

SDFSFA Bulletin January 2008

This bulletin is provided as a service to members of the
SCUBA DIVERS FEDERATION OF SA
Working to develop the sport of Scuba diving in SA
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We are the peak body in South Australia, representing all recreational scuba divers.
We act as a voice for all divers and other associations on all diving related matters.

We are publishing this electronic bulletin as a separate publication to our normal monthly SDF News Sheet. Future issues of this "SDFSFA Bulletin" will include lengthy articles about matters of interest to recreational divers. We welcome contributions from our readers.

We trust that our member clubs and news sheet readers enjoyed Christmas and a good start to the new year. The Australia Day holiday long weekend from 26-28th January will provide us all with more time for diving.

If you don't have the time to read through everything in this bulletin, take advantage of the following table of contents (which contains **most** of the headings). Click on any item of interest to proceed straight to that section.

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YEAR OF THE REEF

As reported in our January news sheet, 2008 is the International Year of the Reef. This is a year-long campaign of events and initiatives hosted by governments, individuals, corporations and schools around the world to promote awareness, conservation action and strengthen long-term constituencies for coral reef conservation. Anyone is welcome and actively encouraged to participate in this initiative.

The World Ocean Observatory is pleased to announce the launch of their latest online event: Coral Reefs (www.thew2o.net/events/). This comprehensive, media-rich site features videos and podcasts, reports and forums, educational materials and more to explain and highlight the state of the world's coral reefs.

"Coral reefs have been called the rainforests of the sea, though given their iconic status as the most colorful and diverse places on earth, it would be perhaps more apt to call rainforests the coral reefs of the land! Reefs have been critically important in furthering our understanding of marine ecology and nature in general - the delicate balances between reef inhabitants have taught

us much about how the world works and how human activity can upset the web of life. Tropical reefs have great value to humans, not just as treasures seascapes (that generate revenues for neighboring coastal communities all around the world), but also as sources of food, as providers of materials, as beach-forming agents and as natural buffers from storms and tsunamis, and as repositories of pharmaceutical compounds for treating human disease. Yet despite this great value, coral reefs are rapidly becoming degraded. Over-fishing, pollution, fertilizers, and other anthropogenic sources, poorly planned or uncontrolled coastal development, and climate change effects like warming and ocean acidification are taking their toll on reefs. Some predict the disappearance of reefs as we know them in just a few short decades, unless action is taken to improve reef health today...”

For more information, visit “Coral Reefs: Delicate and Diverse yet Degraded, and Fast Disappearing” by Francis Staub at <http://www.thew2o.net/events/coralreefs/current.htm> Also visit either <http://www.icriforum.org> or <http://www.iyor.org/> for more information on the International Year of the Reef 2008.

REEF WATCH NEWS

Reef Watch tells us “a new Australia-wide monitoring program, which will work in partnership with Reef Watch in South Australia, is seeking experienced divers who are passionate about marine conservation and are willing to contribute their time and expertise in the long-term. The program will provide the necessary training and as much technical, financial and logistic support as possible to assist the collection of scientific data across Australia. The first training course for SA will (be) based at Second Valley and runs from 5-10 February 2008.”

They say that you will be able to: -

1. Take your Reef Watch skills and participation to new heights and really make a difference?
2. Receive dedicated training in species identification and scientific methods with a team led by Graham Edgar (author of *Australian Marine Life*)?
3. Have opportunities to dive in some of Australia's most interesting dive locations?

To find out more, contact Rick Stuart-Smith at Rick.StuartSmith@utas.edu.au .

