MONTE BELLO BURNING

HMAS Sydney's Involvement with the Nuclear Test of 1952

By Marcus Peake

On the forenoon of 3rd October 1952 the crews of selected Australian and British warships were mustered on their decks. They were about to witness something that very few men had ever seen and although they did not know it, for some the effect in later life would be devastating.

Most of the ships had been there for a week or two, patrolling a specially designated area. Aboard HMAS *Sydney* the lookouts had been doubled and regular flights of her Firefly and Sea Fury aircraft had been conducted. The crew did not know why they were there, so rumours were rife – that they were searching for a Russian submarine, or perhaps engaged in a major exercise.

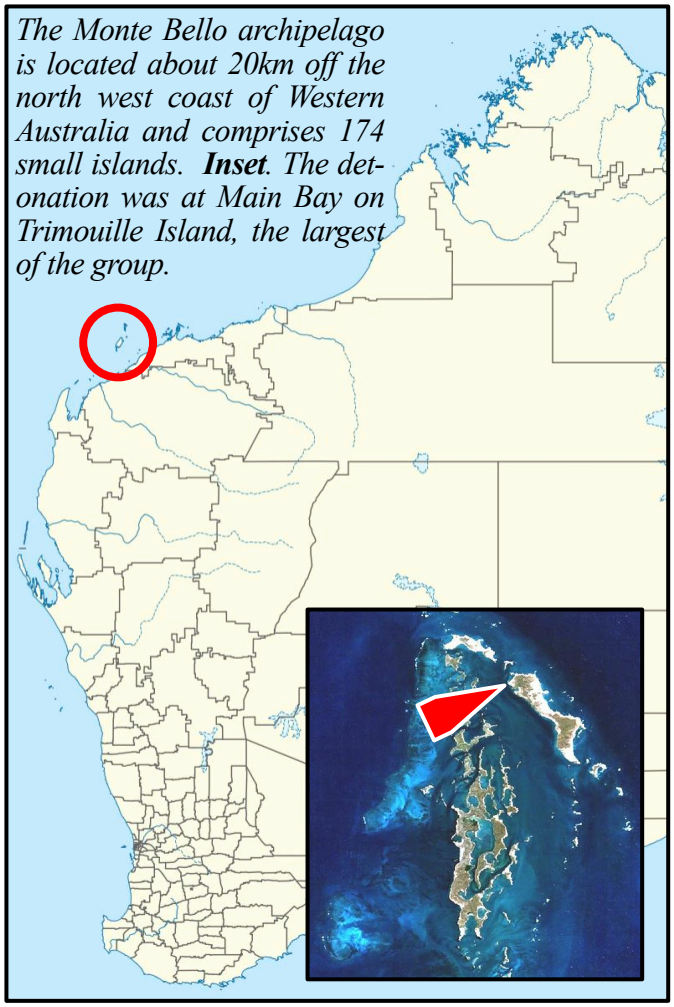
But apart from the intrigue of their task, life went on as normal. Routines were run, meals were served, watches were kept. The damage control state remained as normal, and the working rig was for the most part shorts and sandals as the weather was hot.

Around Sydney were other ships of the Australian fleet: *Culgoa, Tobruk, Hawkesbury, Macquarie, Murchison, Shoalhaven* and *Mildura*, as well as a host of smaller vessels. And on the nearby islands elements of the Army and RAAF – principally engineers and communication specialists – had been working for weeks.

Around 26 September the commanding officer of Sydney briefed his crew, advising that Britain was to test an atom bomb and that the ship was there to enforce the exclusion zone. He advised them that there would be an opportunity to witness the blast.

But what was the background to this?

The mid 40s had brought with the nuclear age. Two 20 kiloton weapons had been dropped on Japan and for a while it seemed America and the USA were the only nuclear-armed countries – but the Soviet Union had been aggressively



The Monte Bello archipelago is located about 20km off the north west coast of Western Australia and comprises 174 small islands. ***Inset****. The detonation was at Main Bay on Trimouille Island, the largest of the group.*

conducting its own program, boosted by captured German scientists and intelligence from the UK/USA Manhattan project. In August 1949 the Soviet Union conducted its first successful weapon test in Kazakhstan, and the nuclear arms race was on. Between 1945 and 1990 the world was to see over 70,000 warheads developed, from the tiny (0.01 kiloton) 'Davy Crockett' shell, to the huge 25 kiloton B41 bombs.

