



Grapple Zulu Flagpole, Christmas Island, September 1958.

joe pasquini

Grapple Zulu Flagpole was my undoing.

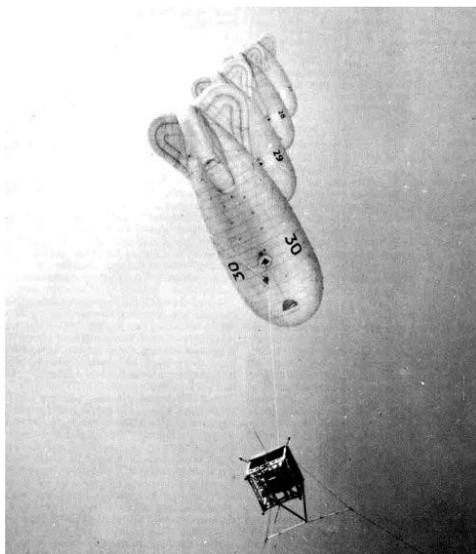
At the end of July 1958, we returned to Christmas Island from our overseas base in Adelaide, Australia. It was for the new Zulu series of nuclear tests. Our route took us on an overnight stay at RAAF Amberley, Brisbane, then on to Fiji. Where, we were able to have decorative Aloha Shirts, made-to-measure overnight, for our sojourn at Christmas Island. On our previous visit to Fiji for Grapple Yankee in the Spring, we arrived in Brisbane on Easter Sunday, when everything was closed.

We took off for Fiji on Easter Monday but forgot that we would be crossing the International Date Line (IDL). When we landed in Fiji, it was Easter Sunday all over again. Everything was closed. We didn't get any shirts made that time. Our final over-night stop for the trip was at Canton Island in mid-Pacific. A small round coral atoll with nothing going for it, except it was a refuelling stop for Pan Am Lockheed Super Constellation aircraft; that plied their trade between the United States and Australia, via Hawaii.

The flight to Christmas Island was a great navigation exercise, it took us a quarter of the way around the Globe, mainly across water.

The mission for Grapple Zulu, was to be four detonations, the first at the end of August. This would be a balloon detonation, where the test bomb was hoisted skyward by four World War 2 barrage balloons. Then detonated above 1,000 feet.

This was to be followed by an air drop Hydrogen Bomb, code name Zulu Flagpole. The third detonation would be yet another airdrop hydrogen bomb, finishing off with a balloon shot. The final one was the testing of an atomic trigger that would be used in future to ignite a Hydrogen Bomb.



Grapple Z Balloon Shot

Showing the basket were the weapon was suspended

We were racing against the clock. We had no idea when the International Atmospheric Nuclear Test Ban would be declared. Once it was executed, it would become effective immediately.

Condensing the timeline of four nuclear detonations over a few short weeks presented many challenges. *It also allowed for a lot of shoddy processes to be allowed to develop.* Safety standards were overlooked in the process of completing a variety of critical tasks.

Water, which is the lifeline of any community, would be scarce. A Desalination Unit had been built on the Island. It provided a limited amount of fresh water. A limited layer of unpotable brackish water could be tapped from pools under the coral island. All washing and showering needed be done with a sea water combination. Leaving a layer of salt over everything. Thank heavens that the island was stocked with an abundant supply of cool beer.

Most of August was spent rehearsing for the different detonations. The tight test schedule was:

1.	Grapple Zulu Pennant	August 22 nd	1958
2.	Grapple Zulu Flagpole	September 2 nd	1958
3.	Grapple Zulu Halyard	September 11 th	1958
4.	Grapple Zulu Burgee	September 23 rd	1958

which left little time to recover between shots. Including cleaning radioactive aircraft 'sampling aircraft', in time for the next detonation. It was a major challenge. A schedule was set up that aircraft flying on the first detonation would not be needed again until the third detonation. Then aircraft used for the second detonation would be washed down, and not be used again until the final detonation. That tied up the entire availability of Squadron aircraft. Only two aircraft were left available as reserves. There was little margin for error. Hence, the serviceability of each and every aircraft was critical, including the airframes, but also on all the sampling equipment and radiation instruments that were needed.

My new crew had been selected for the second detonation. Codename Grapple Zulu Flagpole. This was intended to be another high yield hydrogen bomb, like Grapple Yankee. How big? We were told by our liaison people at Atomic Weapons Research Establishment that it would be in the 10 Megaton range.

Similar to what we were been told for Grapple Yankee. Decades later we were to discover that the scientists at the Atomic Weapons Research Establishment (AWRE) really didn't know. They were guessing. AWRE were just lying through their teeth. At the time, they were completely unaware that each detonation contained three separate energy pulses, each with different energy yields. My new crew was chosen to be the primary sampling crew and aircraft, flying as Sniff One in the Order of Battle. Detonation was scheduled for September 2nd. I was to fly as the Observer. The 'guinea pig' crew member.

Cloud Sampling only required a two-man crew. But the Ministry of Defence insisted that full bomber crews were needed to fly the sampling missions. As a result, during all the nuclear tests, more than 400 Observers were unnecessarily exposed to high energy ionizing radiation. These would be the 'guinea pigs' needed to monitor short term and long-term effect of radiation on the human body. The purpose being to see if in the event of a nuclear war, a bomber crew irradiated with high intensity gamma radiation, would be fit enough to fly on more than one nuclear mission.

Grapple Zulu Flagpole was my downfall. My one and only task was to sit in the sampling aircraft that flew through the nuclear cloud for the entire trip. The only thing I was expected to do was to turn the PIKE sampling unit 'On', when we entered the cloud. Then, to turn it 'Off', when we exited the cloud.

PIKE was a unique sampling instrument. It poked out the top of the aircraft into the airflow, just like a periscope, capturing and diverted the airstream onto a moving roll of wide Scotch tape inside the aircraft, as we flew through the nuclear cloud. Any dust or solid micro particles (radioactive debris) would stick and be stored on the tape. In essence, it would be capturing a complete cross section of the nuclear cloud, as the aircraft flew through it. This would present a very accurate cross section of the geography of the entire cloud. Together with how powerful the radiation was at each point in time and in space.

Quite simple and straight forward. Right? Turn the switch on when you enter the cloud. Turn it off as you leave the cloud. But the task didn't need an Observer to perform it. It could easily have been done by the Navigator, or even the Pilot. Instead it was left to me; it was my one and only task. **Well, I managed to screw it all up!** Something else got in the way. In trying to explain what had happened at the flight de-briefing once we had returned to base, my words fell on deaf ears. This is the first time I've been able to fess up to what really happened when Sniff One flew into the Flagpole cloud.

Going through the well-practiced routines, we had rehearsed all the different elements the Sampling aircraft would undertake. With a different crew, and a different function, we followed the same procedures of getting airborne and getting into position in the sky. September 2nd, 1958 was D day for Grapple Zulu Flagpole. A wake-up call shortly after midnight. A quick flying meal before climbing into our flying gear. Final briefing. Stuffing our pockets with a few dozen Radiation Film Badges and Quartz Fibre Electroscopes (QFE's). We were ready to go. Out to our aircraft under the bright firmament of stars. Engine started. Taxi to runway. Take off. Dawn lit up

the sky and Earth. Climbing up to our predetermined height, and position, we started flying our holding pattern on a racecourse circuit. Listening in for the final bombing run, and bomb release, we quickly turned away to put as much distance between us and the detonating cauldron of nuclear magma.

