

# WHERE EAGLES WOULDN'T DARE ↘

The Royal Australian Navy fields very special teams of underwater operators putting themselves in harms way to secure safe passage for shipping.

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**W**e all know, in broad terms, what a diver is – not the Olympic kind, elegantly entering the water from a height, but the black-rubber-suited kind, flopping backwards off the side of a boat, breathing air through a mouthpiece attached to cylinders on his back.

Many divers the world over pursue underwater activity for pleasure or sport. But there are also those who make their living under the water.

Abalone fishermen, biologists, treasure hunters, oil-rig

maintainers, pipeline welders, the list goes on. And then there are the military types.

In Australia, both the Army and Navy train men for working-diver specialties. The Navy, as one might expect, requires divers for tasks as obvious as ship maintenance below the waterline.

But, perhaps less obvious, and certainly less well known in any great detail, is a Navy diving specialty that pushes men to the very edge of what any sane person would consider the comfort zone – the Navy clearance diver (CD).

The Royal Australian Navy has two clearance diving teams – AUSCDT1 based in Sydney and Perth-based AUSCDT4.

Each of those teams has three main elements – mine counter-

measures, maritime tactical operations and underwater battle damage and repair.

In addition to their diving and explosives skills, clearance divers are trained to a much higher standard of fitness and weapon handling than just about anyone outside special-forces elements.

Navy clearance diving, as the name merely hints, is a specialty predominantly concerned with clearing mines and other hazards to naval shipping.

Sound simple? Well consider for a moment the task before AUSCDT3 (Australian Clearance Diving Team 3 – raised when concentrations of CDs deploy overseas) at the opening of the current involvement in Iraq. Working in murky water where visibility was so poor that they literally couldn't see their own hands raised close to their diving masks, their task was to explore every inch of





the Umm Qasr facilities, declaring the port free from anti-ship mines or other nautical hazards. And this with the added pressure of political and humanitarian deadlines bearing down from on high.

But even this description doesn't clarify what they actually do under the water. They look for objects, deliberately seeded below the surface, that are primarily designed to explode. Mines, bombs, booby traps – call them what you will – objects with enough destructive power to blow catastrophic holes in the plating of modern battleships. And the clearance diver's job is to find these objects in water so dark and murky that they can't see their own hands.

So how do they find what they seek? Fingers, probing the gloom, seeking out unexploded devices by touch!

There are modern sonar and other detection devices available, of course, but using these in the confines and clutter of a modern port facility is next to useless. So the diver must rely on the sensitivity of his own fingertips to find unexploded bombs literally by bumping into them in the dark.

Did they find anything in Umm Qasr? You bet. Among hundreds of other things tagged, mapped and dealt with, was a sunken mine-laying boat complete with a full load of modern anti-ship mines, each having to be

removed from the boat before being removed from the water. On top of that, hundreds of suspicious objects eventually dismissed as simply part of the detritus of a modern port, none-the-less had to be examined and classified before being dismissed or removed. And none-the-less causing at least a momentary spike in adrenaline as probing fingers found them in the dark loneliness of up to 20 metres of tide-affected, turbid water.

There was also a time limit on how long the AUSCDT3 members could work at Umm Qasr, as huge tidal differences caused dangerous currents to sweep through the port. Tidal streams could get as strong as 5 knots according to Sub Lieutenant Jace Hutchison, Maritime Tactical Operations Element Officer, normally based in Western Australia with AUSCDT4.

"With water running that strong on the changing tides there were only two or three windows of between 20 minutes to an hour a day where we could enter the water to get the job done," he says.

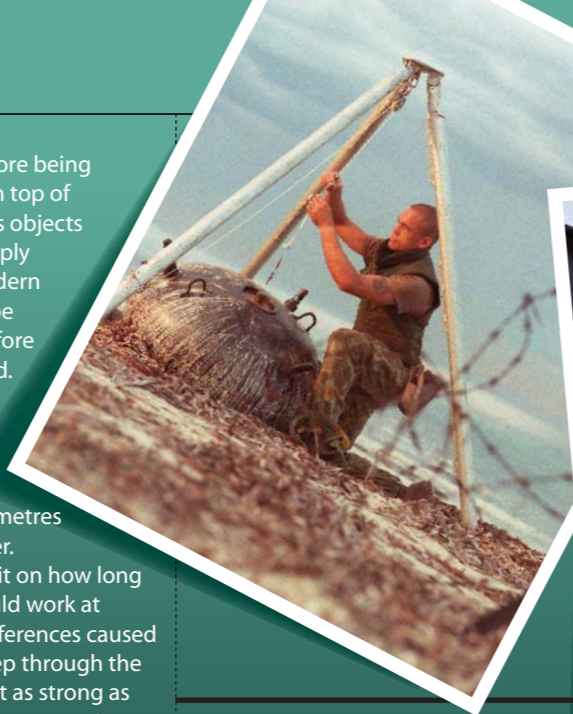
"At the time, we also had a really strong push from both the Australian and US governments to open up the port as quickly as possible, at the same time keeping the infrastructure intact and to provide the humanitarian support to the people of Iraq.

