



December 1968



December 1972



*Keeping the Memory Alive*

Vol 14 December 2016

## THE TRACKERS'

# C R O N I C L E

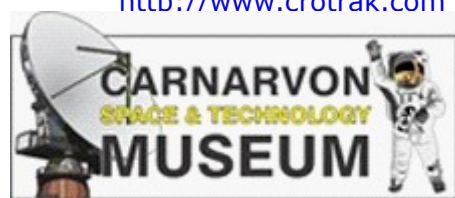
### I

ncluded in this issue:

NASA and the Omega Speedmaster - ctd. ....	2
Whereabouts .....	3, 4
Catch the Buzz .....	4
From A Carnarvon Viewpoint - ctd. ....	5
CROing about Carnarvon - ctd. ....	6
Extracts from "Recollections From My Years At Carnarvon" - ctd. ....	7
Manned Spacecraft: Where Are They Now?.....	8
ACROBITS '73 ctd. ....	9
Memories of the Opening of the 3 <sup>rd</sup> Phase of Museum - ctd. ....	10
Nvidia sinks moon landing hoax using virtual light ctd. ....	11
Quotations.....	11
Christmas messages .....	12

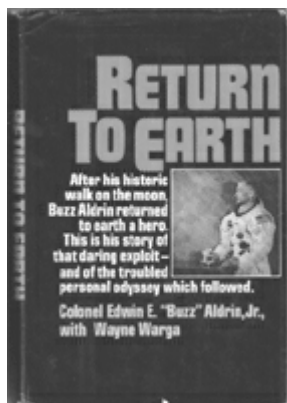
Terence (Terry) Kierans - Editor  
CRO Trackers  
PO Box 93  
QUINNS ROCKS WA 6030  
AUSTRALIA

Tel: 61 8 9304 6983  
Mobile: 0414 25 1091  
email: [tk@crotrak.com](mailto:tk@crotrak.com)  
<http://www.crotrak.com>



## NASA and the Omega Speedmaster ctd.

When the shuttle flights became operational, there were no longer requirements by NASA for specific watches to be worn during shuttle missions. With the exception of extravehicular activity, all astronauts were confined within the pressurized environment of the shuttle. Nonetheless, the S.P. continued to be used by many of the shuttle astronauts.



In 1989, with the Soviet Union's improved attitude toward the West, the Soviet Union selected Omega as the watch supplied to all cosmonauts. Through the years, this watch has become a collector's item to some and a memento to others. Astronaut Buzz Aldrin mentions in his book *"Return to Earth"* that when donating several items to the Smithsonian Institution, his Omega was one of the few things that was stolen from his personal effects.

This is then the history of this interesting and historic watch. The manufacture of this chronograph gives meaning to the words quality, craftsmanship and teamwork. It has withstood vigorous and repeated testing and surely must be one of the most thoroughly tested watches in history. It was the only watch *"Flight Qualified by NASA for all Manned Space Missions"* and was used during Projects Mercury, Gemini, Apollo, Skylab, Apollo-Soyuz, and the Space Shuttle. As the only piece of space equipment available for wear to the public, the Speedmaster Professional provides the opportunity to own a small piece of history.

But perhaps the greatest legacy of the Speedmaster Professional is that it has withstood the test of time. For even now, some 30 years after it was first introduced, it is still the only watch flight-qualified by NASA for extravehicular space activity.



Extracts from: *The Moon Book*, Omega S.A., and *"The Moon Watch: A History of the Omega Speedmaster Professional"* - February 1993 issue of the NAWCC Bulletin...by Alan A. Nelson.

## Whereabouts

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

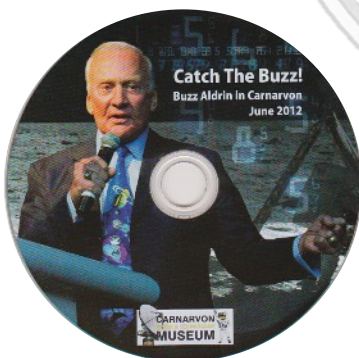
*The quest continues; the list has got a bit shorter, thanks to George Allen; Sue van Dongen et al. I have been given information concerning the possible whereabouts of a few of these, but so far have not been successful in obtaining, or confirming, details. The last Reunion Dinner brought out some missing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

## Whereabouts ctd.

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

## Catch the Buzz

The "Catch the Buzz!" DVDs are now available for sale at the museum. Cost is \$22.00 plus postage. 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 our website at:

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





## From A Carnarvon Viewpoint - ctd.

### Gemini IV

America's first EVA

4 - 8 June 1965 AEST

By Hamish Lindsay

#### **The new Mission Control Center in Houston (MCCH) opens for business.**

This mission was the first time the new Mission Control Center in Houston, Texas, was used. New technology was to be tried and it was the first time Houston had three 8 hour shifts covering 24 hours a day. Chris Kraft, as well as Mission Director, was Flight Director of the Red Team covering the working day operations; Gene Kranz and his White Team was the Systems Shift, checking the status of the ship and its consumables and put the astronauts to sleep; while John Hodge's Blue Team was the real-time planning shift.