After the flash subsided, we flew back to our holding station, fifty miles away from Ground Zero, and continued flying the racecourse pattern. Until we were called in by Sniff Boss to make the first deep penetration of the mushroom cloud. We listened on the secret operational radio frequency, as Sniff Boss made two narrow cuts through the cloud and were very intent on hearing the radiation readings that they broadcast during their passage through the cloud.

This would provide us with a reference point to what we could expect, when we flew into the Zulu Flagpole cloud. The radiation readings Sniff Boss broadcast were on the high side, but there was still 10 minutes before we would be called in to enter the cloud. The Observer did not have a window, except for the skylight, it was impossible to see what was happening outside the aircraft.

We were ordered in to make the first pass, and the aircraft straightened up for a deep penetration into the cloud. With the Observers ejection seat being on the right-hand side of the aircraft, my right elbow was only 3 inches away from the skin of the aircraft. On the intercom radio we used for internal communications, the Pilot called out "Here we go"! The black sky in the sky light window above my head, changed to white, as we penetrated the centre of the cloud. *Right at that very moment..... **My right elbow 'exploded'! The pain was excruciating. The pain shot up my arm, across my body, up to my head and down to my feet. I was paralyzed and was unable to move for almost two minutes.*** Two events had happened simultaneously.

We entered the nuclear cloud; the radiation instruments went crazy – at the very same time my right elbow exploded. It could only have been the shock of high energy ionizing radiation, which had triggered an unbelievable attack of the 'bends'*. Attempting to describe what had happened, and documenting it during de-briefing, was impossible. No one was interested, they just did not want to know. They had their own personal stories to tell and were not interested in listening to anyone else's. Hence, the event went unrecorded, until now, nearly seven decades later.

*The bends. Decompression sickness (DCS; also known as divers' disease, **the bends**, aerobullosis, or caisson disease) describes a condition arising from dissolved gases coming out of solution into bubbles inside the body on depressurisation.

Meanwhile, when we entered the cloud, I think the Navigator had started broadcasting his radiation reading broadcasts every 15 seconds. Slowly, as I started to come too, the pain started to diminish, but it took a long time, over 2 minutes. In a jet aircraft you travel a very long distance in 2 minutes. We were still into the cloud. When I was able to gradually start moving my arms and legs, it was then that I realised that the PIKE unit had not been turned on. The On/Off switch was located on my right, at shoulder level. My right arm, and the right side of my body were not working. With my left arm I tried to stretch across my body, to turn the PIKE unit on. Then when

I thought we had left the mushroom cloud, I tried to turn it off with my left arm. I was physically and mentally, out-of-action for the rest of the flight. Apparently, we made a second cut into the cloud, receiving an additional massive radiation overdose, then were ordered to return to base.

All the time, I was too busy nursing my right elbow. It was so painful. I had been afflicted with the most excruciating bout of 'the bends' that I have ever experienced. The only possible explanation was that the violent and sudden intensive burst of high-powered *neutron* radiation, as we entered the nuclear cloud, had somehow triggered the catastrophic release of nitrogen gas into my blood stream. The 'bends' primarily afflicts the joints. My right elbow located just three inches from the metal skin of the aircraft, was the most vulnerable part of my body, as we had no protection whatsoever against radiation.

Had I been flying the aircraft; or if the same thing had happened to any sampling pilot, as they flew into a nuclear maelstrom, it would have been GAME OVER, for the aircraft and the crew. The bends can be deadly. The attacks are known to deep sea divers as the Raptures of the Deep. Full Pressure Suits would have avoided the 'bends' syndrome. But the nuclear tests were run 'lean and mean', and such luxuries were considered too wasteful.

As soon as we entered the cloud, all our radiation readers maxed out, and I maxed out with them. The verification of this account can be found in two documents. One secreted in the hidden AWE archives, about Grapple Zulu Flagpole 1958. Sniff One, PIKE radiation section results analysis. Which would show that the PIKE equipment malfunctioned. *The reality being, it was the Observer who malfunctioned!* The second document being my Navigation Log that recorded aircraft fuel tank levels prior to cloud entry, and the rest was blank, with the exception of my final CHARLIE reading; after I had semi recovered, and we were on the ground. Checking my personal QFE dosimeter, the reading was much higher. It was reading a radiation dose of just under 20 Roentgens.

Landing back at base after the sampling sortie, we evacuated from the aircraft, then into, and through decontamination procedures. With the detonation of the second largest Hydrogen Bomb built by the UK, no one was interested in my encounter with the 'bends'. Nor, that they had been triggered by radiation from the cloud. Debriefing for the mission, I was assigned an EPAS Officer (Equipment, Provision and Supplies). He was not in the least bit interested when I tried to explain to him what had happened. He had his list of 21 Questions, and that was all he was concerned about. *It was his painful duty to debrief one of those radioactive aircrew 'lepers', who had just flow through a BIG nuclear cloud, and wanted to finish the debriefing as quickly as possible. Seated behind a table, keeping a measurable distance away from the idiot in front of him, who was babbling away, about suffering from the 'bends'.* Being unable to understand what he was hearing, he just wanted to keep a long way away from the 'glow in the dark' creature that was hovering before him. Having finished what I had to say, he looked me straight in the eye and said, "If you are sick, report to Sick Bay"! With that, he wheeled around and marched away as quickly as he could. Leaving me standing.

He was only doing his job, under impossible conditions, and in a chaotic environment. Being a 'kiwi' (a flightless bird), he didn't understand the 'gut' of the aviator. Never having experienced the euphoria of waltzing and skipping through the tops of clouds. Nor climbing so high, that the sky above is pitch black in the middle of the day. Travelling and flying where no man had been before. Never having experienced the ecstasy of low-level flying. Especially in classic aircraft such as the DeHavilland Mosquito, hopping over treetops, then dropping down into the next field. Once airborne, and the wheels were up, the aviator is a different person, flying with the birds, totally disconnected from all ground restricted land-lubbers.

The day following the detonation was a Stand Down day for the entire Island. I woke up feeling groggy and with a nasty headache. Apart from that, I felt half-alive. Progressively feeling better as the day past and thinking to myself that 'I had dodged the radiation bullet', I just fell into the regular Island routine. My massive altercation with 'bends' the previous day seemed to have passed without any apparent damage. Or so I thought at the time.

Not until many years later, was it discovered that it was not the bullet I should have be concerned with. Instead it was a delayed blast of an unknown dose of high energy radiation. The high intensity *gamma* and *neutron* radiation I had been exposed to, had seriously damaged my DNA, and burnt out the core of my short-term memory function in my head. The hard-wired ligatures of my autonomous body functions appeared to be still working, and in place. So were most of the skills I had developed and used. I thought at the time that I was back to normal. Or as many of the cloud flyers used to express when anyone asked what flying through a nuclear cloud do to them. They would defensively respond, "*There is nothing wrong with me*"!

Going back to the Squadron on September 4th, I discovered that the Observers Log that I kept on the flight through Grapple Flagpole, had just two entries on it. Take off time for the mission, fuel level readings and the final CHARLIE (cumulative radiation dose) reading after we touched down. Nothing else, it was completely blank.

Except for my final QFE dose reading that I recorded and logged. It was just under 20 Roentgen. The official readings we were given as a crew was a tad short of 15 Roentgen. Both in the danger level, well above the maximum permitted. Our entire crew were grounded for the duration, meaning that we were unable to fly operationally for six months, except as passengers. That would take us into March 1959. We were dead weight, and were immediately taken off the Squadron roster, and re-assigned to Task Force Command to use as they felt fit.

