LEGAL TENDER FOR JOURNEYS TO AND FROM THE MOON ONLY)”

The note is printed in purple and is 132 x 75 mm (figures 8a and 8b).

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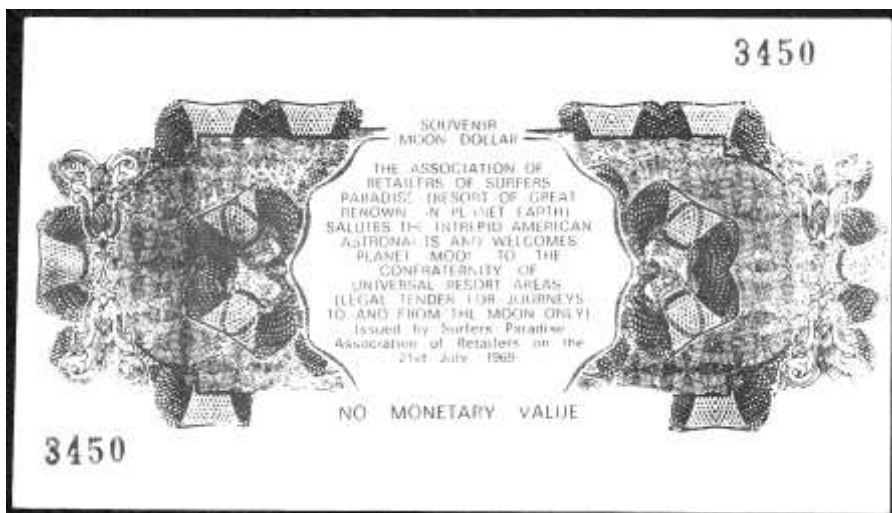


Figure 8b – Association of Retailers of Surfers Paradise Souvenir Moon Dollar – back

OTHER MEDALLIONS

The next medallion shows Armstrong and Aldrin carrying out activities on the moon's surface – collecting rock samples and setting up a flag – with the landing date "JULY 20, 1969" and the legend "FIRST MANNED LUNAR LANDING" below. The earth and the Apollo command module *Columbia* are shown at top with the astronauts' names and the launch date "JULY 16, 1969". The reverse shows the area of the moon where *Eagle* landed (figure 9).



Figure 9 – Bronze medallion showing Armstrong and Aldrin working on the Moon

A golden coloured lightweight medallion, which appears to be aluminium, depicts the *Eagle* on the surface of the moon with *Columbia* orbiting above and the Apollo XI astronauts' names. The other side has Neil Armstrong's

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words “that’s one small step for a man; one giant leap for mankind” superimposed on a map of the moon’s surface, with the legend “COMMEMORATING MAN’S FIRST STEP ON THE MOON’S SURFACE” and the date “July 20, 1969” (figure 10).



Figure 10 – Lightweight medallion

A bronze medallion has portraits of Neil Armstrong (top), Edwin Aldrin (left), and Michael Collins (right). In between these are the Saturn 5 rocket on the launch pad (bottom), the command and service module (left), and the command module (right). The mission dates, “JULY 16-24.1969”, are below. The other side shows Armstrong and Aldrin saluting the USA flag with Eagle in the background; the title “MEN ON THE MOON” and date “JULY 20-1969” are below (figure 11).



Figure 11 – Armstrong and Aldrin saluting the USA flag

The English Speaking Union of the USA issued a silver medallion for their Golden Jubilee in 1970. The reverse shows the path of the Apollo spacecraft from earth to the moon and back again with the legend “ENGLISH THE FIRST LANGUAGE SPOKEN ON THE MOON” (figure 12).

THE SPACE RACE – 40TH ANNIVERSARY OF APOLLO 11



Figure 12 – English Speaking Union of the USA

COINS

Turks and Caicos Islands issued a 5 crowns coin in 1994 to commemorate the “25th ANNIVERSARY FIRST LUNAR LANDING”. It depicts an astronaut on the moon saluting the USA flag; there is also the logo of the American Numismatic Association. The legend “ANA SALUTE TO COIN COLLECTING” appears around (figure 13).



Figure 13 – Turks and Caicos Islands 5 crowns coin, 1994



Figure 14 – USA Eisenhower 1 dollar coin, 1971

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The reverse of the USA Eisenhower one dollar coin (first issued in 1971) shows a bald eagle (with an olive branch in its talons) flying above the moon's surface with the earth in the background. This reverse design was continued on the Susan Anthony dollars (first issued in 1979). This design commemorates the Apollo moon landings (figures 14 and 15).



Figure 15 – USA Susan Anthony 1 dollar coin, 1979

BIBLIOGRAPHY

Baker, D, *Conquest*, Windward

Bond, P, *Reaching For the Stars*, Cassell

Carlisle, L J, *Australian Historical Medals 1788 – 1988*, Sydney, 2008

Gatland, K, *The Illustrated Encyclopedia of Space Technology*, Salamander Books, London, 1981

Glenn, J, *John Glenn – A Memoir*, Bantam Books, New York, 1999

Kerrod, R, *The Illustrated History of Man in Space*, Prion, London, 1989

Schefter, J, *The Race*, Century, London, 1999

Turnhill, R, *The Observer's Spaceflight Directory*, Warne, London

Von Braun, W, & Ordway, FI, *History of Rocketry & Space Travel*, Crowell, New York, 3rd edn, 1975

Yenne, B, *The Encyclopedia of US Spacecraft*, Bison Books, 1985



YET ANOTHER BIG HOARD

By Gillian Davis, NAV 913

If I went through my neighbour's handbag looking for information on her financial or social activities, I'd be a nasty little nosy-parker or worse, wouldn't I? But if I investigate the lifestyle and savings of someone 1200 years ago, I'm a wannabe historian, bringing information to one and all, throwing light on how our ancestors lived. Strange, aren't we – despising the nasty perv and praising the historian? Same job – different calendar, that's all.

So, having cleared myself of all blame and enthusiastically admiring all treasure trove hunters and metal detectorists, may I share with you an insight into what the British Museum describes as "the most spectacular Viking Treasure find in Britain for 150 years, found by father-and-son metal detectorists in a field near Harrogate". (Harrogate is about 38 km west of York.) It included a silver-gilt vessel, a gold arm-ring, and over 600 coins, some of them referring to Islam and the pre-Christian religion of the Vikings, as well as Christianity. It was officially declared treasure trove by the British Government in July 2007, and the British Museum was energetically raising funds to secure it, which is where I came in as a humble member of the "BM Friends".

The reason the British Museum is at the forefront of these investigations is that, apart from being a centre of excellence for historians in general, it is obliged under the *Treasure Act 1996* of the UK to provide an identification service for new discoveries, to provide a proper record of the hoard and to assist the legal process, which can declare the find officially "treasure trove" and award the appropriate amount to the finders. The current system, under which finds are handled by a Government-appointed organization, is an enormous improvement on the early stages where since 1276 their disposal was decided by a coroner, who even if honest was not always knowledgeable. This practice was current until comparatively recent times, the British Coroners Act of 1887 continuing it, but customs vary across the world, some countries assigning set proportions to finder and land owner.

