



December 1968



December 1972



Keeping the Memory Alive

Vol 13 December 2015

THE TRACKERS'

C R O N I C L E

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NASA and the Omega Speedmaster ctd.

From the now defunct website "clubspeedmaster.com".

This list included:

- The Breitling Watch Corporation
- The Bulova Watch Company
- The Elmore Watch Company
- The Elgin National Watch Company
- The Forbes Company
- The S. A. Girard-Perregaux Company
- The Gruen Watch Company
- The Hamilton Watch Company
- The Heuer Time and Electronic Corporation
- The LeJour Watch Company
- The Longines-Wittnauer Company
- The Omega Watch Company
- The American Rolex Company
- The Seiko Watch Company
- The Zodiac Watch Company

In order to comply with the 'Buy American' act, Omega had the cases for the Speedmaster manufactured in Michigan by the Starr Watch Case Company. Crystals were shipped to them from Switzerland. Completed cases with crystals were shipped on to the Hamilton Watch Company in Pennsylvania, for inspection and testing. The case and crystals were then shipped to Switzerland where the movements were installed and the entire watch was subjected to final inspection and environmental testing. Omega changed the original Cal. 321 movement to the Cal. 861 in 1968 so it must be assumed that the Cal. 861 was the version tested.



The Bulova Watch Company submitted 16 chronographs for testing that were manufactured in Switzerland and that Bulova had purchased these chronographs through their subsidiary in Switzerland, Universal Geneve. The 16 chronographs were disassembled by Bulova and a new crystal, a new machine case, specifically manufactured pin, a new crown and stem, a new face and dials and certain gaskets, washers and screws were replaced on each watch. The original movements and the back of each watch were retained. When confronted with the fact that these watches were, in actuality, Swiss chronographs, Bulova stated that they had invested \$23,000 of research and development funds in developing and tooling the process. Thus, by utilizing these R&D costs, the watches were found to qualify under the "Buy American Act."

The testing process was done in two stages. First, there were several general requirements needed to become "Flight Qualified." If a watch met these criteria, it was then subjected to a series of specific and rigorous "space flight environmental tests" to determine final suitability for spaceflight.

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 | Vera Kastropil |
| Eric Ainsworth | L Donkin | John Keane |
| Gay Albon | John Draper | Mike Keen |
| Bill Arbery | Mike Dresser | Jim Keenan |
| Allan Barber | Bruce Duff | John Kelman |
| John (Allan) Barber | I Dunleavy | Gloria Klarie |
| 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 |
| Jim Crossland | Phyllis Hook (Watson) | Denis Owens |
| Noel Cunningham | J Hopkins | John Paddon |
| F Dawes | Deidre Howard | Diane Pitman (Housley) |
| Andrew Dempster | B Hughes | John Platten |
| Jean DeVis | Ed Humphreys | D Powell |
| Marilyn Dick | B Hunter | M.J.K Power |
| Olive Dick | D Hutchins | Wendy Puccinelli |
| Neville Dippell | Ian Jones | 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 | 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.)

Summary.

Young: "It was a really good test mission. Gus performed more than 12 different experiments in the three orbits he did a really great job I don't think he really got enough credit for the great job he did. He proved that the vehicle would do all the things needed to stay up there for fourteen days. We changed the orbit manually, the plane of the orbit, the first lifting reentry and we used the first computer in space."

John Young's home town of Orlando, Florida, showed their support for him by presenting him with a 18 metre long telegram signed by 2,400 residents.

THE MANNED SPACECRAFT CENTER AT HOUSTON, TEXAS, COMES ON LINE.

Gemini III was the last time that the Mission Control Center at Cape Canaveral was used. The familiar flight controllers' voices on the network saying "This is the Cape" was replaced by "This is Houston" as the new Manned Spacecraft Center at Houston, Texas, came on line for the Gemini IV mission. Chris Kraft had to add two more Flight Directors and flight teams to cover the longer Gemini missions.