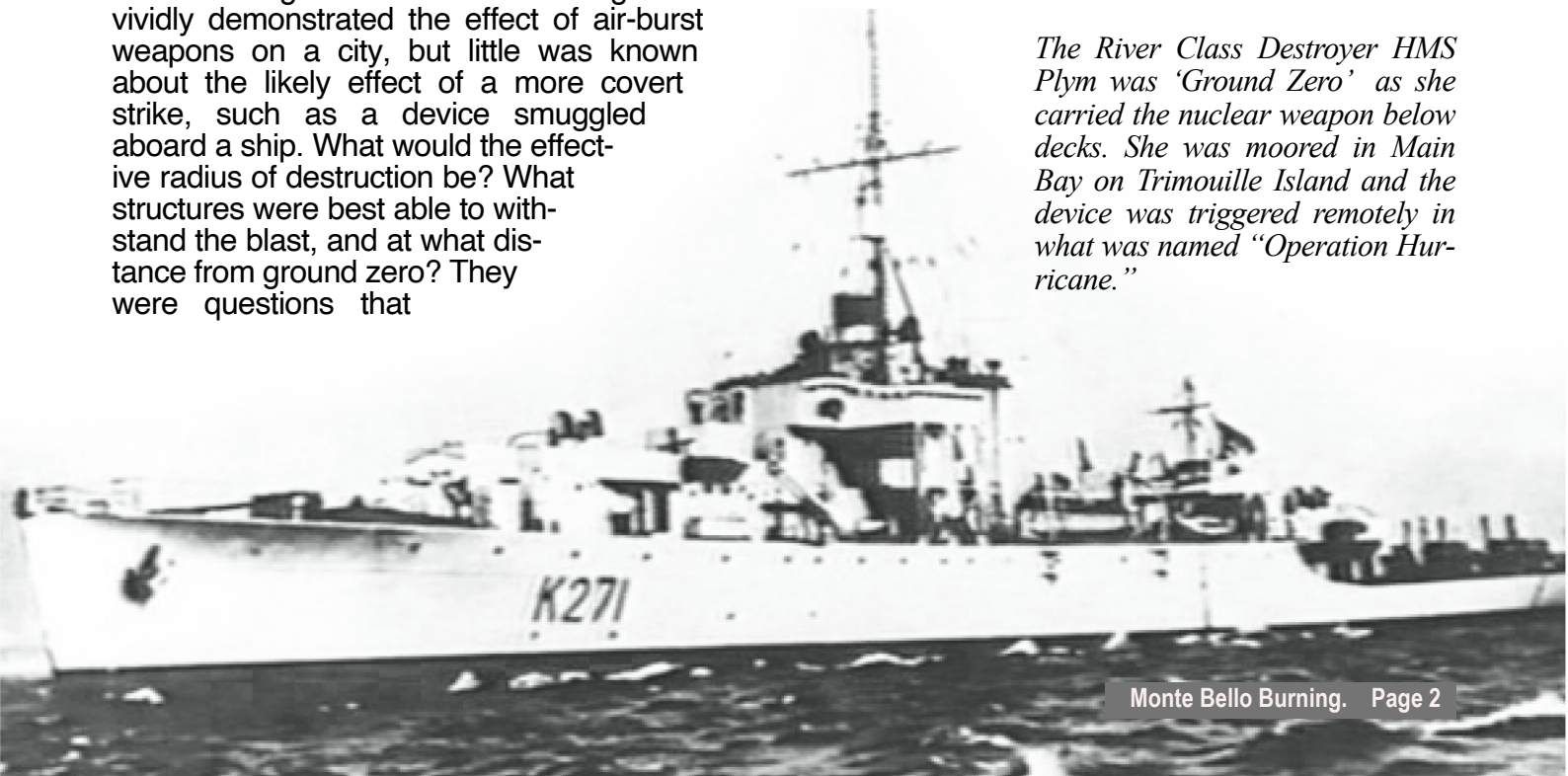
The bombing of Hiroshima and Nagasaki had vividly demonstrated the effect of air-burst weapons on a city, but little was known about the likely effect of a more covert strike, such as a device smuggled aboard a ship. What would the effective radius of destruction be? What structures were best able to withstand the blast, and at what distance from ground zero? They were questions that were best answered by actually testing a weapon in that configuration – an idea that the British found particularly appealing as by then it was the only nuclear nation not to have tested an atomic weapon. They were keen to do so.