We told Rick that SA divers were concerned that the training course is being held during a working week (5-10 February 2008), presumably during the day. This would limit it to the unemployed or retired. Rick’s response was as follows: - “Thanks for expressing the concerns of SA divers - we appreciate the communication. We were hoping that some people may be able to arrange a few days off work if given enough warning. We realize that this would mean that not all those divers that would be excellent contributors would be able to make it, but we only have room for 8 divers, and intend on running another course next year (or later this year) in most states. Part of the selection process will also allow divers to nominate for a course that suits them most, so for those that can't make the SA course, they will have the opportunity to be selected for a course in another state, if there is one that suits them better time-wise. So we are trying to maximize chances of those divers that will be the best contributors attending a course, but due to the need for the course to run over at least 5-7 days, and the late start this year, it was impossible for us not to run across some weekdays. I'm sure you'll understand our situation and can hopefully express this to those divers that are concerned. Thanks again, Rick”

SURVIVAL TIPS FOR DIVERS STRANDED OR FORGOTTEN AT SEA

Following on from last month's story about three divers who surfaced a long distance from their boat and didn't have a working safety sausage between them, we now present "Survival Tips for Divers Stranded or Forgotten at Sea" from

<http://scuba.about.com/od/divemedicine/a/leftbehind.htm>: -

"Survival Tips for Divers Stranded or Forgotten at Sea

An open water diver's worst nightmare is being stranded or forgotten at sea. Do you know what to do if your dive boat leaves you behind? Here's a summation of a few survival tips from "Lost at Sea", an article from Rodale's Scuba Diving Magazine, May 1998 issue.

DON'T PANIC

Look again. Maybe you missed seeing the boat. Get your head out of the water as high as you can and do a complete 360° search of the horizon. If the boat is close enough to swim to, take a compass heading and swim to it.

SIGNAL FOR HELP

If you are not close enough to the boat or a current prevents you from swimming to it, you should signal for help. Visual and audio signals are available for scuba divers. If you don't have the luxury of having any with you, take off one of your fins and wave it around, splashing the water. If you can, yell for help.

GET YOUR ORIENTATION

Try to determine which direction you have been swimming/drifted relative to the shoreline or boat. Most likely, you have been going down current. Watch the plant life to see which direction it is leaning. If you have drifted down current, the boat is probably in the other direction.

WAIT

It is best for you to stay where you are. If you are close to land, get out of the water. You will need to conserve your body heat and energy. Ditch any unnecessary equipment you have.

BE A SURVIVOR

Keep a look out for boats and planes that might see you. Stay close to your buddy. Keep your arms and legs close to your body for heat and don't give up hope!"

The web page went on to refer to suggested items for reading and links to web pages about divers that have been stranded at sea. (It actually referred to "Real Divers Stranded at Sea", but 'real divers' shouldn't get stranded at sea ☺)

GREATER PROTECTION FOR BLUE GROPER & HARLEQUIN FISH

Western Blue Groper (WBG) numbers have decreased in recent years. This is mostly due to heavy fishing pressure (including spearfishing) and the ease of capture of these fish because of their large size, good taste and their inquisitive behaviour. WBG have a strong population structure and they change sex with age so fishing can disrupt population structure and dynamics. Given its longevity and diet, WBG may be a "keystone" species in the reef habitats where it occurs, and there may be ecological cascade effects from the extirpation of groper from reefs. Harlequin Fish (HF) is a southern Australian endemic fish species with a limited geographic distribution (SA & WA), and a limited known depth range. It occurs on coastal reefs, over a narrow depth range, and has vulnerable population characteristics. Although there is a paucity of quantitative information about population sizes, it is likely that the relative abundance of this species in SA is much lower than in WA. There is concern that abundance may have declined over time in areas where water quality is reduced, and reefs are degraded. HF is caught recreationally and (to a lesser extent) commercially across its range by a number of methods,

with few controls on the capture, particularly in SA, and no investigation of the potential impacts of fishing has been undertaken. As reported in our December news sheet, the Marine Life Society of SA, in conjunction with other groups, including our Federation, is lobbying the State Government for greater protection for WBG and HF. For further information about the matter, visit <http://www.mlssa.asn.au/issue1.htm>. Be sure to wait for the three fish photos to download. Premier Rann has advised MLSSA that the results of the PIRSA Recreational Fishing Survey will inform a review of the management arrangements for all recreationally caught species and a review might consider measures such as restrictions and education about threatened species. The results of the PIRSA Fisheries survey should be available in December 2008. WBG has already been included in the review for consideration. Mike Rann has personally asked PIRSA to include HF in the review for consideration. For more information about the survey, visit www.pir.sa.gov.au/fisheries/home. For further details about the issue of greater protection for WBG & HF, visit both http://www.mesa.edu.au/seaweek2008/wbg-info_sheet01.asp and http://www.mesa.edu.au/seaweek2008/wbg-info_sheet02.asp.