Ten days after Flagpole detonated, the flying cloths that I had worn flying through the nuclear cloud were returned. Some needed a good hand wash. Going through my clothing box, I felt something solid in my flying suit. When I got to it, I discovered more than a dozen Quartz Fibre Electroscopes (QFE's) and Film Badges, that I had stashes into my pockets. These were my personal radiation reading instruments. I must have been so groggy and discombobulated at debriefing, that I had forgotten to surrender any of them. I must have been moving about like a zombie!

Which raises another question. If I still had my personal Film Badges and QFE's still in my Flying Suit, where did my 'official' readings from these instruments come from? Did someone invent my radiation dose? They did not come from the ones in my pockets, because I still have them. These are the original Film Badges and QFE's that I flew with, through the centre of Grapple Zulu Flagpole hydrogen bomb cloud.



The background is the 76 Squadron Badge, which is appropriate, as this is where the instruments were used. A copy of the Squadron symbol, 'Lion and Rose' was painted on the tail of every Squadron aircraft. The long thin tubes at the top, are the QFE's. The less sophisticated Film Badges had a common safety pin, soldered onto a metal case that contained a 35mm 'black and white' film strip. It was top of the line equipment. *Just the thing to have when flying through a nuclear cloud.* We never used the safety pins, because they would have punctured the Mae West Life preservers.

A dozen or so of these instruments were submitted to Rosenblatt Solicitors as exhibits, together with additional materials and records. To support my testimony for the nuclear veterans, in their pension appeals. None of them were ever used. The Treasury solicitors ensured that my testimony was rejected by the Court and thrown out. The Film Badges and QFE's submitted as evidence are probably still in the vault at Rosenblatt Solicitors. I'd like to have them back.

During our cloud sampling mission, having exceeded the maximum personal radiation dosage limit, the 'bean counters' (management) moved us from the ASSET side of their balance sheet to the LIABILITY side. We were 'fried' and no longer of use to anyone. We were grounded, and recategorized to A4,G7 (unfit to fly), then summarily thrown off the Squadron. Transferred to Task Force, to be assigned 'grot' (rubbish) work. Being cast adrift, was not a happy experience. I was out of touch with my crew and the rest of the Squadron and ended up in a void not knowing what was going on. The Task Force Administration was still short of people to fill the many tasks that needed doing. They were constantly plugging up holes that existed throughout the entire operating systems.

As some problems were fixed, new ones appeared. It was an ongoing process. One major issue that became apparent was, not everyone on the island was being accounted for before each detonation. Many people were being missed and didn't know what was going on. *Not all had been informed that a bomb was about to be detonated*, including an overworked cook, who had just got to his tent after working nonstop on a 20-hour shift. Having just climbed into his cot, when he was blown out of his bed, and out of his tent, by the shockwave of the unannounced nuclear bomb detonation.

This incident led to a set of new orders being promulgated, that every person on the Island must be accounted for, and their position known, before any bomb was 'cleared' for detonation. While a seemingly small change, it was enough to send the planning staff and procedure writers into a fit. This was the unfortunate vortex that I had been pushed into, and was assigned the entire airfield, as the Airfield Safety Officer. I was given the task of getting a head count for nearly a thousand men, positioned on and around the vast airfield, or the bomb would not be released from the aircraft. My territory included Air Traffic Control, Radar installations, fuel depots, bomb assembly areas, decontamination pans, as well as all flying squadron personnel that remained on the far-flung airfield. I was overwhelmed and did not know where to start. To my relief, I was taken under the wing of a senior administrative officer, who became my mentor. With his vast experience and knowledge, he taught me Administration within two-weeks.

It was something that I had never had to deal with before and did not know where to start. He assisted me with a crash course in the Art of Administration. That experience has lasted a lifetime. Crash courses in doing things that had never been done before, became the mode. While I didn't get it all right, by far the biggest portion of my administrative efforts did work. That was all that mattered. It also had an important side benefit. It got me out of the aircrew 'cocoon' of just working with aviation technicians. Those who only spoke the language of flying, speaking in a series of abbreviated code words, and initials that only aviators use. It opened the world of other

people, whose language and interests were far removed from those of the aviator. It broadened my horizons.

My appointment as the Airfield Safety Officer lasted for the final two Grapple Zulu detonations. The next air dropped hydrogen bomb was Zulu Halyard. Flying in from Whitehall, London, we received a visit from a group of high-powered Top Brass, including ACM Harry Broadhurst (top Dog in the RAF), who flew in on a magnificent Vulcan delta winged bomber, to witness the detonation of a hydrogen bomb first-hand. The Brass were at the Airfield for the burst, and we mingled together after the detonation, as the multi-coloured nuclear magma raced up to the heavens. They too were overwhelmed with the experience.

Soon, I was beginning to feel like an old hand at the nuclear trade. It was my fourth nuclear detonation. Yet, it was still amazing and memorable to experience and watch. To feel the startling heat radiating off the face of a new Sun, as it erupted and shone just one mile above the surface of the sea. From a distance of 35 miles, the nuclear caldron was hotter than the real Sun high in the sky. The final detonation name Zulu Burgee was fired September 27th, 1958, it was a balloon shot of an Atomic trigger. It was a very dirty radioactive cloud. The sampling aircraft did not linger very long in that Cloud. They were able to collect highly active radiological samples very quickly. Chris Donne was flying as Air Controller on this detonation, with the call sign of Sniff Boss.

With Burgee exploded, it was time to pack up and go home. Home at that time was Adelaide, Australia, which was our Squadrons overseas base, and where my gear was stowed. Having been overdosed with radiation, and not being available to fly as an active crew member for six months I was expecting to get passage back on a Hastings Transport Command aircraft.

Instead, out of the blue; an incredible offer was received from HMNZS Pukaki. A New Zealand frigate that had been loaned by the New Zealand Government for the nuclear tests. The ship had provided a number of essential services in support of the Grapple operations.

It would be soon be leaving Christmas Island and sailing back to its home port Auckland, New Zealand. The New Zealanders graciously offered 76 Squadron two berths, if we had anyone interested in taking a South Sea Pacific cruise with them. HMS Scarborough, a Royal Navy frigate was also part of the Operation Grapple taskforce. Prior to its return to the UK, it was scheduled to pay courtesy visit to both New Zealand and Australia. Scarborough would be showing the flag, visiting New Zealand for a few days, before crossing the Tasman Sea for Sydney.

We were also offered two berths, for the leg between Auckland and Sydney. Possible as a reward for our work, my co-Navigator Alan Gardener and I, were offered berths, on both ships. Both of us had received excessive radiation overdoses, that precluded our flying as active aircrew.

We were dead weight. The offer would allow us to sail from Christmas Island to Auckland on HMNZS Pukaki. Spend a week in New Zealand, then join HMS Scarborough to sail from Auckland to Sydney, Australia. It was then up to us to get from Sydney back to base in Adelaide. Incredibly, we were both granted a 'Leave of Absence' to make the journey. We must have been in a really

bad way for this to happen. A rare occurrence, and a wonderful opportunity to take two South Seas cruises at the expense of Her Majesty's Government. From a practical stand point, the people who arranged the trip were getting rid of two pieces of burnt 'toast'. We were off their books, and out of their hair. They didn't have to book us on any of the crowded return flights to Australia.

What a magnificent and serendipitous opportunity had come our way. Many years later came the incredulous realization that after having flown through the 'fire' (Flagpole) we had been thrust into the 'pan' (Pukaki). Highly radioactive aviators sailing on a highly radioactive ship. It is impossible to make this up!

Oblivious to this at the time, once Alan Gardner and I got our heads together, and our ears stopped ringing. We needed to develop a DIY trip plan for our Grand Adventure. It would be a 3 to 4-week trip. What clothes to take? What clothes should we ship back to base? What would we do, and where would we go during our week in New Zealand? How would we get from Sydney to Adelaide? By air? Train? Drive? The logistics were challenging, the options were numerous, and money was short. Despite all the obstacles, we decided that we would go for it. Having already gone where no one else had been before, we knew that we would be able to handle whatever lay ahead.