Australia, under Prime Minister Menzies, was also keen to help. Concerned about communist expansion, particularly in Asia, Menzies felt that Australia needed to cultivate great and powerful friends. Mindful that Britain could not readily find suitable sites for testing at home he offered to host the tests in the interests of national security. His decision was made public in February 1942. There is no evidence he consulted Cabinet beforehand.

Public sentiment at the time was quite different to today. Understanding of the human and environmental impact of nuclear tests was limited, and there was a strong sense of patriotism for Britain, which was still regarded by many as 'the home country'. The February announcement was widely greeted with a sense of excitement.

And so it was that elements of the Australian fleet found themselves deployed just off Monte Bello Islands in October of 1952, together with many other ships of both nations – including the River Class frigate HMS *Plym*, that was to play a special part in the Operation.

Aboard *Sydney*, about 1100 men were mustered on the flight deck by 0925K on the Friday morning of 3rd October. They were facing west, the general direction of the blast, but shortly before 0933 were ordered to turn around and remain there until told otherwise. They did not know the specifics of the test – that the weapon yield was about 20% greater than that dropped on Hiroshima some seven years earlier. They were simply told to wait until ordered, and then to turn back to the west to see the explosion once the initial detonation had occurred.



The River Class Destroyer HMS Plym was 'Ground Zero' as she carried the nuclear weapon below decks. She was moored in Main Bay on Trimouille Island and the device was triggered remotely in what was named "Operation Hurricane."

The nuclear cloud as seen from the RAN warships shortly after detonation. Although it is not fully developed, the cloud is already drifting with the prevailing wind.

A full 'general rehearsal' had been conducted on 20 September which confirmed that all was in readiness. Meteorological conditions were deemed to be satisfactory on 2 October and 'Day' was set for the following day.

At 0933K on 3 October the device aboard *Plym* was remotely detonated. LCDR Robert Scrivenor, the Commanding Officer of HMAS *Hawkesbury*, described the event as '…a brilliant orange flash, followed by a boiling cloud of smoke, dust and water, shooting up into the sky with dramatic speed. The typical 'mushroom' was soon distorted by the high winds in the upper levels. The blast of the explosion was felt 2 minutes 16 seconds later.'

Click on image to see Documentary about Tests.

Rob Frearson, who was aboard HMAS *Sydney* gave the following account to 'Flyby' magazine:

'…we knew something big was on the horizon as most of the seagoing fleet was in the area. We seemed to be cruising up and down the West Australian coast. Lookouts on the bridge were doubled and were told to keep an eye out for aircraft and unknown vessels. There was supposed to be Russian ships in the area, and also the Submarine that we were originally sent to find.

Next day the Skipper had all Ship's company muster on the Flight Deck as he had a special announcement to make. It turned out that we were on security patrol as Britain was about to explode its first Atomic bomb in a ship anchored off a small Island out from Onslow Western Australia, namely in the Monte Bello Islands. Now we knew why most of the Aussie fleet was present and

why security was so intense. We were also told that a Russian submarine was in the area witnessing the blast.

We cruised the area for another week or so, then one morning at 7.30am it was announced that we were to muster on the Flight Deck and face West. There we were about 1100 sailors, dressed only in shorts and sandals about to witness the largest unknown, untried atomic bomb in British service to be tested on Australian territory.

When the bomb was about to be detonated, we were told to turn our backs on the actual blast and as soon as the button was pushed, we were told to turn around and witness the blast, followed by the mushroom cloud and you could see the shock waves heading towards our ship. When these waves hit the side of the Sydney, it actually made this large Carrier rock.

The cloud drifted towards the mainland which was not supposed to happen, a wind change caused this. I read many years later that it reached areas like Rockhampton and Warwick, where many deformities in cattle and humans eventuated.

After the explosion, we cruised the blast area for 3 or 4 days in contaminated waters, and we were convinced that most of the ship was contaminated. The scientists were dressed in anti- radioactive clothing while the crew still strolled around in our shorts, no shirts.