The fund-raising campaign succeeded, and the find was acquired jointly by the Museum in London and the York Museums Trust, enabling any

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members who visit the UK in the next few years to see something of these treasures. The current arrangement is that it will alternate between the two museums, a few months at a time.



*Figure 1 – Map of Great Britain showing hoard referenced sites and nearby localities
Co – Colchester, Cu – Cuerdale, H – Harrogate, S – Shapwick
G – Glastonbury, L – London, M – Manchester, Y – York*

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Of course these discoveries are even more helpful if the finders do not simply rip the items out and scatter them about while dancing for joy, but leave them "as found" as much as possible, because sometimes good clues can be provided by the way they are packed, or what they are wrapped in. However, from my viewpoint of comparative ignorance I still have the nerve to challenge some of these judgments.

For instance, the official report includes the following: "The finders had commendably resisted the temptation to empty out the cup, so its contents could be meticulously excavated and recorded layer by layer at the museum, preserving vital details for telling the story of the hoard." Very good, if it was amassed on one occasion by a methodical person with enough time to do the job neatly. But what if the contents were flung in at the last moment because the Vikings were only half a mile down the road? What if the villagers were all able to put something away in the boss's stash, awaiting a safe day to redistribute them, and nobody knew in what order the folk would arrive with their contribution? How would you know someone meant a particular item to be at the bottom, and why?

This particular store included a gilded cup, possibly used for church services, which was carefully wrapped in lead sheeting, showing that there was time available to do the job properly, but unless the coins were in strict date order from bottom to top, how would anyone know whether they were deposited over the years – particularly in the case of those found inside buildings, which were never put straight into the soil. An example of that was the Shapwick treasure, uncovered in 1998 when a farmer's son found a few coins, rummaged around further up the same field, and ended up with more than nine thousand denarii from Somerset; but they had not actually been planted in a field, as excavations revealed that they had been neatly placed in rows inside the corner of a small room in a Roman villa which had fallen down and been removed long ago. The lord of the Harrogate manor might have been checking his little stash for years, with the permission of the local clergy, and whether it was a kind of private bank arrangement or a panic job, the answer tells us something about history.

Harrogate has been declared a "Viking hoard". Judging by the date of the newest coin (there were over 600, apart from fragments) it must have been deposited about 927-928. Currency came from as far away as Afghanistan and Russia, plus Scandinavia and the Frankish Empire; some are English pennies, some are dirhams with Arabic inscriptions, and some jewellery comes from Ireland, making it obvious that the Harrogate area was a big

trading centre even if several transactions had gradually worked the foreign material away from the coast to the local rulers. If a hoard includes a large proportion of foreign currency one expects to find it near a port, but Harrogate could never be described as that, so it is some indicator of how both wealth and influence spread through the country.

That forms an interesting contrast with the Cuerdale hoard, deposited on a Lancashire riverbank in 903, found by workmen in 1840. That was the largest Viking hoard in western Europe, assumed to be deposited by Norsemen based in Ireland, quite different to this "Vale of York" find which, thinking of the gilded cup and the golden armband which were included, was from a more settled population but is the largest find since Cuerdale.

The Shapwick find was a good one, the largest ever of Roman Britain. When the Museum catalogued it they found more than 9,000 well preserved silver denarii from Somerset, and as an illustration of how chance can affect these findings, the farmer had only recently bought the property after 36 years as a tenant, then the young man thought he would try his hand at this new sport of metal detection, and – Bingo! Before that, the biggest Roman coin hoard had been the Colchester one which included about 3000 coins, found in the 1890's. "Shapwick" revealed coins minted before AD 230, the earliest ones dating from Mark Antony's coinage for his troops in 31 BC, but as everything else was produced after AD 64 there must have been a bit of personal saving involved there. And as it was inside the large building, surely that would indicate how settled and stable Roman British society was becoming (nowhere near Boudicca of course!)

It should not be forgotten that Scandinavia has been one of the richest sources of hoards. According to Peter Spufford (chapter 3), the pressure of Scandinavian raiders denuded every seaport between Hamburg and Bordeaux, leading to a lack of coinage to serve the normal economy, and the resultant Scandinavian hoards contained not only European issues but a large amount of Central Asian dirhams, some of which found their way into this recent Harrogate discovery. These dirhams (also called "kufic" from the script upon them) came from as far as what is now Afghanistan, via the Volga areas, and the territory they covered went from Baghdad on one side to Iceland and Ireland on the other. As the Vikings regarded any source of silver in the form of ingots or ornaments as simply another form of cash, this explains why so many hoards contain what could be religious items

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mixed up with the pennies. (Wouldn't a numismatists' group tour over these areas be fascinating? I can't wait!)

One hoard about 240 km east of Moscow contained over 11 000 dirhams, plus 12 pounds weight of pieces from those coins, so one can only gasp with wonder at the thought of the millions of silver coins being pumped out of countryside mints to achieve this level to be withdrawn from circulation and then replaced. The main items of trade on this route were slaves in one direction and furs in the other, both fairly pricey items apparently. Spufford quotes a Jew from Muslim Spain who commented, in Germany in 965, that Indian goods were on sale along with local grain and wine, and he wondered at the fact that he could find perfumes and spices at the "extreme end of the west"; but eventually the sources of silver in Central Asia dwindled, while the western European currencies flourished.

Are we too narrow-minded in presuming that hoards were set aside either to keep them away from invaders or to preserve them while the owners were absent? Another possibility is revealed in Arabic 10th century literature which describes chieftains being buried with coins, clothing, food and drink and their favourite slave girl. How many finds include skeletons, or did the wild animals take those but not the coins? And there is a Nordic saga which quotes the alleged "Law of Odin" that the dead could enjoy any silver that they had buried themselves. What a cruel decision to make – do I party now or save it for heaven?

What a boon metal detectors have been. Our own NAV newsletter reported last year's discovery of a gold and silver treasure-trove in Staffordshire by a complete amateur who found it on a friend's farm, and as the finder – a middle-aged man on a disability benefit – was expected to gain about a million pounds for his effort, I can only imagine that as of now, approximately every second bloke in the UK is hunting for access to: a) a detector, and b) a half-decent bit of paddock! This particular find was not only coins but included religious relics and Anglo-Saxon war gear such as sword fittings.

For anyone developing an interest in hoards, I can recommend Kenneth Jonsson's book *Viking-Age Hoards and Late Anglo-Saxon Coins*, which provides incredible detail, complete with graphs etc, of hoards up until its 1986 publication, but there have been so many finds since then, and rapidly improving metal detectors. Who knows what we may find which will turn a few of our theories upside-down? And for a thorough examination from the British point of view, the book listed below, edited by M A S Blackburn

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in memory of Michael Dolley, is a remarkable collection of research papers.