Personal Interviews:

Pilot John Young.

Capcom Pete Conrad

References:

Tracking Apollo to the Moon by Hamish Lindsay

Carnarvon and Apollo by Paul Dench and Alison Gregg.

Flight by Chris Kraft.

Failure is not an Option by Gene Kranz.

On the Shoulders of Titans: A history of Project Gemini by Barton Hacker & James Grimwood. NASA SP-4203.

NASA websites

From A Carnarvon Viewpoint - Addendum.

From: Ed Fendell

Sent: Monday, 14 September 2015 6:43 PM

The reason I dwell on that assignment is that it probably saved my entire NASA career. I have stated this publicly many times. If I had been at CRO or one of the local sites when the entire Capcom mess at CRO was going on, I probably would have inserted my foot into my mouth and gone down in flames with Dan Hunter my boss. Being out at sea, and not having access to all of the conversations on different loops between, Hunter, Conrad, Kranz, Kraft, and Slayton saved my butt. No it had nothing to do with the retrofire.

ed

The Carnarvon Space Festival 2012 ctd.

By Hamish Lindsay

"...and make all the manoeuvres to carry out the joining of rendezvousing with the rocket we docked with up front – all of that in preparation for Apollo. It's a wonderful machine."

Turning to Phil Youd, Buzz surprised everyone with, "Anyway I wanted to present you with this (a copy of Buzz's book *One Small Step*) and here's a token of my appreciation – it's a gold medal from where I learned discipline, duty, honour, and country, from West Point Military Academy."



Photograph - Hamish Lindsay

Professor Beazley, "You're going to treasure that... was it unexpected?"

Phil Youd, "It was."

Professor Beazley

"There are thirty original trackers here – they have come from across Australia and across Western Australia. We'd like to honour them by a photo at the front, so if you could all make your way down to this end, please, while the rest of us are going to take this opportunity to relish the occasion. And thank you Dr. Buzz Aldrin for making this a reality."



Photograph- Louise McCreavy

After we posed with Buzz, Paul Dench remembered that "*Carnarvon and Apollo*", his book written with Alison Gregg, had not been presented to Buzz. "I suddenly realised it was now or never. I grabbed Alison Gregg's arm and ushered her to the front of the crowd with me, and presented our book to Buzz with a brief speech."

I had a quick look at the museum, crowded with people. I was pleased to notice the message celebrating the opening from Chris Kraft and his picture I had arranged was on display in a frame, with an earlier letter he sent after he visited the station in 1967.



Hamish Lindsay and Terry Kierans chat inside the museum
Photograph- Louise McCreavy

There were many panels of pictures and descriptions, video displays, a remnant from Skylab from Balladonia, and some items of equipment used in the station at the time.

Before I had any time to get (more) pictures we were whisked away to drive over the dry, sandy Gascoyne River to the plantations, stopping at Bumbak's property for a talk about bananas.

We returned via the causeway to have lunch at Gwoonwardu Mia, the Gascoyne Aboriginal Heritage and Cultural Centre. The showroom had many aboriginal artefacts and paintings for sale. We enjoyed a very tasty lunch, the long table loaded with many delights and fruits prepared by the local plantation growers.

To be concluded

Extracts from "Recollections From My Years At Carnarvon"

David Johns

SPAN staff ctd.

Work at SPAN would start about half an hour before sun rise and finish about half an hour after sunset.



During the week Don and I would alternate morning and afternoon shifts and we would each fully work every second weekend. In summer a weekend could be two fourteen hour shifts.

Our hours were long but we had the flexibility of being able to swap shifts so we could each have time off when we wanted it. Because of the hours, we were well paid and I was happy to work the long hours and bank the money.

At SPAN there was a silly demarcation issue. While Don and I were expected to use the equipment for observations, we were encouraged to not do maintenance work but report all faults to the technicians for them to fix.