Gemini IV, with Houston as the Flight Control Center, served as a training ground for astronauts, flight controllers, technical staff and tracking stations, setting the style for the later Gemini missions, as well as for future Apollo flights.

At the tracking stations we were used to "This is the Cape..." coming down the line; now we heard this new identification "This is Houston..." in our earphones when Mission Control called us.

#### **Astronauts no longer Capcoms at remote tracking stations.**

This was the first mission that an astronaut was not the Capcom, but just an observer. Dave Scott (Apollo 9 and 15) was our astronaut/observer for Gemini IV. After the Capcom fracas of Gemini III we settled down to follow our leader and Capcom, Ed Fendell, also known as "Super Jew."

Ed was a stickler for intercom protocol and discipline, and drilled us mercilessly until we reached his high standard of prompt, efficient reporting. Ed had a streak of humour, which surfaced sometimes on the intercom. He and Monte Sala, our Digital Command System engineer, working closely together during the mission, would mock each other's accents on the loop - Ed's American and Monte's Italian.



Then one night (we always worked at night as it was the Americans' day) Ed suggested Monte go outside and have a wash. The humour of that suggestive remark wasn't explained until we walked outside and saw that Ed had poured a packet of detergent into Monte's fountain and the suds foamed up all over the Gemini spacecraft model.

Ed later became famous as 'Captain Video,' remotely controlling the Lunar Rovers' television cameras during the later Apollo missions. It was Ed who received the Plan X secret instructions for an EVA just before launch.

#### **New shifts for tracking stations to cope with long duration missions.**

This mission was our first taste of long duration missions where our shifts cycled with the spacecraft's cluster of station overhead passes. It would then drift away from us and fly over India and South America with minimal tracking facilities, when we could get some rest, though some critical personnel had to sleep on standby on site. For example we could be busy tracking through a group of 7 station passes, say orbits 13 through 19, then we would go home to sleep for 9 orbits and return to the station to support passes 28 through 34, and so on through the mission. It was a 14-hour day at work followed by a 10 hour break sliding forward 1 hour earlier each shift for the length of the mission.

*To be continued*

## CROing about Carnarvon

*A personal reminiscence by John Ford.*

Well, I had seen equally ugly scenes with Australian and British sailors and soldiers, given enough beer, so it wasn't just Americans. But- NASA: National Aeronautics and Space Agency? Wasn't that it? Civilian and civilised, surely? These were scientists, engineers, and technicians - like me.

We would be focused on the task, the mission, the purity of the calculations and calibrations. Who could say what scope might exist for me here, to learn new space-age technology and to cement new friendships?

I mused through the eight miles into Carnarvon, barely noticing the road and the way it twisted and turned through the undulating terrain. We made the T-junction, where the road out of Carnarvon heads east to Gascoyne Junction, and we turned west, heading for the town site and the coast. I can't recall our goodbyes, but somehow I was at the Port Hotel and the Cortina was gone.



Port Hotel Bar

as blokes - and a few cheerfully attractive girls - milled in and out of the doors. The front bars were buzzing, but the focus was



somewhere deep in the rear. Music, singing and the animated uproar of a busy pub lounge drew me in.

A broad corridor split the hotel's ground floor, from the front entrance right through to the beer garden at the rear. I moved inside, found reception and got a room upstairs for a few nights.

Five minutes later I was in the beer garden and savouring my first real impressions of Carnarvon, along with the first rapturous drafts of an extremely palatable cold beer. I rather liked what I saw.

Compared to the rural towns of the south, there was an expansive ambience here in this broad beer garden, with its banana fronds incongruously tied to the cement block walls. At the open rear was a stage, and a musician, eyes wild and laughing, was playing the piano feverishly as he flogged the crowd into a dancing frenzy.

This was John Huysing, who I knew slightly from Perth. He too had gone north to repair his fortunes - being a barman by day and playing his music in the pub at night. I meant to renew contact with John, as at present he was the only person I knew at all in Carnarvon.

But for now, people were friendly, ready to talk and happy to include me, and it was a pleasant introduction to the Port and to Carnarvon. I stayed there till closing.

Next morning, after a typical country pub breakfast in the old dining room, I stepped out onto the pavement under the front verandas and peered up and down the main street. It was a really wide and spacious thoroughfare, lined with buildings typical of country towns.