RECENT DIVER DEATHS IN NEW ZEALAND

There were three scuba diving related deaths in New Zealand during December. The first incident involved a 37-year-old woman who drowned whilst diving off Makara Beach (in Cook Strait?) on Wellington's south coast on 8th December. She was diving in up to 20m of water off Boom Rock with her buddy in near-perfect conditions. The two divers became separated whilst resurfacing. Her body was later found, not far from where she went missing, by friends. Visit http://www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=10481243 and http://www.nzherald.co.nz/section/1/story.cfm?c_id=1&objectid=10481472 for more details. A 29-year-old woman died whilst diving off Motiti Island in New Zealand's Bay of Plenty (N/NE coast of the North Island). She was one of four people who were out diving together for scallops on 28th December. The victim had apparently been surfacing from a depth of 29m with her dive buddy when she began experiencing breathing difficulties and grabbed the regulator out of her buddy's mouth. The buddy gave air to her but was forced to surface when the air ran out. A fisherman discovered the victim's body near Motiti Island at 5.45am on 30th December. It was later discovered that there was still some air left in the victim's dive cylinder, enough to get to her to the surface. She had suffered a previous asthma attack whilst diving. Visit <http://www.bayofplentytimes.co.nz/localnews/storydisplay.cfm?storyID=3759608&thesection=localnews&thesubsection> for more details. Another diver drowned in the Bay of Plenty*, New Zealand on 29th December. It was 49-year-old man who was diving with family members off the coast below the Cape Runaway lighthouse on the East Cape. Te Kaha police said that the family members saw him floating on the surface just a short time after beginning the dive and pulled his unconscious body from the water. Their efforts to revive him failed.

(* "People in the Bay of Islands are being warned not to collect or eat shellfish because high levels of a marine biotoxin were revealed by recent testing. Paralytic shellfish poisoning can cause numbness, dizziness and, in severe cases, paralysis. The affected area is enclosed by Cape Wiwiki and Cape Brett and includes Paihia, Waitangi and Russell. Northland District Health board shellfish programme coordinator Elizabeth Watts says the biotoxin occurs naturally, depending on weather, water temperature and algae conditions. She says further testing will be conducted before the warning is reviewed." Source:

http://www.radionz.co.nz/news/latest/200801030918/shellfish_warning_in_bay_of_islands)

MORE ON SHARKS

John West says at

http://blogs.news.com.au/dailytelegraph/yoursay/index.php/dailytelegraph/comments/shark_expert_live_blog/#commentismore, "Shark attacks around Sydney are really remarkable for how they DON'T happen considering how many people use the water. Common sharks found inshore around the northern beaches during the summer are dusky whalers and hammerheads but the risk of attack is very low. Bull sharks are also found around the Sydney area and these are known to be quite aggressive although are found more often within Sydney Harbour and Pittwater where they come to breed. The highest risk of attack seems to be dawn and dusk and swimming alone appears to be a risk factor as well. The overall risk is extremely low, however so please still enjoy the water." John also offers this advice: -

- 1/ Do not swim, dive or surf where dangerous sharks are known to congregate.
- 2/ Always swim, dive or surf with other people.
- 3/ Do not swim in dirty or turbid water.
- 5/ Avoid swimming well offshore, near deep channels, at river mouths or along drop-offs to deeper water.
- 6/ If schooling fish start to behave erratically or congregate in large numbers, leave the water.
- 7/ Do not swim with pets and domestic animals.
- 8/ Look carefully before jumping into the water from a boat or wharf.
- 9/ If possible do not swim a dusk or at night.
- 10/ Do not swim near people fishing or spearfishing.
- 11/ If a shark is sighted in the area leave the water as quickly and calmly as possible.