Span telescope
Photograph - Terry Kierans

This would have been OK except that there were problems with the telescope and the senior technician, who was OK with electronics, knew nothing about optics. Worse still, he blustered and pretended that he knew a lot.

Don and I had worked in optics labs and we could see that the telescope was not performing to its specifications. Don, although senior to me, was of a more accommodating nature than I was and I had many clashes with the senior technician.

Eventually he was transferred out of SPAN and was replaced by an engineer, Roger Glass. Roger set about addressing the problems and the telescope results improved significantly.

The main SPAN technicians were Russell Swarger and Hans Lemons, who were cooperative and good at their work.

Russell had recently returned from Vietnam and told worrying stories about the progress, or lack of progress, in the Vietnam war.

Hans had worked for Telstra (or the PMG as it was previously named) and found the NASA work to be a breath of fresh air.

Other technicians who worked at SPAN from time to time included Jim Cleary, Jim Gregg, Doug Beany and Brian Renshaw. Some of the SPAN operators also did equipment operating in other parts of the Tracking Station.

The longer term SPAN operators that I remember at SPAN were Anne Green, Rosemary Williams, Ruth Cates, Kathy Franin and Elizabeth Beckett.



Looking back, with the benefit of hindsight and by today's standards, I would say we were a little overmanned at SPAN. NASA seemed to have a philosophy of having enough staff to cope with crises when they occurred.

To be continued

Apollo 8 Liftoff Photo by Ralph Morse



Ralph Morse conceived the idea of combining on the same color film the lift-off of the Apollo 8 rocket with its target, the crescent moon.

To get the double-exposure in proper relationship he went to Cape Kennedy 28 days before take-off day, to make the first exposure of the moon. The film, unprocessed, was stored in a refrigerator.

Four weeks later it was reloaded into a camera. The second exposure of the rocket was fired by remote control on lift-off.

The technique of double exposure used by the photographer to get this photo of the launch of Apollo 8 has been explained in detail in a

couple of newspapers, namely *The Palm Beach Post* <http://bit.ly/1H5M2jn> and the *Sarasota Herald Tribune* <http://bit.ly/1S7reOT>.

An extract from *The Palm Beach Post* follows.

“Double That Exposure
By IRVING DESFOR

Double exposures used to be accidents through a photographer's carelessness — he forgot to advance the film. In a few rare cases, the goofs made interesting combinations but normally they were thrown away with a resolve not to let it happen again.

The double-exposure calamity was virtually eliminated when a preventive device was built into the cameras: After clicking the shutter, you couldn't snap again until the film was advanced.

However, double exposures were not always mistakes. When deliberately designed and carefully controlled, they can be creative story-telling images. To produce planned double-exposures, photographers now have to outwit most modern cameras with a variety of tricks.

One of the masters of photographic wizardry is Ralph Morse, energetic and inventive photojournalist of *Life* magazine. He describes problem-solving techniques and some of the off-beat experiences of his 30-year *Life* career in the 1972 winter edition of “35-mm Photography”, a *Popular Photography* publication.

To obtain his historic double-exposure take-off of Apollo 8 Morse relied on the ability of 35-mm cameras to advance each frame precisely and accurately. The only requirement is an exact starting point.”

ACROBITS '73

OWNING A HORSE IN CARNARVON

We are now at the stage where my daughter loves horses more than ever, is beginning to ride well and through this, has become a more loving person. She has gained this by having to care, work and play with a noble animal.

It's an expensive hobby to encourage and perhaps the approximate cost might be of interest. This is as follows :-

| | |
|-------------------|--------------|
| Horse or Pony | \$100 |
| Saddle, Bit, etc. | \$150 |
| Rent for Stable | \$1 per week |
| Feed | \$5 per week |
| Pony Club uniform | \$50 |

There are various other extras such as a fitted sundial for checking time and direction. This is a local invention perfected by Doug Beaney at SPAN. Also air conditioning is another worthwhile feature to be fitted to any horse especially during summer riding. Bob Davies has local franchise.