HMNZS Pukaki at anchor in the Port London Roads, 1958.

A week later we got our sailing orders to report to Port London at 8 am for embarkation. We would be in uniform throughout the journey. A tiny dinghy took us from Port London to the ship,

which was anchored just off the Port. We only carried a suitcase each. The rest of our gear, including flying equipment etc., was packed and shipped back to Adelaide by air. The dinghy trip from the Port to the Ship, seemed like a long way, and we were surprised just how bumpy and rough the sea was in a small boat.

From the dock, the sea appeared to be very smooth, but it wasn't. Tying up to the gangplank we climbed up and saluted as we were piped on board. Greeted by the Officer of the Day, we were assigned our berths. Mine was the Captains Sea Cabin, a tiny closet just behind the bridge, next to the radio shack. Nowhere to put anything, but we didn't have much anyway. The New Zealand crew turned out to be a great bunch of people and they greeted us with open arms.

We soon settled into shipboard routine with our new shipmates. Later in the afternoon the anchor was weighed, and we were off. First stop would be Suva, the Capital of Fiji. Most of the crew had grown beards, which are permissible in the Navy. What we didn't know was that it was a contest, to see who could grow the longest beard during Operation Zulu.

A day after departing Christmas Island, the contest was held and judged on the Aft Deck, with awards being given. On a small ship, they need to make their own entertainment to compensate for the long and lonely days spent at sea. Years later it was discovered that the Beard Growing Contest was a ploy to 'save water'.

Sunday mornings the Captain held a prayer service on the Aft Deck. With little to do, we asked if there was anything we could work on or help with. But the Kiwis had everything pinned down neatly, and all we could do was to relax and sunbath.



HMNZS Pukaki, aft deck, Beard measuring contest

We were introduced to the Ceremony of the Daily Rum Ration; we were given a daily shot of neat Navy Rum. The ranks had their rum cut with water, and it needed to be consumed the same day. It could not be stored. On special occasions, as a birthday, it was the 'sippers' custom. The birthday boy went around taking a sip out of his mate's rum ration. Just enough to get a nice buzz.

It was a joy to discover another world and another way of life. Different customs. Alan and I just lapped it up. Shortly after leaving Christmas Island the ship encountered the doldrums. A vast area, where there is no wind, and the surface of the sea resembles a glassy mirror, with gentle undulating waves. It brought back memories of the poem Rhyme of the Ancient Mariner. '*As idle as a painted ship. Upon a painted ocean*'.



Doling out the daily Grog ration

Yet, this was a powered ship and it cut through the smooth glazed sea, like a knife cutting through water. Whenever we disturbed a school of flying fish, they leapt out of the water, and out of harm's way. Using their wings for elevation, they used their tails to power them along. Some would fly more than 100 feet before diving back into the water. It was just hypnotic watching them perform.

Occasionally, at night-time, a flying fish or two would land on the deck of the ship. The following morning, we were able to gather them and take a very close look. From time to time we would spot schools of dolphins leaping through the calm waters. There was much to see.

Keeping a close eye on the horizon for other ships, in the vast, remote ocean we were sailing in, we did not encounter a single ship. We were advised by radio that the following day we would be performing an exercise with a Royal New Zealand Airforce Sunderland flying boat. It would be flying out of the RNZAF base at Suva Bay, in Fiji, and it would be searching for us.



Alan Gardner holding a deck landed flying fish

For the first time, we were able to make a contribution. Being well versed in the many different sea search patterns used by aircraft, we suggested that the lookouts concentrate on the horizon to the rear of the ship.

It would be the perfect opportunity for the Sunderland to perform a classic 'Creeping Line Ahead' (CLA) search. With some Maritime Reconnaissance skills, we were able to 'read the waters', and probably had a better insight of Ocean search than many would believe.

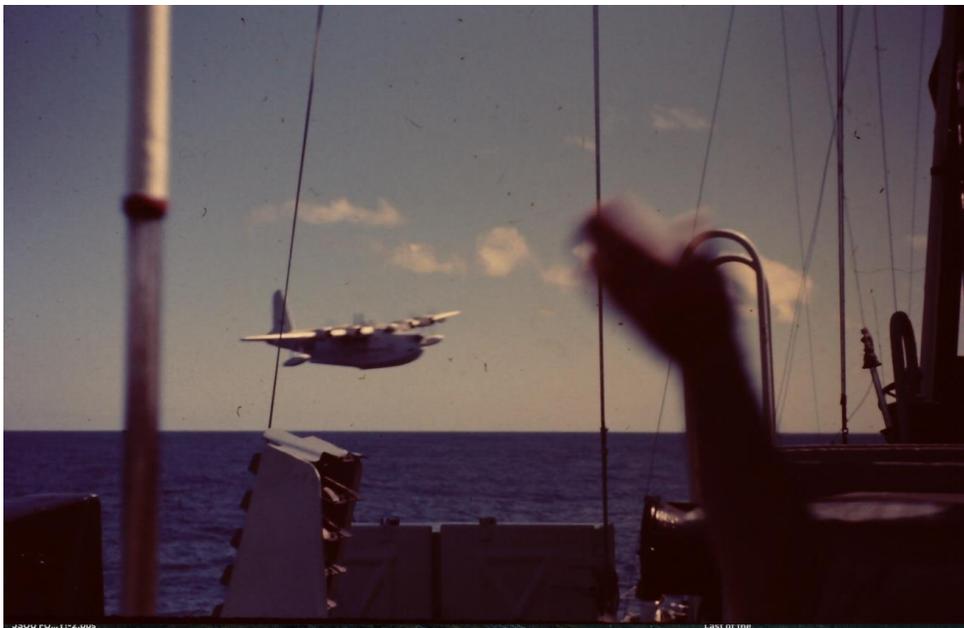
As a ship powers its way through the waves, the screws (propellers) churn away, chopping up plankton and other tiny marine life leaving them trailing in the wake. The process leaves an oily looking slick showing where a ship has passed.

In highly travelled areas, the seas have an abundance of cross trails indicating the common highway travelled by ships. These trails can last up to a week in tranquil areas of the doldrums. Hence the search aircraft would just be looking for the ships trail, which would lead them directly to the vessel.

Sure enough, the aircraft was spotted right behind us. It swooped low over the frigate, with everyone on the aircraft and ship waving and shouting. The crew of the aircraft would not have heard a thing, with four huge engines humming in their ears. It was a beautifully clear day in the doldrums, and the Sunderland flew with us for an hour or more. Before heading off South East towards Fiji and its base in Suva Harbour.

We even got a couple of mentions in Gerry Wrights excellently detailed book, "WE WERE THERE". "Thursday, 25 September began with the embarkation of six Fijian Sappers for passage to Fiji, along with two RAF Flight Lieutenants.....*Pukaki* then weighed anchor and bid farewell to the other Grapple Squadron ships and quietly headed south for Suva". Then: "Six days after leaving Christmas Island a RNZAF Sunderland flying boat from Fiji joined the ship for training. After shadowing the frigate for an hour, it closed for two hours of close support.

The RAF Officers were free with their jokes about the aircraft's vintage after their experience on Christmas Island with the most modern of aircraft, but it was done in good humour". With all said and done, the Sunderland was a grand old aircraft. I wish I had had the experience of flying in them, as one of my friends from Navigation School did.