IF YOU SEE A SHARK:

Stay calm! It must be remembered that some stated methods of repelling sharks could, given different conditions and different sized animals, result in an altering of the shark's initial response and may unintentionally provoke an attack response in the very animal that it was meant to deter. Leave the area as quickly and as quietly as possible. However, if an attack is imminent try to keep the shark in sight and if it gets close then any action you take may disrupt the attack pattern, such as hitting the shark's nose, gouging at its eyes, making sudden body movements, blowing bubbles, etc.

IF SOMEONE IS BITTEN BY A SHARK:

First aid: - once the patient is removed from the water:

- 1/ Treat the patient immediately on site.
- 2/ Stop the bleeding immediately by applying direct pressure above or on the wound. A tourniquet may be used if bleeding cannot be controlled by a pressure bandage.
- 3/ Reassure the patient at all times.
- 4/ Send for an ambulance and medical personnel (if possible do not move the patient if badly injured).
- 5/ Cover the patient lightly with clothing or a towel.
- 6/ Give nothing by mouth.

However, if a shark is that close, you can try hitting it or gouging its eyes - this may deter it!"

MORE FACTS ABOUT THE SUN PRINCESS

The 261m-long *Sun Princess* was launched in 1995. Australia's largest and most modern super-liner, she cost US\$300m to build. She has a crew of 900. She recently completed her maiden around-Australia cruise. She visited Outer Harbor on 28th November during that cruise, which

took some 28 days to complete. She will visit Outer Harbor again from 8am to 6pm on Sunday 30th March 2008. She will also be back again from 8am to 6pm on Saturday 22nd November. She can carry up to 1950 passengers in 975 state-rooms. She is one of the “Princess Cruises” superliners. She features four swimming pools, five whirlpool spas (Lotus Spa®) and a range of sports facilities including a gym, fitness centre, sports deck, sports court and golf simulator (computerized golf centre). The sports court is inside the funnel. There are two main dining rooms, seven luxurious lounges and bars, eight restaurants & cafes, two large show lounge/theatres, a large casino, nightclub/disco, massage and beauty salon, a gallery of duty-free boutiques, a library, card room, internet café, writing room & business centre, laundry and dry cleaning service. By visiting <http://www.dawnsunprincess.com.au/html/ship-facts-sun-princess-cruise.cfm>, I discovered that the *Sun Princess* “rises 14 stories and measures nearly three football fields in length”. (The Adelaide Oval would apparently need to be 50% larger to store her there.) She has a maximum speed of 21 knots. Some of her other features include a four-storey atrium and reception with marble floor and stained glass dome. A smaller atrium is also located aft. A theatre seats 550 passengers. The ship also has panoramic glass-walled elevators, an open-air teak promenade deck, photo shop and children and teen centres. The *Dawn Princess*, her (almost identical?) ‘sister ship’, is two years younger, having “Entered Service in 1997”. She (*Dawn Princess*) will visit Outer Harbor from 8am to 6pm on Sunday 16th November 2008. King William Travel is presenting a free film morning and travel talk from 10 to 11.30am on Thursday 17th January. Phone them on 8212 2132 for details.

Visit <http://www.dawnsunprincess.com.au/html/> for lots more details about ships and cruises.

THE *QUEDAGH MERCHANT* (WILLIAM KIDD’S SHIP)

Our December 2007 Bulletin reported the discovery of William Kidd’s ship, the *Quedagh Merchant*. Those details came from

<http://www.theaustralian.news.com.au/story/0,25197,22927327-30417,00.html>.

Historian Richard Zacks wrote the book called “The Pirate Hunter: The True Story of Captain Kidd”. Visit either <http://www.cindyvallar.com/williamkidd.html>

<http://www.bio.umass.edu/biology/conn.river/kidd.html> for more details about William Kidd.