"So there certainly were deadlines to meet."

Australian clearance divers don't just clear mines, however, and in fact, are not always employed as divers.

There were 34 Australians attached to AUSCDT3 in Umm Qasr, under US command, working closely with their American and British counterparts. When not in the water fulfilling their core tasking, they performed a similar function on dry land – clearing the wharves and port facilities of explosive ordnance. They were also responsible for their own security in the port.

"Facilities for the team were nothing special. We were in the field the whole time, providing our own protection," Sub Lieutenant Hutchison says.



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"There was us, the British and the US counter-mine teams all living together in one of the warehouses with not much more than our own sleeping bags and so on, and eating ration packs the whole time. "But it was a terrific experience. I'm really enjoying this job so far and I can't see any reason why I'd want to give it away."

Navy Clearance Divers are the Australian Defence Forces' specialist divers whose primary focus, as discussed, is the detection and disposal of explosive ordnance. This role is conducted at sea in ships, in the approaches to ports and anchorages and on land in port facilities and the littoral environment associated with amphibious operations. The clearance diving fraternity is, in fact, the largest single ADF element with a direct and primary interest in EOD (explosive ordnance disposal).

All personnel wishing to join this elite fraternity, including officers, must undergo rigorous acceptance testing and psychological evaluation.

Lieutenant Commander Steve Bliss, Commanding Officer AUSCDT4, says that once a suitable applicant is found, he will undergo a Clearance Diver Acceptance Test – a two-week program on the shores of HMAS Penguin in Sydney, home of the RAN Diving School.

"This is a very condensed period. It is very demanding both physically and mentally," he says.

"If they pass that, they then go on to the Clearance Diver Course."

This course is run over 34 weeks and the demands placed on potential applicants are probably not seen anywhere else in the ADF outside of Special Forces.

Leading Seaman Ashe Konig who grew up on a dairy farm in Milanda, near Cairns, says he didn't do any diving before joining the Navy but was a keen swimmer and loved the outdoors, and so saw clearance diving as a very attractive prospect.

"I was actually on the first Clearance Diver Acceptance Course, as it's known today, back in 1995.

"It was very challenging and they actually made a lot of changes after our course because we had a lot of blokes go down [eliminated] on the course.

"I was only 17 at the time and it was certainly very different to anything else I had done in my life – it was very difficult."

But in the intervening 10 years, the young lad from country Queensland has

seen a thing or three beyond the farm gate.

"Now, as a Leading Seaman, I'm the link between the senior sailors and the junior level. The seniors tell me what needs to be done and I work with my team of juniors to get that job done. And that can be challenging – keeping both sides happy."

He says he has been in the Navy for 10 years and one week – 10 really good years.

"My posting to Cairns was probably the highlight so far. We actually got to do a lot of work with live ordnance up there.

"There are still a lot of WWII mines out around the reef, so we got lots of hands-on experience with the real thing – opportunities you probably wouldn't experience on a posting to Sydney or Perth.

"It was a real thrill to work on those things – things I used to read about as a kid.

"Most of it was old British stuff – old contact mines. They look scary and were actually a bit scary to work on, but some of them were in remarkably good condition considering how long they've been floating around out there."

Clearance diving as we know it today owes much of its heritage to a Royal Navy concept developed mainly during WWII that saw teams, known as P Parties (Pilotage Parties), responsible for clandestine reconnaissance and obstacle clearance in the maritime environment.

Since its inception in 1951, the Royal Australian Navy Clearance Diving Branch

**CLEARANCE DIVER SKILL SETS**

**MINE COUNTER-MEASURES**



**BATTLE-DAMAGE REPAIR**



**MARITIME TACTICAL OPS**



**TAG (EAST) WATER OPERATOR**



**SPECIAL DIVERS**

Clearance Divers (CDs) are the ADF's specialist divers. CD tasks include but are not limited to the rendering safe and disposal of all ordnance, including missiles, artillery projectiles and air-delivered

munitions in ships, on land and underwater: also includes the demolition of maritime assets.

Clearance Divers undertake all military diving tasks to a depth of 54 metres, however initiatives are underway to conduct diving to 90 metres.

During his career, a CD will be rotated through the following operational areas:

**HUON CLASS MINE HUNTER COASTAL (MHC) Mine Counter Measures.**

Activities include diving using self-contained, mixed-gas equipment for mine counter measures tasks, identification and disposal of sea mines. SCUBA (air) is used for underwater maintenance and underwater demolition.