RNZAF Short Sunderland fly pass, mid Pacific

Arriving in Fiji was quite an event. It was the first landfall that the ships' crew had made to the outside world for nearly three months. The crew went wild. They couldn't wait to get onto dry land (and the pubs). The daily watch was transferred to the nearest 'public house', which was quite a distance from the ship. Seamen would log out to 'go ashore' from the bar, then log in on their return. Meanwhile, the Captain had left to meet with the Island Governor, in Government House, where he stayed for dinner.

There was hell to pay on his return when he discovered what had happened, and there was quite a lot of disciplinary action taken on board when the ship sailed off for New Zealand. In Suva, we stayed onboard the ship and did not venture into the Port. We already knew Fiji from the many transits we had made earlier.

For us, the only lasting impression of the Port at Suva was a Japanese ship, tied up for provisioning. At various times the crew were released from the ship, and most came off with Golf Clubs. They proceeded to nearby patches of waste ground and started hitting golf balls all over the place. We concluded that Golf was a very prestigious game, and very highly regarded in Japan.

The ship a big ocean-going vessel, was shark-fin fishing. It sailed International Waters around the Pacific, fishing for shark. They possibly caught quite a few Dolphins as well. Once hooked, the sharks were lifted to the deck, and in a single swoop, their top dorsal fins, and other choice fins portions would be cut off. The living, bleeding and crippled fish would then be jettisoned overboard, as it had no further value to the finning enterprise.

The scent of fresh blood in the water did attract, and lure schools of sharks from miles around to the slaughter, and a feeding frenzy. Once the fins had been cut off, the fins were festooned all over rigging, to dry in the Sun. Once dehydrated the fins were packed below deck, to make way for fresh harvests.

A few days after Pukaki departure from Fiji, the ship conducted a practice exercise of firing a round of Squid depth charges. The Squid system was the ships anti-submarine attack weapon. During World War 2, Depth Charges were used, these would be rolled off the back of the ship. It was a cumbersome system requiring the ship to sail over a submarine before the depth charges could be dropped. Which caused the ship to lose Sonar contact with the submarine. By firing the anti-submarine mortars ahead of the ship, it was possible to retain sonar contact with the submarine throughout the attack.

On countdown, a mortar shells pattern was fired-off ahead of the ship. Impacting the surface, they sank to predetermined depth before exploding. Water, not being compressible, the detonations created huge air bubbles under the surface; which send pressure shockwaves from each detonation deep into the immediate area.

The ideal attack pattern was to drop a ring of mortars around a submarine, so that the shockwaves would crush the hull of a submarine and sink it. The greater the depth that the mortars were detonated, the less movement would be seen on the surface of the sea. For the movies, depth charges and mortars are detonated just under the surface. Which produces magnificent columns and spikes of water, as the gases from the detonation erupt from the sea. But they are very ineffective in sinking submarines. The explosions killed and stunned any fish, in the immediate area of the gun cotton detonation.

On occasions, the ship would turn back to net the stunned fish. Which would provide a magnificent fish fry for the crew, with extra fish to be frozen down and used at a later date. In our case, the ship continued sailing and did not stop-off to go fishing. Fifty years later, came the realization that there was a very specific reason why the squids were fired, and why the ship did not stop. During the nuclear tests, Pukaki was ordered to sail directly under Ground Zero of one of the Hydrogen Bombs that had been detonated.

After one nuclear detonation, Pukaki had been ordered to sail through the sea underneath Ground Zero. The ship had unknowingly sailed through a mass of microscopic radioactive nuclides, that had been irradiated by the detonating nuclear magma. The invisible fallout contaminated the entire ship and the crew. The action of firing off the Squid mortars, which had been exposed to the radioactive nuclear fallout, was in fact an act of cleaning them up. The mortars barrels were cleared and cleaned, then the mortars were reloaded with clean fresh rounds that had been stored below in the ammunition locker.



Pukaki squid detonations, mid Pacific

The day before arriving at Auckland, the ship anchored in the vicinity of Port Tryphena, Great Barrier Island, for 24 hours, to 'smarten up'. Very early in the morning, it sailed into a deserted

cove in the Bay of Islands area and dropped anchor. I and my co-Navigator were 'invited' to leave the ship for the day, and that a dinghy would be provided for us.

We were offered the chance to go shoot some of the many feral goats that inhabited the area. We were advised that the local farmers would appreciate any help they could get to rid themselves of the unwanted creatures.

We opted not to, and just rowed to the shore, spending the day walking around. It was grand to get on firm land again, after the rocking ship. We just waited until evening, when it was time to re-board. We wondered why we were removed, 'no one told us anything'.

In retrospect, the crew needed us off the ship so that they would be able to do a final 'spit and polish' and rid the ship of any residual radiation contamination that may exist.

Next day we arrived at Devonport Naval Base, Auckland. The pier was full of family members waiting for their loved ones, who they had not seen for many months. It was a joyful reunion for everyone. Being outsiders, we watched the many happy reunions that took place. But it was time for us to leave, so packing our one suitcase each, and climbing into civilian gear, we made for the gangway. We were piped off the ship by the new ship's crew that had already replaced the Operation Grapple veteran crew.

Having sailed on HMNZS Pukaki, and having known her wonderful crew; decades later, when hearing of what had happened to those wonderful seamen, it became a personal matter. While there was little that could be done from a distance, except to try to rationalize and try to solve what had really taken place. *The Massey Report* conducted on the crew of Pukaki pointed out the DNA damage that was passed from one generation to the next. The photographic evidence showing the DNA, 'before and after' is startling.

Back in the UK, the BNTVA had been infiltrated by elements of MI5. MI5 knew everything that was going on within the organization, and had access to e-mails etc. This was confirmed in the story of Sir James Gordon Josephson, OBE, authored by Slaine McRoth. *The X,Y,Z Files: The 100-Year Experiment*.

The BNTVA program administrators were 'talked' into not repeating the *Massey* experiment, by the MoD 'moles' within the BNTVA - "**as it had been done before – no need to repeat it**". The nuclear veterans were not Statisticians. Instead they were pushed into a different 'Statistical' study, that wasted a lot of time and yielded no results.

The opportunity to perform a double-down repeat study, to confirm and prove the results of the original Massey study, was lost for ever. At that time, there were sufficient nuclear veterans still alive to set-up statistically accurate samples, providing valid results. The latest farcical Government funded study to replicate the Massey Study at Brunel University, was an expensive disgrace. It cost a lot of money; it wasted a lot of time. After many months of setting up, the University then claimed that there were not enough living veterans alive, to conduct a 'statistically valid' study.

When I volunteered to take part, I was turned down. The Brunel study was not completed. Shame on them.

MOD LAWYERS PULLED A FAST ONE ON NUKE VETS



There were a few sentences that grabbed my throat when reading Fissionline 24 i.e:
"The crucial turning point came when it was agreed there was "no point in replicating the peer-reviewed Rowland cytogenetic study, which proved New Zealand mariners were damaged by radiation at Britain's H-bomb tests. Official minutes of the..."
Correct me if I am wrong, but I seem to recall that with any new scientific study, the methodology for the study is also included, for the precise reason that THE STUDY CAN, AND SHOULD, BE REPLICATED to ensure the validity of the facts. If the original study cannot be replicated next door, or around the world - then it's validity is questionable. It would appear to me that the Crown Solicitors were able to pull a 'fast one', in more ways than one, over a bunch of well meaning, but obviously incompetent Nuclear Veterans. Could it be that radiation also has an adverse effect on brain cells?

The author onboard HMNZS Pukaki, when it reached Suva, Fiji, on its way back to Davenport, Auckland. With an extract of an article, which appeared in Fissionline 26. We now know that radiation does have an adverse effect on brain cells.