I hope these comments have whetted a few appetites to go on exploring this ever-changing topic. Always another find, another excitement: studying hoards never stops. And isn't it a LOT more fun than my neighbour's handbag?

BIBLIOGRAPHY

Australian Numismatist Newsletter, Summer 2009

British Museum Magazine, Spring 2000, Winter 2009

Blackburn, M A S, *Anglo-Saxon Monetary History*, 1986, Leicester University Press

Jonsson, Kenneth, *Viking-Age Hoards and Late Anglo-Saxon Coins*, 1986, Stockholm

Spufford, Peter, *Money and its Use in Mediaeval Europe*, 1988, Cambridge University Press



MANAGING THE NOTE ISSUE OF AN AUSTRALIAN BANK

By Trevor Hart

(former Group Archivist, Australia and New Zealand Banking Group Limited)¹

In nineteenth century Australia there were three types of banks – trading, saving, and mortgage banks. The trading banks were further divided into banks of issue and non-issue. The banks of issue were those that issued bank notes from 1817, when the Bank of New South Wales was established, until the Commonwealth government took over the function in 1910. The *Australian Notes Act* was to operate on 1 November, 1910. Additional to the *Notes Act* a further act was proclaimed to take effect on 1 July 1911 which levied a 10% annual tax on outstanding private bank notes. This made the note issue uneconomical for the trading banks who consequently withdrew from issuing bank notes. The first Commonwealth notes were the super-scribed issues of 1910. These were the notes of private banks over-printed with the words “AUSTRALIAN NOTE”.

The issuing of bank notes in the 19th century played a fundamental role in the deposit raisings of the banks and supplemented current account deposits and term deposits. The banks received gold and issued bank notes; the gold was then available for further lending. Unlike deposits, on which the banks had to pay interest, the funds raised through the note issue were “free”, ie there was no interest paid by the bank. There was, however, a real cost to the note issue – the cost of producing and managing the notes themselves. The costs were for engraving the plates and printing the notes, recording their issue, and withdrawing them when they became too tattered for use and started to reflect on the image the banks wished to project as solid and respectable organisations.

This paper discusses some of these issues.

There were, of course, issues of acceptance of bank notes by other banks. The Tamar Bank and the Cornwall Bank, both of Launceston, had an

¹ This is an edited text of a talk to the Numismatic Association of Victoria on 17 March 1995 and is based on surviving records held in the extensive archive of Australia and New Zealand Banking Group Limited to which acknowledgement is made. Footnote references are to record series in ANZ Archive.

agreement in 1835 relating to the exchange of their notes. The notes were included in a daily exchange of “notes cheques and bills” held at two o’clock each day. Settlement was on Saturday but was not required if the “owing” balance was less than £2000.²

There are a large number of banks in ANZ Group’s pedigree – thirteen were banks of issue. They were: Bank of Adelaide, Bank of Australasia, Bank of South Australia, Bank of Western Australia, Bathurst Bank, Commercial Bank of Tasmania, Cornwall Bank, English, Scottish and Australian Bank, London Bank of Australia, Royal Bank of Australia, Tamar Bank (no known note specimens) Tasmanian Bank, and Union Bank of Australia. They bought their bank notes from English suppliers Perkins Bacon and Co, Bradbury Wilkinson and Co, Chapman and Co, and Sands and McDougall of Melbourne. Tenders were called from time-to-time from various companies and designs by C Skipper and East, and note plates engraved by the Tasmanian artist Thomas Bock are known.³

There were limitations on the amount of notes that banks could issue. The Bank of Australasia was restricted by its charter to issuing notes to a maximum of its total deposits or three times its paid up capital but this was varied in the charter of 1856 to three times the aggregate amount of specie (as coin was called) and bullion actually in their hands in the Colonies.⁴ The charter also set out time limits after which the note issuing power would expire. These were extended from time to time as the charter was renewed.⁵ The ES and A’s charter permitted it to issue notes in denominations of £1, £2, and £5 or any greater sum than £5 but not in fractions of a pound without the express approval of the Commissioners of the British Treasury. It was limited to the amount of its subscribed capital. Additionally, the bank was required to keep the note issue covered by holding at least a third of the issue in specie.⁶ Other banks were restricted

² U2/1/11. Agreement dated 1 Jan 1835.

³ Plates of the Commercial Bank of Tasmania are held in ANZ Group Archive

⁴ Bank of Australasia Charter 1856 clause 14. Charters were issued by the Crown and provided for incorporation and, amongst other matters, limited liability of the shareholders.

⁵ The Bank of Australasia’s charter was initially for twenty-one years but was re-issued, initially for twenty-one years but subsequently each ten years until the time it was cancelled through the formation of the new Australia and New Zealand Bank Limited in 1951.

⁶ E/4/16. Charter preamble

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in their note issue by their Articles of Incorporation or their incorporation acts of parliament.

Issuing bank notes was a tedious business. It was usual for the English note printers to provide designs for notes and from time to time the printers advised the banks of the need to upgrade their notes to keep up with advances in forgery. Printers were sometimes selected by tender. The English banks shipped notes to their Australian head offices where they were recorded in note accounts.

Each note had to be signed by two or three staff members (usually the manager and, in the early days, directors) and recorded in a note register which noted the names of the signatories, the number and dates the notes were signed and the date they were issued.

Because they were intrinsically valuable even when unsigned, all notes were kept under double custody, i.e. two people each held a separate key to one of two separate locks on the cupboard in which the notes were stored.

The banks usually operated a double system of cash control; the teller would hold a stock of notes and specie which would be under double custody when locked away for the night. The bulk or “stock” of cash was kept under double custody in the “treasury” usually in a strong room, and from here the teller’s till was replenished. The “Safe Book Treasury” (1838-1893) for the Launceston branch of the Union Bank of Australia⁷ records the first batch of notes received on 20 August, 1838. They were £1, £2, and £5 notes totalling £4,100. Specie (mostly in gold) totalling £38,357.3/- was also held, of which £18,831.3/- was “mixed specie” including Spanish dollars. Dollars did not disappear from the branch’s books until 1844. In 1840 the branch recorded stocks of £10, £20, and £50 notes. The branch took no £20 notes from its treasury between 1840 and 1849 when they were returned to London for destruction. Twenties did not reappear until 1853. Similarly, £50 notes disappeared in April 1861; they were not held again – and perhaps were no longer issued by the Union Bank.⁸

In the Bank of Australasia requisitions were lodged with the Superintendent’s office in Melbourne by the issuing branches and notes were ordered through the bank’s London Office which would send them

⁷ The Union Bank’s Launceston branch opened on 30 Apr 1838

⁸ U/32/34. Safe Book Treasury, Launceston

directly to the ordering branch.⁹ There were a large number of the issuing branches in Australia: all capital cities, Launceston, Ballarat, Beechworth, Belfast (Port Fairy), Castlemaine, Creswick, Geelong and Portland were some. The Bank of Australasia centralised its note issue in Melbourne in 1878¹⁰ and maintained the note registers for all the issuing offices. (None of these survives.)