For people interested in gaining further knowledge before buying I recommend the following books:-

1. Care of Australian Horse and Pony
by M.I. Clarke (Publ. Rigby)
2. Horse Sense for Australians and New Zealanders
by P. Harvey (Publ. Reed)
3. Bee Keeping in the Yanktse
by H.O.'Ney (Publ. China Free Press)

FUTURE ARTICLES BY W.BRENNAN -

THE COST OF RUNNING A GUINEA PIG FARM.

MULTI STORIED CHICKENS

ANIMAL HUSBANDRY IN MORGANTOWN

A HISTORY OF REDUNDANCY

BEE KEEPING - HOW TO APPLY YOUR KNOWLEDGE GAINED AT THE TRACKING STATION.

THE ART OF MEMO WRITING

PSYCHELIRIUM TREMENS

Remember when HIPPIE meant big in the hips.
And a TRIP involved travel in cars, planes and ships,
When POT was a vessel for cooking things in,
And HOOKED was what grandma's rug might have been,
When FIX was a verb that meant mend or repair,
And BE IN meant s ply existing somewhere,
When NEAT meant well organised, tidy and clean,
And GRASS was a ground cover, normally green,
When lights and not people were switched ON and OFF,
And the PILL might have been something you took for a cough,
And CAMP meant to quarter outdoors in a tent,
And POP was what the weasel went,
When GROOVY meant furrowed with channels and hollows,

-7-

To be continued

Nvidia sinks moon landing hoax using virtual light

Courtesy CNET

Using its new top-shelf graphics processing unit, Nvidia tackles one of the most persistent conspiracy theories in American history: the veracity of the 1969 to 1972 Apollo moon landings.

by Nick Statt @nickstatt September 19, 2014 12:50 PM PDT



A virtual re-creation of the Apollo 11 landing site helped gaming-component supplier Nvidia debunk persistent hoax claims about the moon landings.

Few events in US history inspire a paranoiac bent on unearthing political conspiracy theories quite like the Apollo moon landings do. So when Nvidia, the leader in high-end graphics processing units (GPUs) for PC gaming, wanted to show off a lighting feature of its [new GeForce GTX 970 and 980 cards](#), it found its inspiration in the sky.

"Global illumination is the hardest task to solve as a game company," Scott Herkelman, Nvidia's GeForce general manager, said in an interview. "Virtual point lights don't do a bad job when the environment stays the same, but a game developer has to fake shadows, fake reflections...it's a labor-intensive process." So when a Nvidia research engineer used the company's new dynamic lighting techniques to show off a side-by-side comparison between an Apollo 11 photo and a GeForce-powered re-creation, the company knew it had a novel demo on its hands.

"We're going to debunk one of the biggest conspiracies in the world," Herkelman said.

The first manned missions to Earth's satellite began in 1969 with Apollo 11. Just a few years later, conspiracies sprouted up claiming that potentially each of the six lunar landing crews and every one of the 12 Apollo astronauts who walked on the moon had in fact participated in an elaborate ruse.

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](#)

My sincere thanks to all of those who have contributed to the website so far;
listed at: http://crotrak.com/thank_you.htm .

QUOTATIONS

"I think humans will reach Mars, and I would like to see it happen in my lifetime."
~ Buzz Aldrin

"In Mercury, you couldn't translate. You could just change attitude. But you were actually flying it like a flying machine in Gemini."
~ Wally Schirra

"The Earth reminded us of a Christmas tree ornament hanging in the blackness of space. As we got farther and farther away it diminished in size. Finally it shrank to the size of a marble, the most beautiful marble you can imagine."
~ James Irwin

"Mystery creates wonder and wonder is the basis of man's desire to understand."
~ Neil Armstrong

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.



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