According to the web page found at <http://www.bio.umass.edu/biology/conn.river/kidd.html>, the *Quedagh Merchant* “was burned and left to sink slowly where it lay (in the River Higuey), far from the home water of the Indian Ocean.”

Details about the recent discovery of the wreck of the *Quedagh Merchant* can be found at <http://www.sciencedaily.com/releases/2007/12/071213162036.htm> and

<http://news.independent.co.uk/world/americas/article3253097.ece>. The shattered remnants of the wreck are apparently in less than 3m of water “just a short paddle from the shore of Catalina Island”, off the Dominican Republic.

According to <http://www.britannica.com/eb/art-61994>, the “Dominican Republic (is a) country of the West Indies that occupies the eastern two-thirds of Hispaniola, the second largest island of the Greater Antilles chain in the Caribbean Sea. Haiti, also an independent republic, occupies the western third of the island.” (Higuey is at the eastern end of Hispaniola.)

According to <http://www.sciencedaily.com/releases/2007/12/071213162036.htm>,

“Anthropologist Geoffrey Conrad, director of Indiana University Bloomington's Mathers Museum of World Cultures, said the men Kidd entrusted with his ship reportedly looted it, and then set it ablaze and adrift down the Rio Dulce.” The Rio Dulce is said to be located at Latitude (DMS): 18° 25' 60 N, Longitude (DMS): 68° 57' 0 W) in La Romana.

Now I've been confused somewhat over references to the Higuey River, the River Higuey, and now the Rio Dulce. There's also confusion over the size (tonnage) of the *Quedagh Merchant*. I've also struggled with cases of 'Quedagh' also being spelled as 'Quedah'. Please keep this in mind as you read the following details written by myself: - "Captain William Kidd captured the *Quedagh Merchant* on 30th January 1698. She was a large (500 ton/tonne) merchantman (merchant vessel, usually a 3-masted, square-rigged sailing ship). These were a popular 'prize' with pirates because they were poorly armed, had a minimum crew and were heavily laden with cargo. Kidd renamed the *Quedagh Merchant* the *Adventure Prize*. About 15 months or so later, in 1699, Kidd transferred much of the *Quedagh Merchant*'s booty to a sloop called the *Antonio*. He left the *Quedagh Merchant* 'under guard' up the Higuey River in Hispaniola. As mentioned above, the men entrusted with the ship reportedly looted it, set it ablaze and sent it adrift down the Rio Dulce. She apparently sank off of Catalina Island in just 3m of water where she remained undiscovered for more than 300 years. Indirectly, the *Quedagh Merchant* helped to establish the National Maritime Museum at Greenwich in England. In 1701, Captain Kidd was sentenced at the Old Bailey to be hanged. He was hung at Execution Dock at Wapping, England on 23rd May 1701. His dead body was cut down and chained to a post. It was left there where the tidal waters of the River Thames could ebb and flow over it. Admiralty law prescribed that the tide ebb and flow over the dead body three times. Kidd's body was later painted with tar and bound with chains. His head was set in a metal harness. This all ensured that the bones and skull would stay in place when the tissues rotted. The bound body, encased in an iron framework, was then hung from an iron gibbet at Tilbury Point in the Thames estuary to serve as a warning to any 'would be' pirates. Gold, silver, jewels, silks and muslins from the *Quedagh Merchant* were forfeited to the Crown and sold by auction. The money raised by the sale bought one of the buildings that housed the National Maritime Museum at Greenwich. (Much of the above information was gleaned from "The Seafarers – The Pirates" by Douglas Botting & the editors of Time-Life Books (ISBN 0-8094-2652-8).)