The cost of producing notes was extremely small; it took in the cost of paper and printing, freight, insurance and duty, and in 1888 was costed at one penny a note. Additional costs included the salary of the Note Clerk (£250 per annum) and the state note tax. The note tax in Victoria was at the rate of two per cent of the average circulation of notes at June and December each year. In 1889 the Associated Banks estimated the amount of note tax paid by banks of issue in Victoria at over £32,000 per year.¹¹ Note tax applied in Victoria from 1876.¹² The ES&A provides an undated memorandum showing that it cost £89.4/- per 1,000 notes including the cost of unproductive specie held to cover the issue. The value of the issue based on opportunity cost was seen as £70. Further costs related to lost and stolen notes and forgeries, and the destruction of un-issuable notes. The Australasia required its staff to list the numbers of notes posted so that the bank could stop payment in the event of loss.¹³

Destruction of notes was also highly labour intensive. Notes had to be counted on receipt from branches, collated in numerical order and “narrated.” No example of a “narration” survives in ANZ Group’s Archive but it appears to have been a listing of notes in number order. The number of the narration was then recorded in the note register against the individual number of each banknote. The register was therefore a continuously updated record of the outstanding notes. The Bank of Adelaide used a cancelled note register but whether this was a “narration” has not been established. Notes to be cancelled were usually stamped “cancelled” and the corner with the signatures cut off.¹⁴ London had problems processing notes for destruction. Between 1 October, 1860 and January 1861 the Australasia burnt 132,284 notes, they having appointed a special clerk for

⁹ A/153/11. Memorandum for London Office 12 May 1874

¹⁰ A/153/4. Circular Memorandum (New South Wales) 1 Jun 1878

¹¹ A/264/5. Scrap Book, Note Department

¹² A/153/11. Memorandum for Victorian branches 7 Dec 1878

¹³ A/104/1. Superintendent to Manager, Melbourne No 6 of 13 Oct 1838

¹⁴ A/3/6. Board Minutes 7 Mar 1850

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“narrating and marking off in the Note Register” in the previous May.¹⁵ The directors, who were responsible for destruction of the notes in London, were paid a special fee to oversee the cancellation of notes because the volume was so large.¹⁶ By 1860 the volumes of cancelled notes in London were huge, e.g. on 2 January 1860, 560,102 notes with a face value of £1,673,278, and on 30 August 1860, 798,615 with a value of £2,223,036. This continued for many years and probably arose because un-issuable notes had been accumulated in the branches since the gold discoveries. On 13 April 1856 there was, in the Bank of Australasia in the Colonies, an aggregate £8,247,247 worth of notes. Of this sum only £864,439 was on issue. There were also 1,124 £2 notes circulating and the board directed that they be withdrawn.¹⁷

The Geelong manager thought fit to tell the directors what his procedure was. Here is the lengthy description as he wrote it.

When retired from circulation by the Teller, and while still under his charge, the Notes are pasted, repaired and cancelled with the stamp, and, at the termination of each financial month, transferred to my safe; but before being received into it, they are checked either by myself or the Accountant, sealed up and put away until circumstances admit of their being sorted and entered in the usual specifications; when this is to be done, they are given in charge of a clerk, he is held responsible for the amount entrusted to him, and required to be present at every subsequent stage of the process: by him alone they are checked again previously to sorting, in which he is assisted by others appointed for the purpose the Notes are then counted into such quantities as may be most convenient for narrating (generally into thousands) each fifty being marked by a slip of paper, and care is taken to see that the sum of the whole of the parcels corresponds with the amount received from me, and in case of any discrepancy they are immediately checked until the error is discovered. This being done, the clerk in charge reads out the numbers of the notes to two others who take them down in the Narrations, and these being rolled in columns of 50 lines, are in themselves an

¹⁵ A/3/8. Board Minutes various dates

¹⁶ A/3/8. Board Minutes 3 Mar 1859

¹⁷ A/51/12. Secretary to Superintendent No 1047 of 19 Feb 1857

*effectual check at this stage: from the Narrations, the numbers are copied into a Book kept specially for the purpose, and marked off in the Note Register; other Notes are then returned to me until it is found convenient to cancel them with the Register, which is done by myself and the Accountant, two clerks at the same time checking the Narrations, and as each bundle is finished, the Notes composing it are cut in two and sealed up ready for transmission to London by the first convenient opportunity, being meanwhile carefully locked away in my safe.*¹⁸

Forgeries provided the banks with a number of problems as they could often circulate for some time before being discovered by the bank when they were presented for payment. Forgeries were made initially by hand – sometimes free-hand copies. With developments in photography and printing, photolithography was used to copy notes. The note printers and the banks took care to guard against forgery by using such means as watermarked paper, and increasingly elaborate designs which culminated in multi-coloured notes.

In 1835, Mr Bacon, the Bank of Australasia's engraver, prepared designs for notes for Sydney and Hobart which after alteration were approved and ordered printed. Alterations required inclusion of the words "Incorporated by Royal Charter" as well as the value differently printed on each. He was instructed to order from Wise and Co, 400 reams of paper with a watermark "The Bank of Australasia". A month later Bacon was instructed to prepare designs for the Launceston branch.

Paper was a problem. The Superintendent of the Bank of Australasia told the bank's London Secretary that the paper for the new issue of 1863 was worse than the old issue. In proof he enclosed a note which had only been in circulation for about a month which he described as "so soft, woolly and porous, as to be quiet unserviceable."¹⁹ The London Bank of Australia also complained about paper saying that the notes became "soft and thin." Perkins Bacon & Co, the note printers, replied that in their experience, the paper became "soft and thick." On the quality of the paper generally, Perkins Bacon found that few could agree on a good paper. They said in a letter to the Secretary of the London Bank in 1876, that,

¹⁸ A/218/5. Manager Geelong to Assistant Superintendent 1854-1857. Extract from Manager's letter to Secretary London 9 Jun 1856

¹⁹ A/8/39. Superintendent to Secretary No 1244 of 22 Dec 1863

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The feel of a bank note it is a matter of taste, like everything else, & it often happens that when a customer objects to a paper and calls it inferior, he really means that he likes of thicker of thinner paper, a clear one or what we call a bladdon(?) paper."²⁰

Robbery was also a frequent problem. In 1863 The Bank of Australasia had 100 unsigned forms stolen from its Yackandandah branch. Almost all were recovered with only one note known to be put into circulation.²¹

The physical needs of the note office were recorded by the Note Clerk of the Bank of Australasia in 1876. The Note Department comprising two clerks had moved, in March, into the bank's new Melbourne building on the northwest corner of Queen and Collins Streets. Webster, the Note Clerk, complained that ventilation was inadequate with no opening windows. In high Victorian style he said,

*The evil I point out may not be so perceptible to a person entering the apartment [for a short time]. But when large quantities of cancelled notes are in process of manipulation – from which the odour and effluvia are under any circumstances most disagreeable – I can testify that the air of the room is rendered very impure, and quite unfit for healthy respiration.*²²