*To be continued*

## Extracts from "Recollections From My Years At Carnarvon"

David Johns

### Technology Shock ctd.

We would describe features on the photos in our twice daily written solar reports, or we could direct to Boulder on the scama 'phone about what we could see on the photos and where there were interesting solar surface features.

NASA's main solar forecasting centre was at Boulder and Boulder decided it wanted the capacity to have a photo from Carnarvon as close to real time as possible and Boulder sent us a new state of the art photo transmitter.

The machine was about 60 cm square and about 25 cm high. There was a folding glass door that opened and gave access to a roller about 30 cm long and 9 cm in diameter. A clip ran the length of the roller and would clip the photo on the roller, wrap it around the drum and then fold a special plastic covering around the drum and secure it with special magnetic clips.



We would then talk on the scama 'phone handset to the operator at Boulder who had a specially built photo receiver and when we

were both ready, I would place my phone handset into a special recess in our photo transmitter and in Boulder he would place his phone handset into his photo receiving machine.

I would then turn on our transmitter and a slow scanning head would



track along beside the rotating drum and the photo scans would be converted to audio and picked up by our scama 'phone and then transmitted to the receiver at Boulder.

The rotating drum would spin at about 100 RPM and there would be an irritating high pitched audio signal on the scama 'phone for about the eight minutes that it took to send one 20 cm by 20 cm photo to Boulder.

Notwithstanding the two acoustic interfaces that would not be tolerated with today's technology, the quality of the transmitted photo was surprisingly good because Boulder would occasionally post one back to us as a quality check.

These days I can take a colour digital photo and immediately e-mail it without quality loss to friends on the other side of the world at almost no cost but in 1970, I thought that our SPAN photo transmitter was the ultimate.

Video recorder/players and videotapes did not arrive in the domestic market until about the 1980s.

I recall being in the telemetry room at the main building one day and Colin Foster showed me a new and very expensive device that could record TV pictures.

It was a big complex machine but the feature that sticks in my mind most is that it had a reel-to-reel tape that was about four inches wide. In those days, the idea of recording a video signal was very cutting edge.

Indeed the only consumer tapes that I recall seeing in those days were the common audio tapes, about 10 cm by 6.5 cm, which first appeared in the late 1960s and are still in use today.

*To be continued*

## Manned Spacecraft: Where Are They Now?

*Thanks to Tony Sala for providing this. One of his hobbies is to see as many as he can, first-hand.*

<http://www.live555.com/misc/CapsuleLocations.html>

### Gemini 2 (Unmanned)

Cape Canaveral Air Station, FL

### Gemini 3 "Molly Brown" (Grissom, Young)

Grissom Memorial Museum, Mitchell, IN

### Gemini 4 (McDivitt, White)

[National Air and Space Museum](#) (Smithsonian Institution), Washington, DC \*

### Gemini 5 (Cooper, Conrad)

Space Center Houston (NASA Johnson Space Center's Visitor Center), Houston, TX \*

### Gemini 6A (Schirra, Stafford)

[Oklahoma History Center](#), Oklahoma City, OK

### Gemini 7 (Borman, Lovell)

[National Air and Space Museum](#) (Smithsonian Institution), Washington, DC \*

### Gemini 8 (Armstrong, Scott)

Neil Armstrong Museum, Wapakoneta, OH

### Gemini 9A (Stafford, Cernan)

[Kennedy Space Center](#), Cape Canaveral, FL \*

### Gemini10 (Young, Collins)

Norwegian Technical Museum, Oslo, Norway

*(Also, one of the hatches is on display at the Virginia Air and Space Center (NASA Langley visitor's center), Hampton, VA)*

### Gemini 11 (Conrad, Gordon)

[California Science Center](#), Los Angeles, CA

### Gemini 12 (Lovell, Aldrin)

Alder Planetarium, Chicago, IL \*

\* Visited by Tony Sala

*To be continued*



## ACROBITS '73

### MY JOURNEY TO AUSTRALIA (ctd.)

by D.A. Pettinger, U.S.B.

Brisbane was to be my final destination. So I had to change air terminals to get a flight via Ansett.

As I travelled in the coach to the other terminal, I wondered what I would do with my life in Australia, where do I go from here?.



### BARBECUE, NORTH-WEST STYLE

Silica sands; blue, nude skies; pure, golden sunshine; coral seas teeming with the largest fish I've ever seen; plump crayfish plucked straight from the ocean, and a sucking pig spluttering on the spit - what more could you ask for? These were the ingredients which made our weekend barbecue at a station homestead in the North-West of W.A. one to remember. (Yes, there was plenty of liquid refreshment, too!)

