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July-September 1973



Keeping the Memory Alive

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THE TRACKERS'

CRO NICLE

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NASA and the Omega Speedmaster ctd.

From the now defunct website "clubspeedmaster.com".



The watch became very popular with the astronauts and was often used in their everyday lives as well as their work in the space flight simulators.

However, the use of Swiss chronographs in the American space program met with political resistance by a number of American watch makers, specifically the Bulova Watch Company.

In the early days of the space program, Bulova did not make a chronograph, but nonetheless, it exerted considerable pressure on NASA to use Bulova

products. There were various meetings with NASA officials in order to promote the use of their products.

In 1964, Senate hearings involved the domestic watch manufacturing industry and their use in space and defense projects. Senator Symington from Missouri, Margaret Chase Smith from Massachusetts, and Senator Stennis from Georgia were present at these meetings. The former assistant secretary of defense, Marx Leva, was retained by Bulova as their legal council.

James Webb, the administrator of NASA at that time, was aware of these meetings and helped shape NASA's response to them. The Omega Speedmaster continued to be used throughout the Apollo program. The last manned lunar landing Apollo 17 was scheduled for December 1972.

As this date approached, the Bulova Watch Company became increasingly concerned that its products be used for this last manned lunar mission. Letters were sent to the special assistant to the President at the White House from Bulova indicating their displeasure with the use of Swiss chronographs in the American space program.



James Webb



James c. Fletcher

Thus it was decided by the Administrator of NASA, James Fletcher, that if a suitable Bulova chronograph could be found, it would be used on the last Apollo mission. The astronauts responded by stating that if forced to wear the Bulova time piece, they would also wear the Omega as "insurance."

1972 Test Program

Bulova had insisted that chronographs chosen by NASA follow the policy of the "buy American" regulations established by the Senate. Both Omega and Bulova wished to comply with this, however, as of 1972, Bulova did not manufacture a US made chronograph.

In August of 1972, sixteen companies were notified by NASA that the Manned Spacecraft Center (MSC) planned to establish a Qualified Product List (QPL) for possible future procurement of astronaut watches.

To be continued

Whereabouts?

As a result of Paul Dench supplying his "staffing list", augmented courtesy Brian Milne, the "Whereabouts" table of those for whom we have no contact details has expanded to more than one page. Thanks to those who have sent updates.

C Abott	Cheryl? Dixon	Ian Jones
Eric Ainsworth	L Donkin	Vera Kastropil
Gay Albon	John Draper	John Keane
Bill Arbery	Mike Dresser	Mike Keen
Allan Barber	Bruce Duff	Jim Keenan
John (Allan) Barber	I Dunleavy	John Kelman
Matt Barber	Dave Elliot	Roy Mallinson
Keith Barnard	J Erickson	Bob Marr
Barrow	Ian Few	Keith Mathieson
Deidre Beaumont	Ian Findlay	Alec Matthews
Elizabeth Beckett	G Francis	K McCarson
Keith Beveridge	Ben Franklin	Ian McDonald
Michael Billings	David Froom	S McDonald
G Bond	Jamie Gardiner	Frank McGregor
S Boyce	L Gardner	Eileen McLaughlan
Bill Boyle	S Garner	Don McLellan
B Bradley	G Carrick	Nola Meiklejohn (O'Byrne)
Phil Brindley	C George	R Miller
Hans Britz	Joe George	Ray Mills
Dave Brooks	Richard Govern	Marilyn Milner (Gobby)
T.F.A Brown	Brian Gray	Sharon Morgan (Todd)
W Brown	Ann Green	J Murray
J Burdett	Terry Haggett	Dennis Naylor
R Burdett	Peter Hardwicke	Gloria Neal
Robert Burns	Ron Harmes	Ellie Nichols
Joy Cameron	Anne Harvey (Brookes)	K Elton Nickerson
Geoff Cardwell	D Hatch	Graham Nielsen
John Cawthrey	Gail Heileman	John Noble
Brian Clifford	Ernie Hindley	? O'Brien
Keith Clifton-James	Dave Hine	Joan Oats
Barbara Cobcroft	A Holgate	W Oliver
Pat Coffey	Phyllis Hook (Watson)	Denis Owens
Jim Crossland	J Hopkins	John Paddon
Noel Cunningham	Deidre Howard	Diane Pitman (Housley)
F Dawes	B Hughes	John Platten
Andrew Dempster	Ed Humphreys	D Powell
Jean DeVis	B Hunter	M.J.K Power
Marilyn Dick	D Hutchins	Wendy Puccinelli
Olive Dick		Lorna Quinn
Neville Dippell		

The quest continues; the list has got a bit shorter, thanks to George Allen; Sue van Dongen et al. I have been given information concerning the possible whereabouts of a few of these, but so far have not been successful in obtaining, or confirming, details. The last Reunion Dinner brought out some missing persons, but there are also a few who do not wish to be contacted.