Meantime, the science is still developing regarding nuclear illnesses triggered by radioactivity and radiation. ***The concept of a Statute of Limitations in the field of nuclear diseases, is as wrong as the Supreme Court itself was.*** It needs an Act of Parliament to change the obsolete laws of the land. The Statute of Limited should not apply (and probably doesn't) to ongoing injury!

Based on the work of Karl Sax, the father of radiation cytology, who published his paper "Chromosome Aberrations Induced by X-rays, at Harvard University in 1938, indicating that radiation can disrupt chromosomes and lead to disease (cancer).

One example is an Australian civilian. On October 10th. 1956, an atomic bomb was dropped on the Maralinga Nuclear Testing range, located in South Australia. The detonation was part of the UK nuclear testing programme, code named Operation Buffalo. It was the KITE detonation.

The following day the radioactive fallout spread many hundred miles, engulfing the capital city of Adelaide. With light and variable winds existing at that time, radioactivity continued to fall on the city for the next 3 days. The citizens of the capital, and of the State became 'downwinders' *. The entire State was covered with nuclear fallout. In order to avoid massive panic and alarm, the information and details were suppressed by the Australian Government, and by the UK authorities.

In addition to having the entire population being exposed to an unmeasured dose of radioactivity, the toxic dust fell across pastures and bodies of water contaminating the entire surface area. Radioactivity entered the food chain of the State of South Australia. In addition, the same radioactive cloud spread across the States of Victoria, New South Wales and Queensland. Covering more than half the Australian continent.

*The United States Government awarded their civilian 'downwinder' a \$50,000 Tax Free Grant to compensate for a whole range of nuclear cancers.

See If You Qualify for Downwinders® \$50,000 Tax Free

If you or a family member have had internal cancer or leukemia within the last sixty five years (**if family member is deceased their spouses, children or grandchildren are considered eligible survivors and may make a claim on their behalf**) or if you get cancer and lived in any of the following counties for a period of at least two years between January 21, 1951 and October 31, 1958 or during the entire month of July 1962.

In **ARIZONA** - Apache, Coconino, Gila, Navajo, Yavapai. In **NEVADA** - Eureka, Lander, Lincoln, Nye, White Pine or the northern portion of Clark. In **UTAH** - Beaver, Garfield, Iron, Kane, Millard, Piute, San Juan, Sevier, Washington or Wayne.

The following are Primary cancers that are covered under this program: Bile Duct Cancer, Bladder Cancer, Brain Cancer, Breast Cancer (male and female), Colon Cancer, Rectal Cancer, Esophagus Cancer, Gall Bladder Cancer, Leukemia's (other than CLL or Chronic Lymphocytic Leukemia), Liver Cancer (except if there is evidence of cirrhosis or Hepatitis B), Lung Cancer, Multiple Myeloma, Nasal Pharynx Cancer, Lymphomas (other than Hodgkin's disease), Ovarian Cancer, Pancreas Cancer, Rectal Cancer, Salivary Gland Cancer, Small Intestine Cancer, Stomach Cancer, and Thyroid Cancer

This is not a class action lawsuit. This program has been approved by the United States Congress. It is available to those individuals that were subjected to radioactive nuclear fallout from the Nevada Test Site, 40 miles north of Las Vegas, Nevada.

If the same approach had been made to all the civilian Australian nuclear veterans, the entire population of the country would have qualified, as being "downwinders". Try to work out how much that would cost the British Taxpayer.

Many decades after exposure, the Australian civilian who had been exposed to the nuclear fallout from the Operation Buffalo detonation, developed a set of symptoms, that just could not be diagnosed. A variety of medical tests were performed over several years. Eventually, with the aid of a swallowed 'horse pill', containing a camera, a preliminary diagnosis suggested, that it may be Follicular Lymphoma. The medical staff were unaware of this type of cancer, they had never been exposed to it before. A follow up examination, using an Endoscope confirmed that this was indeed Follicular Lymphoma cancer of the intestine.

With no prior exposure, or experience with the malady, the possible options for treatment were discussed during the hospital's weekly roundtable meeting. Surgery and radiation oncology were ruled out. Leaving chemotherapy oncology as the only viable option.

An experimental program was planned, using an aggressive combination of drugs, which would be administered over a tight 3-month schedule. Several weeks after the treatment was completed, the lymphoma started to disappear. After 2 months it had completely vanished. Success!

A month or two later, a different set of symptoms began to manifest themselves in the patient. Leading to more batteries of tests being administered. It was eventually discovered that while the chemotherapy oncology had successfully eliminated the follicular lymphoma, the chemotherapy had also destroyed the patients' entire immune system. The patient will now need monthly immunology infusions for life.

To date, Wikipedia catalogues a short list of 22 different human cancers; caused by radiation. Which have been attributed to genetic dislocation. Each of these cancers can be deadly!

BY CHROMOSOME (Wikipedia *)

A sampling of 3 radiation induced illnesses, caused by chromosome translocation

Denotation[\[edit\]](#)

The International System for Human Cytogenetic Nomenclature (ISCN) is used to denote a translocation between [chromosomes](#).^[11] The designation **t(A;B)(p1;q2)** is used to denote a translocation between [chromosome](#) A and chromosome B. The information in the second set of parentheses, when given, gives the precise location within the chromosome for chromosomes A and B respectively—with *p* indicating the short arm of the chromosome, *q* indicating the long arm, and the numbers after p or q refers to regions, bands and sub-bands seen when staining the chromosome with a [staining dye](#).^[12] See also the definition of a [genetic locus](#). The translocation is the mechanism that can cause a gene to move from one linkage group to another.

Examples[\[edit\]](#)

For an explanation of the symbols and abbreviations used in these examples, see [Cytogenetic notation](#).

Translocation	Associated diseases	Fused genes/proteins	
		First	Second

t(8;14)(q24;q32)	Burkitt's lymphoma	c-myc on chromosome 8, gives the fusion protein lymphocyte-proliferative ability	IGH@ (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein
t(11;14)(q13;q32)	Mantle cell lymphoma ^[13]	cyclin D1 ^[13] on chromosome 11, gives fusion protein cell-proliferative ability	IGH@ ^[13] (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein
t(14;18)(q32;q21)	Follicular lymphoma (~90% of cases) ^[14]	IGH@ ^[13] (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein	Bcl-2 on chromosome 18, gives fusion protein anti-apoptotic abilities

A total sampling of 22 radiation induced illnesses, are shown at Appendix A

Surely there will be many more; soon to be discovered.

Bidding farewell to HMNZS Pukaki, Alan and I spent the next few days on dry land in Auckland. We were in a different country that did not move or undulate. Having flown in previously on our photographic survey missions, it was not completely foreign. The Kiwis drove on the left-hand side of the road and spoke English. They used Pounds, Shilling and Pence in New Zealand currency. We rented a car and drove off to sight-see as much as we could in the limited time left.

One of the main attractions was a visit to Rotorua, where we decided to splurge and picked the best hotel we could find. It came with breakfast. Seventeen different courses for breakfast! The Breakfast Menu was a challenge, which we decided to take on. Gradually and very slowly we worked our way all the way down the menu. Nearing the end, it became very hard to stuff anything else into our mouths. But we persisted and eventually put away the very last item. Having had our gluttony satisfied, we did not need to eat for the next three days.

We toured through as much of the North Island as we could, visiting the Hydrothermal Energy Plant in Rotorua. The Maori village. The Glow Worm caves at Waitomo. All the main tourist attractions.