There was also a problem caused by fumigating the notes; additionally, the 31 note registers were also stored in a non-fireproof room. John Webster was also concerned, after 18 months in the Note Department, that his career would suffer; he languished there for another 10 years before he resigned at the age of 47. A later Note Clerk, F C Caldwell, also complained about staffing in the department. He stated that with his three other staff he was unable to maintain the efficiency of the department; the staff were recruits without any experience. Caldwell served from 1888 to his retirement in 1915.²³

Each bank issued notes in a range of denominations ranging from £1 to £100. The £2 note must have been very unpopular. Vort-Ronald does not

²⁰ Letter Perkins Bacon and Co to W Younger, Secretary, London Chartered Bank, London 30 Oct 1876 – in note folders

²¹ A/8/39. Superintended to Secretary No 1244 of 22 Dec 1863

²² A/264/4. Half yearly report of the Note Department 22 May 1876

²³ A/52/2. Register of Officers and their Sureties 1833-1862

appear to list it in his *Banks of Issue in Australia*, and certainly not for the banks in ANZ's pedigree. He does, however, recognise the \$3 note of the Bank of New South Wales. Since Vort-Ronald's work came out in 1982, more records have been found at ANZ which might refine present knowledge of the Anglo-Australian note issue. Certainly we now know about the £2 note of which there is no known specimen. That these notes were existent seems strange (unless they were very old stock) in view of the comment made by J C McLaren, Colonial Inspector of the Union Bank in 1840. McLaren advised the bank's Secretary in London that, *the £2 notes are not liked at any of the branches*, and recommended that none further be sent out as it would be hard to *put into use* any of those that were already held in Melbourne.²⁴ Clearly acceptance changed after the gold rushes began and demand increased. In 1851 the Australasia's Melbourne Office reported 72 £2 notes in circulation. By 1853 this had increased to 14,055.²⁵ It should be noted though, that of seven branches that requisitioned notes in 1852 not one asked for twos although they were sent. In fact the total requisition was for £1,494,000 with £2,025,000 worth of notes sent.²⁶ The ES&A Bank issued them between 1854 and 1858. In July 1858 £20,000 worth of unissued twos was returned from Sydney to the Melbourne head office and subsequently to London in April 1859 for destruction.²⁷ The Bank of South Australia and the Commercial Bank of Tasmania also issued £2 notes in early days.

With few surviving notes and records, it is difficult to be precise about new issues. The ES&A reported new forms in denominations of 1, 5, 10, 20 and 50 received from London and issued in 1858.²⁸ Was this a new type? A third issue was also noted in April 1887. Vort-Ronald records the 1893 overprint when the bank reconstructed, and a further type with the bank's new name.

In the 1840s £20 notes were being used to transfer funds between Melbourne and Sydney. The Bank of Australasia was losing commission from the reduced need for bank drafts and managers were told not to reissue these notes to prevent their use as *a medium of remittance*.²⁹

²⁴ U/102/1. General Manager to Secretary No 38 of 15 Feb 1840

²⁵ A/30/1-2. Melbourne Branch Balance Books

²⁶ A/3/6. Committee Minutes 2 Oct 1852

²⁷ E/24/17. New Banknotes Received and Issued

²⁸ E/24/17. New Banknotes Received and Issued

²⁹ A/104/1. Superintendent to Manager at Melbourne No 75 of 10 Jun 1843

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As we have seen, changes were always being made to note designs and printing plates. Separation of Victoria from New South Wales in 1851 caused a need for new plates.³⁰ The Australasia issued new £100 note in 1852 by Perkins Bacon who won the tender over Skipper and East.³¹ In 1858 Perkins Bacon submitted coloured specimens and was asked to show how this would prevent forgery; they were confident that the notes would be *quite secure from fraudulent imitation*.³² (This idea of coloured notes was put to the bank's board in 1847.³³) Whether an issue came about has yet to be verified but most likely it didn't as the Superintendent was recommending a new issue in 1862. The Note Committee of the Court of Directors agreed to a new issue of Perkins Bacon designs and this seems to have been issued from 1863.³⁴ Old notes were cleared when possible and Perkins Bacon was paid £301 for those they held in stock.³⁵ But not all old notes could be cleared and the minutes record £8,787 outstanding for the period 1835 to 1850.³⁶ These would be notes that had been lost or destroyed by customers – or perhaps put away for their descendants who would become collectors in the 21st century!

A lot of the records of note issue have been destroyed. Nevertheless, there is scope for considerable research into the note issue of the private banks - but a lot of the questions will never be answered.



³⁰ A/3/6. Board Minutes. 27 Mar 1851

³¹ A/3/7. Board Minutes 16 Dec 1851

³² A/3/8. Board Minutes 10 Nov 1858 and previous

³³ A/116/1. Superintendent to Manager at Sydney No 37 of 7 Apr 1847

³⁴ Vort-Ronald, Michael P, *Banks of Issue in Australia*, 1982, p60

³⁵ A/3/9. Committee Minutes 2 May 1864, f296

³⁶ A/3/9. Committee Minutes 12 Dec 1864

THE MIGHT OF THE INK!

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INTRODUCTION

Through the *Australian Numismatist*, or any other publication, the sharing of valuable numismatic information with the readership is extremely positive for the obvious reasons. For the author, the transfer of numismatic knowledge and experience from thoughts and observations down onto paper can be hard work. But with passion, patience and perseverance, the results can be extremely satisfying and rewarding.

The author may endure numerous revisions and corrections made to his or her articles. This is unavoidable as the resultant work must be of high standards expected by the readership. And it's most likely that this *published* article could be a reference point for further research and updates.

Being a regular contributor to the *Australian Numismatist*, there are usually three difficulties that must be overcome in my view: firstly, the choice of the subject; secondly, the availability of numismatic and reference material; and thirdly, the technology used for recording and reviewing the article.

Let's look into the first difficulty. A subject may be chosen from a numismatic event or item that inspired the author, leaving with everlasting impressions. For instance, a subject may be drawn out from our experiences as collectors, or from a special place visited some time ago. Other sources of a subject can be representations of historical events, anniversaries, dates, portraits of important people, or depictions of agricultural or cultural life on banknotes, coins or other numismatic material.

Once this is resolved, the second difficulty is the availability of numismatic material and references. Granted, your collection may not have the materials for the article. Some may be reasonably affordable but others could be very expensive to purchase. Assistance from friends may sometimes achieve in locating it, but thankfully, the acquisition of material for study is not mandatory today. This is due to the technological advances in cataloguing numismatic material and posting their images electronically

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on various websites. An alternative is to access related information from public libraries.

This brings us to the third difficulty, the access to technology for recording and reviewing the article. Today, the use of computer has eliminated the need to use a typewriter for recording information.

Still, the author may either use handwritten notes or typewritten notes, and both methods may serve towards the completion of the article. Nevertheless, the use of a computer allows for instant revision and update of the article at any time. In fact, for the first two methods of recording, revisions may force the author to create inserted notes or rewrite the whole article. This can be confusing and lengthy time-wise.