Whereabouts? ctd.

Roger Ramsden	George Sefton-Bellion	Christine Thomas
A Rees	D Selby	Howard Thomas
Dave Rendell	Ron Shand	Don Thompson
Frank Rice	Fred Sharland	Jack Thompson
Doug Richards	? Sheehan	Patsy Thompson (Nolan)
D Richardson	Jeff Shuttleworth	Larry Tomkins
Harry Richmond	Ray Skender	Frank Toomey
Ralp Richmond	Lyn Smart (Willis)	Mike Travell
Dave Rickards	J Smith	Ernst Uhl
G Riley	George Small	Tony Vingerhoets
Brian Robinson	P Smith	Dave Walker
Lynne Rosser	Roger Smith	Tom Ward
Ted Rosser	Dave Standbury	Mrs B Ward
Lindsay Sage	John Stanton	N Wardle
Stewart Sands	Bill Smythe	A Watermeyer
Ron Sargeant	Hazel Snook (Howse)	Irene West
Bob Scott	Barbara Stephenson (Vernon)	Bernie Wilbourne
Lorraine Scott-Malcolm (Erlandsen)	Barbara Teahan	Glen Williamson
Michael Scott-Malcolm	Barbara Teasdale	Garnet Wilmott
Russell Schwarzer	Des Terrill	Brian Wilson
Dorcas Sefton-Bellion		Ray Zatorski

Last of Catch the Buzz DVDs

The last of the "Catch the Buzz!" DVDs are now available for just \$5.50 plus postage from the museum.

It features:



- Carnarvon Airport Welcome;
- Kids Q & A;
- Cocktail Party, which includes Buzz's inspirational speech, and
- Opening of museum

It is a great memento if you were there; if you weren't ...you'll wish you were! But at least now you'll feel part of one of Carnarvon's biggest events.

Please order through the website at:

<http://www.carnarvonmuseum.org.au/buzz.html>



From A Carnarvon Viewpoint - ctd.

Gemini III

The first Gemini manned flight.

24 March 1965 AEST

By Hamish Lindsay

Carnarvon's third pass (ctd.)

At the end of the pass Conrad asked, *"Okay, Gus. I only have one question for you before you go out of range. How's the flying up there?"*

Grissom, *"Great."*

Conrad, *"Fine GT-3. See you next trip - next year."*

Retrofire

Approaching the Californian coast, over the ship Rose Knot Victor (RKV), Young cast off the adapter at 4:32:29 GET (0456:29 AEST) and at 4:33:13 GET (0445:23 AEST) initiated the retro-fire sequence. One after another the four retro-rockets fired and burned themselves out to bring Gemini III back down to Earth.

RKV Capcom, *".....5....4....3...2....1Retrofire!"*

Grissom, *"Auto-retro."*

Capcom, *"Manual-retro. Rocket 3 Rocket 2"*

Grissom, *"Three of them."*

Capcom, *"Rocket 4. Molly Brown, do you confirm all rockets firing normally?"*

Grissom, *"All rockets fired normally and attitudes were right in the centre."*

Then sensors indicated that Molly Brown was off course, and would miss its target by 69 kilometres, and Grissom's best efforts to correct their trajectory had no effect.

Grissom, *"That was the end of the burn."*

Capcom, *"Okay. And how did your attitudes look?"*

Grissom, *"Attitudes were right on."*

With the main parachute blossoming out at 4:48:40 GET (0512:40 AEST) the success of the mission was sealed.

Splashdown.



Just before hitting the water, Grissom threw a landing attitude switch, and Molly Brown snapped into the right angle to land, pitching both men into the windows and breaking Grissom's faceplate. They dropped into the Atlantic, 111 kilometres from the carrier USS Intrepid. The Gemini spacecraft produced less lift than predicted, so landed about 84 kilometres short of the target. Splashdown was at 1416:31 local USEST Tuesday 23 March 1965 (0516:31 AEST 24 March).

After they landed the spacecraft was dragged along nose under water by a wind in the the parachute. All Grissom could see through the window was seawater flowing past, and with his Mercury fright still fresh in his mind, he released the parachute. This time he was not going to "crack the hatch" until the swimmers had attached the flotation collar, so the two astronauts suffered a miserable 30 minutes sealed in a "can" that was getting hotter by the minute, and being tossed around by the seas. "That was no boat," complained Young with feeling.