The Sydney then sailed for Shark Bay (near Onslow WA). Here we anchored and were told that the ship was to be hosed down and completely painted from bow to stern. This was very unusual as usually the civilian dockside workers carried out these duties when the ship was in port. The story we were told was that, we were going to Melbourne and a member of the Royal Family was to visit the ship, (this was complete bullshit)

However the large hoses came out and the Sydney was completely washed down, then most of the crew was issued with a paint brush and paint pot. It was painted from bow to stern and it took 3 full days. The dockyard workers would have taken weeks.

Shark Bay lived up to its name. I have never seen so many sharks swimming around the ship, fighting over the offal that was dumped from the galley. There were hundreds of them, all sizes, from little ones to monsters. Large nets were strung all around the Sydney, just in case someone fell overboard, also there were sailors armed with sub-machine guns patrolling the flight deck, in case someone went into the drink. Luckily no one did.

After the complete repaint we up anchor and set sail for Fremantle and a bit of shore leave. As the ships docked there was a band to greet us on the wharf. We were all given the royal treatment, I think half the population of Perth was there to clap and cheer us as we came ashore. Prior to setting foot on dry land the Captain announced to all that we were not to discuss the explosion with anyone while on leave.'

Two further tests were conducted in the island group four years later: a 20 kiloton and a whopping 60 kiloton, the largest device ever tested on Australian soil. It turned out to be an exceptionally 'dirty' weapon, with fallout subsequently reaching as far afield as the Queensland coast.

A further nine tests on lower yield weapons occurred at Emu Field and Maralinga, (both in South Australia) over 1956 and 1957. Radioactive fallout from the devices was expected to disperse quickly, but in all cases was found to have drifted much further than expected.

The McClelland Royal Commission of 1985 found that significant radiation hazards still existed on the ground, but the report was mostly concerned with Maralinga and the botched cleanup operation. Just what the effects were on the health of personnel in the vicinity of the tests, however, remains a controversial topic.

A study by the British Nuclear Test Veterans Association in 1999 found that 30% of involved (British) veterans had died, mostly in their 50s, from cancers. At least ten separate studies resulted in different findings about the conduct of the tests and the circumstances of the test participants.

The most recent Australian study was published in June 2006, based on 10,983 test participants of which 7,116 were military. The report surmised that the level of radiation received by test participants was generally small, although some groups did receive significant exposures. For the Monte Bello tests these included some RAAF aircrew who flew through contaminated clouds; crew members of HMAS *Hawkesbury* who assisted in records recovery, and the crew and divers from HMAS *Koala* who recovered a landing craft after the first test.

The study found that the death rate among the nuclear test participants was not significantly higher than the general population, but cancer as the cause of death was 18% higher, whilst cancer incidence was 23% higher. It went on to say, however, that the increases in cancer rates did not appear to have been caused by radiation. The report states:

'Neither all cancers combined nor any cancer known to have an association with radiation showed any increase in mortality or incidence with increasing radiation exposure in this cohort. The lack of association between cancer and radiation is not surprising, given the estimated low radiation exposure of most cohort members, and the relatively

small proportion of subjects with any significant exposure.'

It went on to surmise that the higher incidence of cancers in the test participant group probably resulted from other health factors, such as asbestos aboard RAN vessels and a higher incidence of smoking within the test group.

Nevertheless, a case was made that the atomic tests series was *'…a unique, extraordinary event in Australia's history…with Australian forces potentially exposed to levels of radiation beyond what would today be considered safe levels. By common sense and by any reasonable measure, service in the test operations must be regarded as involving hazards beyond those of normal peacetime.'*

The same year the Hon Bruce Billson, Minister for Veterans' Affairs announced that *'…despite the lack of association between cancer rates and radiation exposure, the Government has decided that it would be appropriate to provide health cover for nuclear test participants who have any form of cancer.'*

The statement came almost 54 years after the first test, and veterans continue to experience the after effects of what occurred.

And what of the Monte Bello archipelago today? The area was declared to be a Marine Park in 2004 and you can go on one of the many fishing and wildlife tours advertised there.

The only reminder of those dark days of 1952 are the remains of some concrete bunkers, scraps of twisted steel, and a small notice to remind visitors to restrict their time on the main island to no more than one hour a day, and not to collect shells or other flotsam.

More than seventy years after the tests, the legacy remains. ✈

The Monte Bello archipelago today is a protected Marine Park which hosts numerous nature and fishing charters (inset). There is little tangible evidence of what occurred there over seventy years ago, but traces can still be found.