However, the use of a computer avoids supplementary notes. The obvious benefit for the author is the immediate access of recorded articles for further revisions, updates or insertions at any area of the article. Today, public libraries may provide assistance on the use of computers and related technologies for accessing, recording and arranging information to your needs.

The transformation from paper-based to computer-based recording is not easy. Some investment to the new technology must be made, and time and effort is needed to understand key technical concepts. Still, the paper-based format of presenting an article is acceptable for most publications today.

So, for this article, my thoughts for an appropriate subject went back to the beginning of my banknote-collecting odyssey that started in 1997.

In entering the world of numismatics, I realised that two factors would shape the future of my collection – the attractiveness of the banknote (or coin, etc) and its affordability. Under my *grand scheme*, my method of banknote collecting became progressively an ongoing battle of balancing these two criteria: to buy attractive notes at an affordable price.

Now and then, researching on a country's banknotes allows me to review part of my collection and, by implication, recall the method certain notes were purchased. To my embarrassment, this self-assessment confirmed my skewed preference towards attractive banknotes. When my purchases were negotiated, I was so impressed by the detailed engraving, wonderful design and colours chosen on attractive banknotes that the *affordability* factor moved to a lower level of priority.

Should I have been studied under a microscope by an impartial observer, this behaviour would have been termed as irrational! Despite this, my reviews have always reached the same conclusion: my instinct in buying these expensive banknotes was well-justified in the majority due to their improved market value, and in some cases, due to their scarcity.

Any collector is not perfect and I'm not an exception to this statement. Evaluations of collecting habits could be painful; for example, recollections of bad purchases. For a numismatic collection to be strong, relevant and healthy, problems and bad decisions must be confronted, understood and resolved, so that they aren't repeated. Well this is the theory anyway. Let's continue with my habits ...

Another example of my *grand scheme* has been the purchasing of identical banknotes. Duplicate notes were gradually accumulated in a brilliant way, hoping of displaying both sides for exhibition purposes. This seems to make a lot of sense ... But sometimes, a pair of them wasn't enough! This habit was minimised over the years but ... with one exception: *hand-signed* banknotes.

HAND-SIGNED BANKNOTES: GRAFFITTI OR GREATNESS?

What are *hand-signed* banknotes?

Paper money was first issued in large quantities in the 11th century by the Mongol emperor Kublai Khan, but on a much smaller scale in China as early as the 6th century AD. The distribution and acceptance of such notes were facilitated by soldiers, when new territories were conquered beyond the Mongol Empire.

The concept of the note appeared in China around the 9th century AD. Its design was done on a block of wood, which when inked, was impressed on a fine sheet from the bark of a mulberry tree. Then, when dried, the banknote was signed by the authorities and became a valid instrument of commerce.

In the Western Civilization, the appearance of hand-signed notes can be dated back to 1661 when the first European banknotes were issued in Stockholm, followed afterwards in London (Bank of England note dated December 19, 1699).

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Examples of such notes are extremely scarce and, due to their increasing value, these are usually only found in private collections or paper money museums around the world.

Without doubt, the concept of a *financial instrument*¹ such as a letter of exchange or a banknote has improved commerce when the risk of transporting valuable coinage became too great.

In my opinion, hand-signed banknotes seem to be different from other types. Usually, modern ones carry signatures that are incorporated into the overall engraved design of the note prior to the printing stage. The signatures may be those of bank governors (for example), treasury secretaries, or other authorised persons.

Still, the earliest banknotes were printed without signatures but allowed space on the design for their inclusion. In this way, with the backing of the bank of issue, a printed piece of paper became a strong financial instrument in the hands of the public, with just a stroke of a pen! This is the ingenuity of the human mind!



*Figure 1 – What a work of art! Reverse of the 10 Cruzeiros from Brazil
(Pick No. 133, Not dated, circa 1943-44, 158 x 66 mm)*

The most representative example of my habit in purchasing ‘duplicates’ is the group of common Brazilian banknotes, printed in the late 1940’s and 1950’s. During my first numismatic visit at an East Melbourne NAA Fair,

¹ Financial instrument – This is the means of facilitating a financial or commercial transaction between two parties. It can take on a form of a promissory note, a letter of financial statement or advice, or of a single document that allows unrestricted funds to be transferred from one party to another.

the first banknote I ever bought was one of them. Its lovely vignette on reverse revealed the art of design and engraving. Being fresh and uncirculated, I naturally fell in love with it, if I may say so (figure 1).

But wait! A few more of these notes stood up in that dealer's '\$2' box, anxiously waiting for a new home. I found them cheap and to my surprise, some were *hand-signed*. Being unaware of their value, they attracted my interest and I decided to collect them.

Soon, I've brought up the issue of hand-signed notes with my fellow numismatists when I joined the Numismatic Association of Victoria. The feedback received was of the opinion that in the past, these notes were termed as 'notes with graffiti'². Prospective collectors used this terminology to highlight that such notes are damaged, unattractive and worthless. This may have been a useful trick for buying them at advantageous prices. Well, educated collectors are fully aware that hand-signed notes have always been considered as quite valuable and scarce, especially those from the first quarter of the 20th century and prior.

I'm pleased to report to the concerned reader that the majority of my very few hand-signed banknotes are from these Brazilian issues, which were acquired reasonably cheap.

For this group of notes, its series commenced from 1943 to 1950, with no dates on them and were hand-signed across the face of the note. From 1953, these notes were re-issued with printed signatures. Most are still quite affordable, when it comes to the lower denominations of the series.

As my collection grew, my appreciation towards early bank notes grew stronger, and the hand-signed ones have a special place in my heart. From my collection, the few examples shown in this article are dated from the late 18th century, the 19th and 20th centuries AD.

² Graffiti is the name for images or lettering scratched, scrawled, painted or marked on property or an object. Graffiti has existed since ancient times with examples dating back to Ancient Greece and the Roman Empire. In modern times, spray paint, normal paint and markers are materials used for graffiti. The purpose of the graffiti is to mark territory controlled by a group of people, or a type of public but anonymous protest against local authorities, or a form of visual art or creation put on public property, and displayed for the public. In general, many consider graffiti to devalue a property aesthetically and visually, as well as in a monetary sense.

HAND-SIGNED BANK NOTES

BRAZIL

My first purchase of Brazilian banknotes from that Fair included a pair of the 2 Cruzeiros with consecutive numbers. The signatures on them are very similar and probably, the same bank teller released them. Still, similar signatures do not imply that they're identical. This example is the proof that signatures from the same person cannot be duplicated in an exact way (figure 2).



Figure 2 – Guilty as charged! Spreading the numismatic bug, this was the pair of 2 Cruzeiros from Brasil (Pick No. 133, Not dated, circa 1943-44, 158 x 66 mm) Consecutive notes from the Series 468 with serial numbers 074217 & 074218

By examining the signatures closely, the first note, the end of the line curves closer towards the chin of Duque de Caxias, and on the second, towards his moustache. While the style and orientation of certain parts of

the signature is virtually identical, this leaves us with no doubt that the same bank teller issued these notes. Still, each signature has its own characteristics and therefore, they aren't identical. Therefore each banknote is unique.