To be continued

The Carnarvon Space Festival 2012 ctd.

By Hamish Lindsay

Professor Beazley,

"Thank you very much Mark. It's wonderful to have Engineers Australia so involved. And now it's my great pleasure to invite Dr Buzz Aldrin, with his assistant astronaut, 10 year old Anika Hird, who won a competition to be here today, many congratulations, fully equipped in her blue space suit, which I gather came straight from Scitech. It looks fantastic. So Dr Buzz Aldrin and Anika, could you please officiate cutting the ribbon to this fantastic museum."



Photograph - Hamish Lindsay

Buzz and Anika then waited while the crowd counted down to 'liftoff' and cut the blue ribbon in front of the entrance door to the cheers of the people.

Buzz then put some gloves on and implanted his hand into a concrete block, after which he climbed up onto the lectern,

"Good morning again. I would like to just present this round, Moon-like book



Photograph - Hamish Lindsay

to Phil to keep and display in the museum, or wherever he wants to.

It's called One Small Step and I think we're preparing to get ready for the giant leap. People will come here to visit the steps including this Gemini spacecraft.



Mick Coffey with Gemini Capsule he helped build.

On the nose of it was not an escape tower. If you wanted to get out of this machine you pulled a ring between your legs and the ejection seat went buuung. Just so you know how you get in and out. This hatch is the hatch that was open while I was exiting the spacecraft and going up and exploring the Agena spacecraft that we were docked with, and then going to the very back end of the adaptor and performing experiments there. So I have a sort of love affair for this kind of spacecraft. It was remarkable that it added to the progress between the one man Mercury that could get itself into orbit and change direction, but it couldn't move up or down, forward or back. It couldn't make any manoeuvres at all – it could just kind of turn around and pfft – fire the engines to come back down again.

But this spacecraft could do everything – it could go up or down, forward or backward, ..."

To be continued

Extracts from "Recollections From My Years At Carnarvon"

David Johns

SPAN History.

When NASA sought to have tracking stations in Australia, the Australian Government agreed but did not want the stations to become little Americas - the stations had to be manned by Australians.



The process was that NASA paid the then Commonwealth Department of Supply to build and operate the tracking stations. The Department of Supply used contractors to build the tracking stations, initially one at Carnarvon and later stations at Honeysuckle Creek and Tidbinbilla near Canberra. The Stations were operated by contractors, but to tight NASA requirements.

After the war, the Australian Bureau of Meteorology, the main work of which was to issue weather forecasts, became involved, by default, in issuing radio propagation forecasts and in time the Bureau developed a separate section, the Ionospheric Prediction Service (IPS).

In the 1960s, the Bureau of Meteorology was a part of the Commonwealth Department of the Interior so IPS was also a part of the Department of the Interior.

By the late 1960s, IPS was sharing solar data with other countries around the world and had also developed strong data sharing links with the USAF (for decades the USAF had been using radio communications all over the world and had developed a string of its own solar observatories so that it could monitor flares and predict terrestrial radio propagation characteristics).

When NASA began to plan the Apollo flights to the moon NASA recognised that it needed to develop a capacity to

forecast solar radiation particle showers in space. NASA began to share solar Data with the USAF and when NASA wanted to put a solar monitoring station in Australia, it talked to the USAF solar contacts in Australia, that is to IPS which was a part of the Commonwealth Department of the Interior.

Out of those discussions came the decision to place a SPAN observatory at Carnarvon and staff it with IPS physicists.

Thus the Carnarvon Tracking Station had a Station Director and Deputy Director and an Administration Officer who were employees of the Commonwealth Department of Supply.

Amalgamated Wireless of Australasia (AWA) had the contract to operate the Carnarvon Tracking Station and answered to the Station Director.



Don and I were employees of the Department of Interior Ionospheric Prediction Service. We answered to NASA personnel in America for the quality of our work, and we answered to the Station Director for matters relevant to the station.

This meant that Don and I had to operate through a complicated hierarchical path when ever we wanted changes to the AWA equipment maintenance procedures.

SPAN staff

At SPAN, AWA had three electronics technicians whose job it was to maintain the equipment in top working order. There were also three operators who took photos, did darkroom work and performed other data collection tasks. Don's and my work was to use the equipment to make the solar observations, analyse the data and write the solar reports.

To be continued

The NIGIS Operation

*From The MorseCodians Messenger
October 2010.*

Courtesy Lloyd Brown

Some of our readers may have seen an article in the West Australian of April 5th 2010 under the 'Can You Help' notices requesting information about the Dutch-Javanese radio group that monitored Japanese radio traffic from the Port Hotel in Carnarvon during WW.II. The following story explains the operation in some detail.