As a newcomer to the area I have taken many trips around: The Blows, quieter now since they dropped rocks in them at wartime when the spray rose 120 ft. into the air, and the bounty of oysters ready for the taking; Coral Bay, reminiscent of Tahitian waters; Bernier and Dorre Islands, dormant now after a questionable past, and surrounded by seas abounding with marine life; Kalbarri, where crayfishing is a living and, not far away, "The Loop", that imposing sculpture of Nature where the Murchison River has taken a loop and gorged out a magnificent, breath-taking canyon. All these sights, so rare and so beautiful, and so many of them in this lucky country of ours, can never be forgotten. But for a weekend of leisure and joy, if you get the chance, try a barbecue, North-West style.

We left Carnarvon early Saturday afternoon and drove along the rugged roads opening and closing gates as we went. Now the road was rocky and dangerous on the tyres; now it undulated and we thrilled to the feel of the Big Dipper. We came to a stop at the Texada haulage road to the sea where the signs forbade travelling along it and we gingerly crossed the all-powerful Texada roadway to continue on our journey up North.

Towards late afternoon we arrived at the homestead. Cheery greetings, the keg flowing, welcoming gestures to all, very soon made everyone feel at home. We changed for dinner and the barbecue was soon in full swing.

*To be continued*

## Memories of the Opening of the 3<sup>rd</sup> Phase of Museum

*By the Editor*

**A**t last, now the proceedings could get underway.

John McCloy kicked off with an introductory, and traditional welcoming, speech.



Captain Eugene Cernan

*"Ladies and gentlemen, please welcome to Carnarvon, the last man to walk on the moon, Captain Gene Cernan (applause).*

*So, good afternoon ladies and gentlemen, and a very big welcome to everyone to the official opening of Phase Three of the Carnarvon Space and Technology Museum. I also acknowledge the traditional owners of the land, both past and present, on which the proceedings are taking place today.*

*We are very proud to have with us today Captain Gene Cernan, the last man to walk on the moon; a very memorable achievement, but Captain Cernan has had a long history of space travel, space missions.*

*He was the pilot of Gemini 9A, the lunar module pilot of Apollo 10, and the commander of Apollo 17 when he was up in space finally; but to fly these missions to the moon, not once but twice. He also holds the distinction of being the second American to walk in space, and last man to have left his footprints on the surface of the moon.*

*Accompanying Gene Cernan are his buddy from early days Fred Baldwin (applause), and Dr Lisa Harvey-Smith (applause). Dr Harvey-Smith is an astro-physicist at the CSIRO now located in Sydney. She is the project scientist*

*for CSIRO's Australian Square Kilometre Array Pathfinder telescope. Dr Harvey-Smith will be the moderator at tonight's proceedings in the Civic Centre.*

*It is also wonderful to see here a number of original trackers from NASA, from the NASA Tracking Station which was situated a few kilometres down the range roughly where the radio tower is now; and believe me it's a rather huge site.*

*These visitors are extremely proud, and rightly so, of the wonderful job that they did working on the Gemini, Apollo, and Skylab programs.*

*It is also a great pleasure to welcome some of the OTC staff to today's opening. It's a great privilege to have you all here today (applause).*

*Today is a most exciting and significant day in the history and the development of the Carnarvon Space and Technology Museum.*

*In June 2004 we officially opened a small exhibition area on the hill just outside, and you probably saw it on your way in. We were very honoured at the time with the presence of Buzz Aldrin, the second man to walk on the moon.*

*By September 2014 we had grown not only in size but also, more importantly, in reputation, having attracted many overseas tourists including a couple of overseas TV programmers who came through to look at a wonderful achievement for this small outback town."*



Dr. Lisa Harvey-Smith

*To be continued*

## 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](#)

**M**y sincere thanks to all of those who have contributed to the website so far;  
listed at: [http://crotrak.com/thank\\_you.htm](http://crotrak.com/thank_you.htm).

A call goes out, yet again, for material. I can arrange copying, scanning, whatever, so as to get them uploaded to our website, or published in The CRONicle; you need have no fears regarding their safety.

## Quotations

*"Some things just can't be described. And stepping onto the moon was one of them."*  
~ Buzz Aldrin

*"Today, we are on a path of decay. We are seeing the book close on five decades of accomplishment as the leader in human space exploration."*  
~ Eugene Cernan

*"The fascination to go into space has existed for hundreds of years. But as we do things and they're successful, people get bored."*  
~ Jim Lovell

*"In thinking back to when we had our big glitch, I remember seeing it get light outside the window. We were in the clouds; I'm pretty sure we got hit by lightning."*  
~ Pete Conrad



# Keeping the Memory Alive



*"And from the crew of Apollo 8, we close with good night, good luck, a Merry Christmas, and God bless all of you - all of you on the good Earth."*  
— Frank Borman



If undelivered, please return to:  
**CRO Trackers**  
PO Box 93, Quinns Rocks, WA 6030