We drove past active volcanos, before heading back to Auckland and our next appointment with HMS Scarborough. a Royal Navy frigate, that had served at Christmas Island, together with Pukaki, and was now on a 'flag showing' cruise through the Commonwealth.

Climbing back into our uniforms, we returned the rental car and reported to the gangway for boarding. Once more we were piped aboard, as we saluted the Ship, for the short journey from Auckland to Sydney. We found that another Navy Officer was sharing the journey with us. He had already broken the ice with the crew, so we were able to settle in very quickly. Our course lay across the Tasman Sea. We had flown over it many times during our flights to and from New Zealand. There was a tremendous difference between flying and sailing the sea. Due to the sea current flow around the bottom of Australia, the waves travelled at an angle to our sailing course. It produced a quarter sea motion, causing the ship to corkscrew over the waves.

First day out of Auckland it was not too bad. The next day it was worse and very uncomfortable. The Officer of the Watch was rolling the ship with the waves, which mean that the ship's heading was rocking 10 to 15 degrees across the horizon. Due to the weather and the movement of the Ship, the upper deck was not a place to visit. So, we stayed in the Wardroom and read books. The Captain, maintaining his records, was not happy with the amount of fuel that was being burnt rocking with the sea.

He ordered the Watch to steer a straight course to Sydney, and to cut through the waves instead of rolling with them. The action to increase fuel efficient, meant that each wave we cut through, battered the ship mercilessly. We hunkered down in the Wardroom to keep out of everyone's way. Being teased mercilessly by the Navy officers trying to get us to throw up in such a turbulent passage.

Little did they know that low level flying at high speeds produced more violent vibrations, and air eddies. More stomach lifting and falling than any roller coaster I had been on. In contrast, their food suggestions of mixing hot chocolate onto oysters sounded a very interesting and tasty treat. With some of the food we had eaten on various Survival Courses we had taken, it sounded delicious. Far tastier than eating grubs, caterpillars and worms.

With the pounding of the ship, the Navy officers themselves started to turn green around the gills. Whereas we were weatherproof, it did not affect us at all. To break up any further nonsense, we were struck by a monster wave, which, for a fraction of a second stopped the ship dead in its track. All the wooden cabinets in the wardroom broke loose. All the cabinet draws, filled with glasses and china, shot out of their cases and flew across the wardroom, to crash into the metal walls of the wardroom. Every piece of glass and china in the cupboards was shattered. We used enamelled mugs and plates for the rest of the trip. The ship's speed was adjusted so that we would sail into Sydney, through the 'heads' at dawn on day of arrival, to a berth that was waiting

us at Gardner's Island, next to Woolloomooloo. Everyone was required to 'dress ship' as we sailed into our berth.

The sail in photograph was taken years before the Sydney Opera House was built. The view is entirely different now. With the first two sea cruises tucked under my belt, I was hooked on sailing. Especially when other people were doing the work. Alan Gardner and I decided to make our way to Adelaide from Sydney by train. Spending a few days in Sydney, and a couple of nights in Kings "Bloody" Cross to top it off.



HMS Scarborough gliding into the Gardner's Island dock, Sydney NSW

Soon, it was time to make our train reservations, for the last leg of our adventure. Sydney to Melbourne, Melbourne to Adelaide. We didn't stop off in Melbourne as we were all 'toured out' and were running low on funds.

One interesting item at the time, was that when each Australian State was being developed, they did not think about the neighbouring States. Being very independent, they developed in ways that best suited them. There was no thought of Federalization or Standardization. Consequently, the State of New South Wales hired a Scottish Engineer to design and develop their railway systems. The State of Victoria, adjacent to New South Wales, selected an English Engineer for their railways.

The Engineers did not communicate. The Scottish Engineer developed a narrow-gauge system, the English Engineer developed a wide gauge system. The English gauge is exactly 4 feet 8 ½ inches wide. An odd measure. Even odder is its origin. Believe it or not, the measurement goes back over 2,000 years. It originated in ancient Rome, and can be traced back to the Roman chariots, which used two horses to draw a chariot, with the wheel tracks being set exactly 4 feet

8 ½ inches apart. Which is just the width needed to accommodate the backsides of two horses. The Romans conquered England, bringing their chariots and measurements with them.

When the two rail systems met at the border of Victoria and New South Wales, they were not compatible. Each State built their own Railway Station at the end of their rail line. The trains would stop, and passengers and cargo were physically transferred from one train to the another. That system has been corrected and there is now a common gauge throughout Australia.

Eventually arriving back at the Adelaide Rail Terminal, South Australia, we caught a taxi to our base in Edinburgh Field. That was the end to our wonderful maritime adventure. It was almost anti-climatically after our seaborne experience.

Reporting back to the Squadron, quite a few of our friends had already left. They had been repatriated back to the UK. Having received a massive radiation overdose, we thought that we still had four months before we would be eligible to fly. We waited our marching orders, expecting another sea passage, as passengers on the P. & O. Line, from Port Adelaide to Tilbury Docks, London.

Catching up with laundry and getting ready to pack. We were told to report to Sick Bay for an Aircrew Medical Examination. Half an hour later, we had been re-graded from A4G7 (Grounded) to A1G1 (Fit to Fly). Wait a minute! It was only now November.

We had been 'grounded' and would not be able to fly as active aircrew, until March of the following year. We didn't know what had happened, or what had changed. 'Nobody told us anything'. Someone must have known something, but they didn't tell us.

Decades later having requested copies of my medical records for other reasons, I received a 3-inch stack of all my military medical records. Of the many items in the data, there were two of particular interest. The first was that, while there was almost little to no reference, to my level of participation in the British nuclear testing programme. Nor of my having been exposed to intense whole-body radiation, from flying through two massive hydrogen bomb clouds.

But my Flagpole radiation dose had been physically changed and reduced to almost half of the real level of contamination. It only showed my radiation dose as 8.8 Roentgen.

The change must have been made on Christmas Island, by some faceless person. But who would have authorized the change??? **The physical changing and reduction of radiation dose readings was nothing less than a criminal act!**

Would the same change have been entered onto the secret duplicate radiation dose files maintained by AWRE? ***What other changes were ever made to radiation doses anywhere in the UK?***

Had the same radiation dose reductions been made to Alan Gardner's medical records, and our pilot as well? This would explain the medical upgrades given on returning to Adelaide, and why

we were ordered to flying an aircraft halfway around the World, back to the UK. We had been 'Grounded' on Christmas Island. Taken off flying duties. Reassigned to Ground duties. Given a 'leave of absence' to go on a South Sea cruise with the New Zealand and the Royal Navy.

The evidence points to a number of nefarious activities having taken place during this critical time period on Christmas Island. AWRE has all the information, closely guarded under lock and key, and they are not giving an inch. The alterations and changes could only have been made by AWRE, with the tacit approval of members of the RAF hierarchy.

The second item in my medical files, was a running history of my reporting sick for incontinence. Which started immediately after Operation Grapple. A series of RAF Doctors failed to connect the radiation exposure to the incontinence issue. After all, they would have seen that my final radiation dosage was well below the danger level, and they took the medical information at face value.

Not knowing that my whole-body radiation dose had been deliberately reduced. The incontinence stayed with me for many years, eventually culminating into a full-blown case of Bladder cancer, which struck decades after I had left the military.

Similar things happened to many of my comrades in 76 Squadron. They too were struck by the 'nuclear bug', in many ways in one form or other.

It manifested itself in many forms, and in many different parts of the body; spreading from one vital organ to another. No two were ever alike. With the few I was in close contact with, I became aware of their details. With others, they stopped answering their e-mails, and they didn't answer their phones. Which eventually were disconnected.