When the Japanese occupied Java and other Islands to the North of Australia during World War 2, they began a series of brain-washing propaganda broadcasts to the locals. These were transmitted in the Indonesian language on short range transmitters from Bandung, Surabaya, Surakarta and Batavia (now Djakarta). The Japanese did not think these broadcasts would extend beyond the range of the immediate vicinity islands.

However, by a strange quirk of fate and atmospheric conditions, they were being received in Broome, Western Australia and monitored by members of the Netherlands Armed Forces who were attached to the Netherlands Indies Government information Service (NIGIS). These personnel, a Major and Four Lieutenants were not European Dutch, but who would now be known as Indonesian Nationals, and were familiar with the Indonesian language. These broadcasts were recorded, transcribed and taken to the Broome post office where PMG staff would transmit them by Morse code to the Perth Chief Telegraph Office. From there they were retransmitted to the Melbourne CTO and then passed to NIGIS Headquarters in Melbourne.

After a short time, it was found that radio reception was better and more consistent in Carnarvon and the operation was transferred there. Two rooms at a local hotel were taken over and used to house the radio and recording equipment while the aerials were set up in nearby mangrove swamps. It is most likely that

none of the residents even noticed these, or if they did, had no idea what they were for. And so began a period of constant and discreet surveillance which was to last from 12th Dec. 1943 until 31st May 1945.

Because it was imperative that the Japanese did not learn they were being monitored, all Morse transmissions were over land lines to prevent interception. In the early months of the operation it was usual for these telegrams to be sent first to Perth and then repeated to Melbourne. And to avoid interfering with normal North West traffic, a special position was established in the Phonogram Section of the Perth Chief Telegraph Office. This was worked from Carnarvon by oscillator on a circuit imposed on a telephone line. Later however a direct circuit from Carnarvon to Melbourne was established, but this was after midnight when normal traffic was light. At that time the circuit would probably have been the longest direct Morse circuits in Australia.

In Melbourne, the telegrams were analysed and any relevant information contained in them was then sent to General MacArthur's Headquarters. On several occasions very substantial information on Japanese troop movements was revealed and on at least one occasion, a consequent Allied Air Strike succeeded in causing a large number of enemy casualties including two very high ranking officers.

During the period of surveillance of these broadcasts, over one millions words were transmitted from Broome and Carnarvon to Melbourne. It was one of the many, but little known of, significant events in the history of Morse Telegraphy by the Post Office in Western Australia.

Many PMG Personnel were involved in this operation both in Western Australia and Victoria but those known to have been involved in W.A. are Brian Chugg (Broome), Keith Clark, Charlie Fane, Colin Hopkins and Reg Thomas (Carnarvon), John Meadowcroft and Colin Smith (CTO Perth).

ACROBITS '73

OWNING A HORSE IN CARNARVON

A few months ago I was approached by George Allan of U.S.B. and photofame to write an article on owning a horse in Carnarvon. I objected stating that Doug Beaney, Geoff Tiver and Bob Davies were more qualified as they knew much more about it. Well the arm was twisted again just recently and I hope the following is an encouragement to future horse or pony owners.

Two years ago, I arrived in Carnarvon without a horse. Talking to Doug one day he mentioned that he had four horses. This was very interesting because my daughter, who is a girl and therefore loves horses, wanted one. Three weeks later an eighteen month pony arrived from Yunietharra. In exchange for one hundred dollars I owned my first living organic fertiliser producing machine. We named him Oberon.

Four books out of the library, three books from Fitzy, subscriptions to the Countryman and The Rider, we found the necessary information on how and when to handfeed the pony. Every morning and evening a large bucketful of chaff has to be given plus ensuring there is plenty of fresh water to drink. He needs this to do wee-wees.

After a short stay in the Pony Club grounds we managed to rent a stable from Wilson Tuckey, a local horse owner. On our twice a day visits after feeding, watering and collecting assorted jobs, the family would stand back and smile at our good fortune. we bought a brush and comb and once a week he was shampoo-ed.

Soon our small garden in Morgantown was well and truly fertilised and our neighbours were getting a bit jealous over the size of the rhubarbs. We then asked Geoff Tiver, a great lover of horses, to have a look at Oberon. After a quiet muse watching someone riding him, he said that all the pony needed was plenty of riding as he had already been broken-in. That presented us with a problem as none of us could ride. Apparently we had the worst combination - a green horse and a novice rider.