Unfortunately, the identification of the signatory cannot be made. Usually, a signature could reveal the name and surname of the issuer. In this case, the bank teller issued these notes with a long monogram or a simplified version of his signature. This practice may have been normal if tellers were instructed to sign hundreds of such notes before or during their issuance.

SWEDEN AND ITALY

The next two hand-signed notes were very appealing to me and added another dimension of my appreciation to their creators. At the time of buying these expensive notes, my pre-set budget was broken as my instinct kicked in, or should I say, dented my wallet. The first one looked quite scarce to me, for its condition, appearance and age, while the next one was quite equally attractive and raw in appearance.

The first banknote, dated 1857, is a hand-signed uniface note from Sweden. This denomination was printed in 1836 and 1839 with their serial numbers handwritten and later from 1840 to 1858 with their serial numbers printed (figure 3).

It's one of the most delicate notes I've ever seen. Handled with extreme care, the note was examined and its paper thickness was measured at just 0.12 mm. The use of light yellow colour is a fine selection against the black ink printing of the banknote. The wavy or 'stamp-like' perforated edge of the colour around the note is brilliantly executed.

This note has a watermark showing laurels flanking the central black vignette with the denomination written in Swedish. Moving away towards the sides of the note, the denomination is shown in numeric format as a watermark. This is a testament of Swedish paper note manufacturing techniques around the middle of the 19th century.

This banknote carries two hand-signed signatures as well as some notations on its reverse, which I've been unable to identify. It's also noteworthy to mention that the tannic acid contained in the ink has caused some minor deterioration to the fibres of the paper.

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Figure 3 – Sweden, 32 Skillingar Banco, dated year 1857, Issue Q,
Printed Serial Number 40926 (Pick No. A123c, 145 x 90 mm)

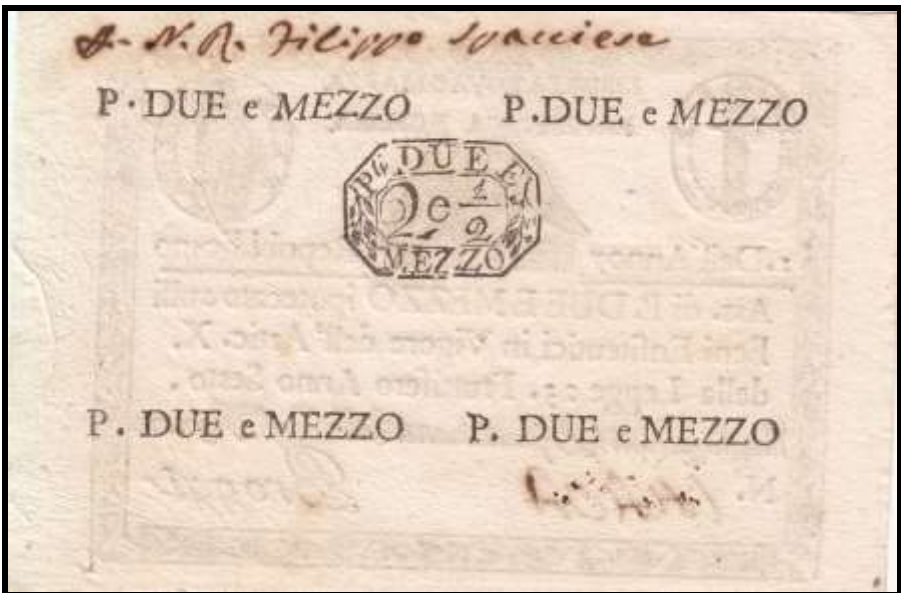


Figure 4 – Italian States, 2½ Paoli, not dated 1798 (Anno 7) (Pick No. S536, 141 x 93 mm)

The second banknote is from the Italian States. Printed on a thicker paper, its thickness was measured at 0.26 mm. Apart from its age, I was quite

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impressed with the impact of the printing plate, leaving a heavy impression on the reverse of the note, as seen on the image (figure 4).

It also resembles the famous French Assignats for their 'heavy-impact' printing style. Indeed, the Pick's *Specialised World Paper Money Catalogue* identifies these notes as Assegnati (in Italian) issued in 1798 (Anno 7). For this series, the Italian Assignats were printed in a similar style for each denomination running from 3, 5 and 10 Bajocchi (equal to one Paolo), through to 1½, 2, 2½, 7, 8, 9 and 10 Paoli.

These two notes came from the same dealer's stock. I was kindly allowed to inspect them, especially the fragile Swedish banknote. After looking at them for a while, the dealer realised my acute interest in them and instantly offered a generous discount. This honest and kind gesture just clinched the deal for me!

Did I break my golden rule by buying these attractive but expensive notes? Yes, but my impulsive approval of this strategic acquisition was correct, as present market conditions value these notes much more than their final purchase price.

According to my SCWPM catalogues, the notes are valued at US\$300 in 'EF' condition (catalogue dated 2006) and US\$160 in 'Unc' condition (catalogue dated 1998) correspondingly. The pair was bought in 1999 for about \$120.

On the issue of rarity, I have never seen similar Swedish notes locally since then. The Italian States notes have occasionally appeared in various denominations but are gradually becoming expensive to buy.

ARGENTINA

Then, my numismatic journey took another turn into an unknown region: Latin America. This next note is considered as one of my favourites in my collection. While not extravagant at that time, this has been hand-signed by one of the founders of the (today) obsolete bank!

El Banco de Oxandaburu Y Garbino was a private banking house established at Guleguychu, Argentina in 1867. Named as Oxandaburu Y Garvino, the bank's first issue of 1867 consisted of six notes denominated in ½, 1 and 4 Reales Boliviano, and then 1, 5, and 20 Pesos Bolivianos.

In 1869, the Peso Boliviana issue was released in five denominations: 4 Reales Bolivianos, and then 1, 5, 10 and 20 Pesos Bolivianos. In the

same year, the ‘Peso Fuerte’ issue also came out with three notes of 1, 5 and 20 Pesos Fuertes.

At a later date, the bank’s name changed to Banco Domingo Garbino. For its first and only provisional and non-dated issue, the bank overprinted its ‘Oxandaburu Y Garbino’s’ 1869 ‘Peso Fuerte’ issue with the new bank’s title vertically in a red ink.



*Figure 5 – Argentina (Private bank Issue) - Banco Domingo Garbino overprint on earlier issue of Banco Oxandaburu Y Garbino, Five Pesos, dated 1-1-1869
(Pick No. S1803, 180 x 78 mm)*

These issues are characterised by the representations of ladies, agricultural themes and portraits of domesticated animals. All these designs and vignettes make them extremely attractive and very popular today. The American Bank Note Company was assigned to prepare and print all ‘1869’ issues. This lovely example is from that of the overprinted series of notes.