**CD TEAMS**

**a. Maritime Tactical Operations.** Duties include diving on pure oxygen and mixed-gas equipment. Trains in small arms, escape and evasion, combat survival and insertion techniques, including parachuting. Tasks include amphibious operations and ordnance disposal.

**b. Mine Counter Measures.** Focuses on the location, identification, rendering safe and disposal of underwater ordnance in areas where conventional mine-hunting methods are not feasible.

**c. Underwater Battle Damage Repair.** Diving on air equipment, both self-contained and surface-supplied, for the

maintenance and repair of ships' underwater fittings, harbour installations and underwater ranges. Trains in skills such as underwater welding, salvage techniques and non-destructive testing.

**MAJOR FLEET UNITS** Service in major warships conducting diving, demolitions and seamanship duties.

**SUPPORT ROLES**

RAN Diving School in support of training operations as well as various admin positions throughout the Navy.

During all postings the Clearance Diver will be required to carry out seamanship and ships' husbandry duties in addition to diving-related duties.



has used contemporary diving equipment to its full capacity and, indeed, has been a forerunner in the development of new technologies in sub-aqua exploration and exploitation.

After 25 years, Lieutenant Commander Bliss has seen many changes in technology.

"Wet suits and breathing equipment are two areas we've seen a lot of changes in over the years," he says.

"I recall the all-purpose set we used to use and it certainly looks an antiquated piece of kit now when you compare it with today's standards.

"We had incidents with the all-purpose sets where divers would be breathing basically a mixture of air and salt water, because the demand valves weren't nearly as good as they are today.

"There were instances where you'd be breathing in bits of glue used in fixing exhaust ports and so on, where you'd get a little flake of glue caught in the back of your throat and you'd be choking and coughing at God knows what depth.

"Today's equipment is certainly far more advanced and, in fact, Australia is at the forefront when it comes to mixed and closed-circuit breathing apparatus development."

Another, perhaps surprising, technological development is on the horizon for our CDs when, in the very near future, they will take personal computers under water with them. A mine countermeasures underwater computer system, to be introduced soon, will provide clearance divers with an electronic means to navigate in open water, conduct searches of inshore waters and log various data elements in real time along the way.

Far from being secretive or miserly about their equipment and procedures, however, AUSCDTs work closely and



cooperatively with their foreign counterparts, on operations and exercise.

Recent activity in the Gulf is testament not only to their interoperability with coalition forces, but proof of the high regard in which they are held within the international diving community.

Lieutenant Commander Bliss says CDs train regularly with their international counterparts.

"Team 1 recently participated in RIMPAC around the Hawaiian islands. They are also conducting exercises with the Malaysians and Singaporeans.

"And we've just finished Exercise Dugong in Jervis Bay with the Americans.

"This is all building up to our major exercise next year – Exercise Talisman Sabre – where Australia will host about 25,000 personnel in Shoalwater Bay."

He says he truly believes that the Royal Australian Navy clearance divers are well advanced as far as search techniques and capabilities are concerned.

But like so many other Australian military units, their real strength and value comes from the diversity of skills developed within a small fraternity.

"We are a composite unit, able to perform myriad tasks that our US and

**“LIKE SO MANY OTHER AUSTRALIAN MILITARY UNITS, THEIR REAL STRENGTH COMES FROM THE DIVERSITY OF SKILLS DEVELOPED”**

other allies can't do and we are well ahead of the game in that respect.

"In the US, individual sections tend to focus on special roles whereas we are pretty much Jack of all trades – and masters of a few of them. We are able to perform at a level in many different tasks and roles that would require five or six or even seven American units to fulfil."

He says CDs are often described as "special forces" in the military sense or mistaken for Navy SEALs.

"We are neither. We are Royal Australian Navy Clearance Divers.

"True, there has been a lot of redefining in certain areas and we are all evolving and moving to counter the terrorist threat since 9/11.

"Our role may change and we'll just have to wait for guidance on that. But whatever is required, Navy clearance divers will be there to meet the task."

**TOUGH ENOUGH?**

BASIC FITNESS TESTS FOR ROYAL AUSTRALIAN NAVY DIVERS COURSES



Course	Run 2.4Kms	Push ups 2 sec cadence	Sit Ups 3 sec cadence	Chin Ups 3 sec cadence	Swim/fin 500m wearing overalls
Scuba Air Diver	12 Min	30	60	6	14.30 Min
Scuba Air Supervisor	12 Min	30	60	6	14.30 Min
Clearance Diving Selection	10.15 Min	30	60	10	13.00 Min
Clearance Diving Course	9.00 Min	50	120	18	9.15 Min



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