For the next year my daughter Catherine bravely withstood falling off, learning to ride and smiling after being bitten. She joined the local Pony Club where she met some wonderful people who helped and encouraged her and us during this difficult stage of early learning for horse and rider. I would like to thank the Teeds, the Beaney's and the Tivers for their help.



You can lead a horse to water
But!

-6-

To be continued

Conrad Punched Out of a T-38

May 10, 1972 (Release 72-98):

"Astronaut Charles (Pete) Conrad Jr., ejected safely from a T-38 jet aircraft while attempting an emergency landing at Bergstrom Air Force Base near Austin, Texas tonight at about 8:45 p.m. CDT."

Conrad ... parachuted to safety, landing about 100 yards from the base operations building at Bergstrom. The two-seat jet aircraft crashed in an open field about two miles from the base, remote from any residential area.

Conrad was returning to Ellington Air Force Base near the Manned Spacecraft Center, Houston, after visiting the ILC Industries facility in Dover, Delaware earlier today. ILC is the manufacturer of space suits for NASA's manned missions. Conrad flew first from Dover to Dobbins Air Force Base, Marietta, Georgia.

The flight from Dobbins to Ellington was diverted to Bergstrom, about 160 miles west northwest of Houston, because of unsatisfactory weather conditions in the Houston area. Conrad, a Navy captain, was taken to the USAF hospital at Bergstrom for a routine examination and returned to Houston later in the evening."

At this point in his career, Conrad - one of the all-time great astronauts - had flown Gemini 5, Gemini 12, and had become the third man to walk on the Moon during Apollo 12, after surviving a lightning strike on his Saturn V/Apollo vehicle during initial ascent. He was in training for the Skylab 2 mission that would fly the following year.

A subsequent investigation found that "An electrical malfunction causing loss of instruments in severe weather was the major factor" in the accident.

Conrad was diverted from Ellington AFB due to bad weather and redirected to William P. Hobby Airport in Houston, which was still open for landings. Then, according to the investigation report:

"At 800 feet altitude on his final approach to Hobby in darkness and in heavy rain and lightning, an electrical failure in the generator system caused the loss of cockpit lighting and partial loss of navigation instruments. Conrad aborted the approach and attempted to climb above the weather. The generator was subsequently brought back on line, and he regained cockpit lighting."

"Because of the electrical problem, Conrad requested radar to an airport operating under visual flight rules, and he was vectored toward Randolph AFB, San Antonio. When it became apparent that he did not have enough fuel to reach Randolph, he was directed toward Bergstrom AFB."

"The aircraft ran out of fuel just after Captain Conrad reached Bergstrom, and he ejected at 3700 feet."

"The investigation board determined that a printed circuit card was not adequately protected from moisture and likely was the cause of a short circuit and disconnect of the left generator during the approach to Hobby. The card is part of the voltage regulator and protection circuit that switches the electrical load to the opposite generator when one of them goes off line."

50 Years On

On a somewhat personal note, September 2015 marks the 50th anniversary of my arrival in Carnarvon, together with Viv Batty, Mike Billings, Dave Sims (LOS) and Col Winrow.

From National Archives Australia



"Immigration - Migrant arrivals in Australia - British Space Tracking technicians bound for Camarvon, in Western Australia - A group of British technicians and their families arrived in Perth, WA, in September 1965 for space-tracking work. They were highly skilled technicians recruited in Britain by the Australian company, Amalgamated Wireless (Australasia) Ltd. The Britons will work at the Carnarvon space tracking station during the

American attempt to place a man on the moon, the Apollo project. In the group were Mr and Mrs Terence Kierans, their three children, and David Sims. The Kierans family is from 82 Wildwood Lane, Stevenage, Herts. David Sims is from Surbiton, Surrey."

"British technicians at Perth Airport.

Left to right, Mike Billings from Maidenhead, Colin Winrow from Ormskirk, Lancashire, and David Sims from Surbiton, Surrey"



"In the group were Mr Vivian Batty, Maria, his Naples-born wife, and their two children. The Batty family had lived at 5 Marsh Drive, Freckleton".

Keeping the Memory Alive

KEEPING THE MEMORY ALIVE



Carnarvon Tracking Station 1964 - 1975



Present Day

[Click for full size](#)

Mick and Sue Coffey's Carnarvon Steel Supplies of Cornish St Carnarvon fabricated and donated the sign

Signwriting generously donated by W&K Painting of Egan St, Carnarvon

Photograph by Phil Youd - Edited by Terence Kierans

[Click here to commence entry to the original station](#)

My sincere thanks to all of those who have contributed to the website so far;
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