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Interestingly, the signature on the bottom left of the note can be identified as 'N. Garbino', a definite link to the Bank's founders (figure 5).

Again, the effect of the tannic acid in the ink has left a small hole at the bottom right green border of the note. Nevertheless, this does not detract the note from its appearance, value and collectability. Hand-signed notes are worth a considerable amount of money compared to the unsigned ones, known also as remainders. They are always in demand and are much harder to find in better condition.

This note was definitely good bait for the trap. And the trap was the discovery that obsolete (broken) banking houses were in the thousands across the American continent by the middle of the 19th century. Soon, it was realised that collecting such notes require patience, time, research and a massive budget. Thankfully, the alternative to a more affordable solution is to collect unissued remainders, still worth collecting today, and at a lower price.

COLOMBIA

The Argentinean banknote opened up new and dangerous avenues for my tastes and my limited budget. The following tiny banknote is an issued note from the private Bank of Pamplona, established in Colombia in 1883. Its first banknote was the 1883 issue of the 5 Pesos, dated 1/1/1883 and 2/5/1883. The following issue was from (later) 1883 to 1884, consisting of the 1, 5, 10 and 20 Pesos. The printer commissioned to carry out the printing of these notes was Bradbury Wilkinson & Co.

This example is from the second issue. Dated 9th of July 1883, it carries signatures from the general director and two directors of the bank. On the reverse, it carries the signature of the cashier (figure 6).

The use of the light orange colour contrasts well against the strong but delicate black border. The use of the circled vignette of Lady Liberty on the centre is well-designed, and is another exceptional example of the engraving work done by Bradbury Wilkinson and Co. It's simply breathtaking. This note surfaced in October 2002 at the International Bank Note Convention held in Melbourne.



Figure 6 – El Banco de Pamplona, One Peso, hand-dated 9-7-1883
(Pick No. S711, 124 x 72 mm)

UNITED STATES OF AMERICA

Now, we are into deep waters: the obsolete currency from the United States of America! These two attractive banknotes were purchased in the beginning of my odyssey, just after the Brazilian notes. In fact, this pair is my first in my small banknote collection from USA broken banks.

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Originated from the same dealer's stock, the price tag was reasonable at the time. Pleasantly warmed by the appearance and detailed engraving work on these 'beauties', my increasing appetite for similar banknotes were gradually negated by their increasing price tags year after year (figure 7).



Figure 7 – Bank of Washtenaw (obsolete bank), Five and Ten Dollars banknotes, uniface and hand-dated 9-12-1835 (\$5: 179 x 73 mm, \$10: 178 x 73 mm)

The shown notes were printed by Draper, Toppan, Longacre & Co, Philadelphia & New York. I assume that these were printed by using a stereograph steel-plating process, one of the progressive printing methods in those days. Both notes were issued on December 9th, 1835 to Mr Brown. The cashier of the Bank of Washtenaw was Mr Morgan and the President was Mr David Page as the signatures reveal.

The Bank of Washtenaw was formed by a group of local men including James Kingsley, Volney Chapin, and William Thompson. The bank was formed in 1835 when liberal banking laws enabled citizens to open banks

with little capital down. The bank quickly collapsed and in 1847 the property was sold to Volney Chapin, which was converted and became his family's residence for over 25 years.

As mentioned before, my later studies confirmed the existence of thousands of such issues from these U.S. obsolete (broken) banks. Over time, more of them surfaced and while some were bought reasonably cheap, others were admired but remained with the dealers' stocks due to their optimistic prices.

Much later, an opportunity such as the following one could not escape my collecting claws! This banking instrument was put up for a Tender Sale at a numismatic meeting. It is a deposit certificate from the Ilion Bank dated 17 December 1868 on behalf of Edwin Loomiz for the amount of \$300 (figure 8).



Figure 8 – Ilion Bank, Certificate of Deposit for \$300, dated 17th December 1868
(194 x 99 mm)

With limited information, my research has so far found out that the Ilion Bank was established in the village of Ilion, in Herkimer County in New York.

The area around Ilion was settled first by Palatine Germans around 1725. Settlers first established residencies along Steeles Creek, which flows through the current village into the Mohawk River. Many mills were set up along the creek. After the American Revolution, a small community was set up in the area named New London. This area of the village still has buildings, which use the name London.

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The community began to flourish starting around 1816 when Eliphalet Remington created his first gun, which would later grow into the Remington Arms Company. The community was even further advanced with the completion of the Erie Canal in 1825.

In 1843 a post office was desired, so a name needed to be chosen. Remington rejected the use of his name as a name for the village, and it was eventually named Ilion.

This early certificate represents a great example of a banking instrument, or banking ephemera – another interesting branch of numismatics.

EPILOGUE

The source of this article was essentially my recollection of pleasant memories from purchasing my first banknotes, which happened to include some hand-signed notes. Throughout this article, I've been able to reveal my collecting attributes and bad habits, but to also elevate a certain group of banknotes to a deserving level.

All these hand-signed bank notes and banking-related documents can be worthy additions to a banknote collection.

As the beginning of the 20th century was approaching, different countries took advantage of improved printing developments, and techniques in anti-counterfeiting; and adopted difficult-to-duplicate designs with a wide spectrum of colours for protecting their currency. Changes to banking procedures and streamlining of economies for banknote production and banknote volumes allowed signatures to become incorporated into the banknote design. Dedicated areas on the banknote design were created for the appearance of signatures and titles, which were part of the plate engraving. On other productions, the signatures were simply engraved on separate plates and were printed following the printing of the main designs.

In the end, the cumbersome and tiring task of hand-signing every note by the teller was gradually eliminated, surely a blessing to bank officials.

Overall, the majority of these notes exemplify the depth of human ingenuity in paper printing technology, the transfer of designs and vignettes from drawings to steel engraving and plating techniques, created with so much love, care and dedication.

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In numismatics, and especially in banknote collecting, these examples develop the collector's admiration for all involved: the designers, the etching drawers, the modelling artists and the printing plate engravers.

Banknote production *is* part of a real mosaic of human achievement.

Importantly too, by hand-signing banknotes, it makes them more personal, more human, and just *unique*! **Oh ... the might of the ink!**

BIBLIOGRAPHY

Cribb, J, *Money*, Collins Eyewitness Guides, Collins Publishers Australia, 1990

Lewis, B R, *Coins & Currency*, Hobby Handbooks (Random House), 1993

Standard Catalog of World Paper Money – General Issues (1368 - 1960), Krause Publications, 11th edn, 2006

Standard Catalog of World Paper Money - Modern Issues (1961 – Present), Krause Publications, 14th edn, 2008

Standard Catalog of World Paper Money – Specialised Issues, Krause Publications, 8th edn, 1998

Taylor, G R (ed), *The Inventions That Changed The World*, Reader's Digest, 1st edn, 1983

Website: Wikipedia (Internet Encyclopaedia)



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