They were gone and had disappeared forever. **Just as the MoD, and the Government of the UK had anticipated, and were waiting for. Wait long enough, and soon there will be no-one left!**

But the story will not end here. Now we have the children, grandchildren and an ever-increasing number of nuclear descendants. Some of whom will eventually become Members of Parliament (MP's). The Government will not be able to keep 'kicking the can' down the road for ever.

We need a Prime Minister with the vision and the courage to tackle and correct the illegal and unprincipled actions of their predecessors, regarding all nuclear veterans. Sooner or later, potential military recruits will realise that the MoD, and all the politicians in Whitehall, are not watching, nor safeguarding their backs. They will simply stop joining the military.

The politicians will have no one to send into harm's way, to be killed, injured or maimed. They will have to find and hire foreign mercenaries, to fight the wars that treaties or overseas dictators cause them to fight.

This ends a historical account of a short, but significant period of time spent serving on a major portion of Operation Grapple, being at extremely close quarters to the 'hot' side of the nuclear detonations. The tally being three air dropped hydrogen bombs, and two balloon detonated atomic triggers.

With a record of having flown through two largest hydrogen bombs detonated by the UK; and having been on the ground of one hydrogen and two atomic trigger detonations. Radiation dosage received varies considerably between actual radiation recorded, and the official (fake) whole-body *gamma* and neutron *radiation* reported on official records.

There were no instruments capable of measuring *alpha* or *beta* radiation. Of all radiation doses that were recorded, there is evidence to show that they had all been tampered with.

No medical follow-up was ever conducted on any personnel who were known to have received significant doses of radiation from Operation Grapple, nor earlier tests. The only follow-up was when a nuclear veteran (military or civilian) had passed away.

Whose organs and why?

20 Since the 1950s, human organs have been removed at post mortem and analysed at nuclear facilities to determine the levels of radionuclides they contained. Various rationales are apparent in the early work, which remained of relevance into the 1990s:

- research for scientific purposes on the amount of radiation present and the effect of radiation exposure;
- evidence on the cause of death for coronial purposes;
- evidence in possible claims for compensation arising from deaths of individuals potentially exposed to radiation.

In many cases, more than one reason pertained.

21 Individuals from whom organs were removed at post mortem for these reasons included:

- employees of the nuclear industry;¹²
- service veterans who had attended nuclear weapons tests;¹³
- individuals who had lived close to nuclear facilities;¹⁴
- the general population with no occupational or geographical link to the nuclear industry.¹⁵

While these are the broad categories of individuals from whom organs were taken for analysis, it is important to note that only very few individuals from each group were involved.

It may be that these post-mortem examinations, conducted without permission from the next of kin, may have ceased. The results and findings have never been released. Under whose authority they were performed, or by whom, nor the results obtained or made public; this still remains a mystery even to this day.

Appendix A

BY CHROMOSOME (Wikipedia *)

A current sampling of 22 radiation induced illnesses, caused by chromosome translocation

Denotation [\[edit\]](#)

The International System for Human Cytogenetic Nomenclature (ISCN) is used to denote a translocation between [chromosomes](#).^[11] The designation **t(A;B)(p1;q2)** is used to denote a translocation between [chromosome](#) A and [chromosome](#) B. The information in the second set of parentheses, when given, gives the precise location within the chromosome for chromosomes A and B respectively—with *p* indicating the short arm of the chromosome, *q* indicating the long arm, and the numbers after p or q refers to regions, bands and sub-bands seen when staining the chromosome with a [staining dye](#).^[12] See also the definition of a [genetic locus](#). The translocation is the mechanism that can cause a gene to move from one linkage group to another.

Examples [\[edit\]](#)

For an explanation of the symbols and abbreviations used in these examples, see [Cytogenetic notation](#).

The following chart is an extraordinary listing of nuclear diseases.

Translocation	Associated diseases	First	Second
t(8;14)(q24;q32)	Burkitt's lymphoma	c-myc on chromosome 8, gives the fusion protein lymphocyte-proliferative ability	IGH@ (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein
t(11;14)(q13;q32)	Mantle cell lymphoma ^[13]	cyclin D1 ^[13] on chromosome 11, gives fusion protein cell-proliferative ability	IGH@ ^[13] (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein
t(14;18)(q32;q21)	Follicular lymphoma (~90% of cases) ^[14]	IGH@ ^[13] (immunoglobulin heavy locus) on chromosome 14, induces massive transcription of fusion protein	Bcl-2 on chromosome 18, gives fusion protein anti-apoptotic abilities
t(10;(various))(q11;(various))	Papillary thyroid cancer ^[15]	RET proto-oncogene ^[15] on chromosome 10	PTC (<i>Papillary Thyroid Cancer</i>) – Placeholder for any of several other genes/proteins ^[15]
t(2;3)(q13;p25)	Follicular thyroid cancer ^[15]	PAX8 – paired box gene 8 ^[15] on chromosome 2	PPAR γ 1 ^[15] (peroxisome proliferator-activated receptor)

			y 1) on chromosome 3
t(8;21)(q22;q22) ^[14]	Acute myeloblastic leukemia with maturation	ETO on chromosome 8	AML1 on chromosome 21 found in ~7% of new cases of AML, carries a favorable prognosis and predicts good response to cytosine arabinoside therapy ^[14]
t(9;22)(q34;q11) Phil adelphia chromosome	Chronic myelogenous leukemia (CML), acute lymphoblastic leukemia (ALL)	Ab1 gene on chromosome 9 ^[16]	BCR ("breakpoint cluster region" on chromosome 22 ^[16]
t(15;17)(q22;q21) ^[14]	Acute promyelocytic leukemia	PML protein on chromosome 15	RAR-α on chromosome 17 persistent laboratory detection of the PML-RARA transcript is strong predictor of relapse ^[14]
t(12;15)(p13;q25)	Acute myeloid leukemia, congenital fibrosarcoma, secretory breast carcinoma, mammary analogue secretory carcinoma of salivary glands, cellular variant of mesoblastic nephroma	TEL on chromosome 12	TrkC receptor on chromosome 15

t(9;12)(p24;p13)	CML , ALL	JAK on chromosome 9	TEL on chromosome 12
t(12;16)(q13;p11)	Myxoid liposarcoma	DDIT3 (formerly CHOP) on chromosome 12	FUS gene on chromosome 16
t(12;21)(p12;q22)	ALL	TEL on chromosome 12	AML1 on chromosome 21
t(11;18)(q21;q21)	MALT lymphoma ^[17]	API-2	MLT ^[17]
t(1;11)(q42.1;q14.3)	Schizophrenia ^[10]		
t(2;5)(p23;q35)	Anaplastic large cell lymphoma	ALK	NPM1
t(11;22)(q24;q11.2-12)	Ewing's sarcoma	FLI1	EWS
t(17;22)	DFSP	Collagen I on chromosome 17	Platelet derived growth factor B on chromosome 22
t(1;12)(q21;p13)	Acute myelogenous leukemia		
t(X;18)(p11.2;q11.2)	Synovial sarcoma		
t(1;19)(q10;p10)	Oligodendroglioma and oligo astrocytoma		

t(17;19)(q22;p13)	<u>ALL</u>		
t(7,16) (q32-34;p11) or t(11,16) (p11;p11)	<u>Low-grade fibromyxoid sarcoma</u>	<u>FUS</u>	<u>CREB3L2</u> or <u>CREB3L1</u>

- https://en.wikipedia.org/wiki/Chromosomal_translocation



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Published by The British Nuclear Test Veterans Association (1173575) 2019.

<https://www.bntva.com>