“BREATHING IN OCEANS FULL OF AIR”

(by Michael Le Page - New Scientist Magazine, issue 2533)

“I felt fine until I passed out” says Edward Cussler of the University of Minnesota in Minneapolis. Back in 1980 he had built an artificial gill that extracted oxygen from water. His dream was that the device would one day allow him to breathe just like a fish, giving him an unlimited supply of oxygen while diving. Cussler is not the first to dream of breathing like a fish. In 1962, Jacques Cousteau predicted the arrival of “Homos aquaticus” people surgically equipped with gills. “The lungs will be by-passed and he will be able to live and breathe in any depth for an amount of time without harm”, said Cousteau. Making a crude artificial gill is surprisingly easy. All you need is a water-tight box made out of a membrane that is highly permeable to gas. Fill it with air and put it underwater and you've got a gill. The levels of oxygen and CO² dissolved in water are at equilibrium with the atmosphere above it, so diffusions through the membrane will result in concentrations close to the atmosphere inside the box. In 1961, just months after creating the first highly permeable silicone membrane, Walter Robb of General Electric built a gill that could support a hamster. “You just had to keep the water moving,” he recalls, so that the water high in oxygen and low in CO² was always in contact with the

membrane. Humans need a lot more oxygen than hamsters. There is not nearly enough as much oxygen in water as there is in air, just 4 to 6 millilitres per litre of sea water, depending upon the temperature. So to get a good flow of oxygen you need a good flow of water over the membrane and also a large surface area to extract a greater volume of oxygen at once. The minimum need is 80 square metres according to Charles Paganelli who also experimented with artificial gills in the 1960s. In the 1980s, Fuji Systems of Tokyo developed a series of prototype gills for divers to demonstrate how good their membranes were. The early version resembled a small fridge strapped to the diver's back. A more advanced model called Donkey III was a coffin-shaped box that the diver pushed in front of him. A televised demonstration in 2002 showed a diver swimming with it in a pool for 30 minutes. Artificial lungs for oxygenating blood has been used for many years in hospitals for patients undergoing major heart and lung operations. Cussler joined together many of these artificial lungs, connected them to a water tight box and placed in it his wife's pet terrier Muggins and placed the box in the Mississippi River for three hours. Although the available oxygen was insufficient to sustain a human, Muggins survived and so did Cussler's marriage. An alternative method devised by Joseph and Celia Bonaventura at Duke University in North Carolina considered mimicking the method on how fish extract oxygen from the water by using a pH sensitive haemoglobin, the oxygen-carrying blood protein. Lactic acid from the swim bladder causes a consequence drop in pH, which releases the oxygen into the bladder. Using this technique, they devised a method of a twin loop system where an oxygen absorbing fluid such as the haemoglobin would absorb the oxygen in the first loop, then in the other loop the fluid would pass over an electrode and release the oxygen. This system has never been put into practice but further research has been done, Waseda University using either the haemoglobin or an inert liquid, perfluorocarbon, and they believe that a suitable twin loop system could be made. Several problems remain however and that is the loss of nitrogen as it is dissolved at greater depths causing a collapse of the lungs and the need for more oxygen to fill the lungs causing oxygen poisoning. Another problem is getting rid of the CO², which can be done, as it was with divers during the war, by using rebreathers based on soda lime which have to be replenished after a few hours. So some way to go before the air tanks are dispensed with but the writer of the article believes that the inventors are trying to solve the wrong problem as divers would not wish to spend hours under water but the systems, whenever a satisfactory method is achieved, could dispense with the time taken for decompression. The writer concludes with the comment, "That when liquid breathing is perfected, perhaps artificial gills will supply the oxygen. It'll happen some day. Just don't hold your breath".

For further reading (and viewing the diagrams) see New Scientist No 2533, 7th January 2006 or <http://technology.newscientist.com/channel/tech/mg18925331.300-breathing-in-oceans-full-of-air.html>."

ANCIENT SHIP RAISED FROM SOUTH CHINA SEA

Below are some details regarding a very impressive recovery of a 30m long Song dynasty cargo ship, complete with cargo in original packing, by the Chinese Government: -

"Ancient Ship Raised from S. China Sea

Chinese archaeologists have raised a merchant ship which sank in the South China Sea 800 years ago while transporting a cargo of precious porcelain. The Nanhai 1 treasury ship, built during the

Song dynasty which ruled China from 960-1279, is believed to contain one of the biggest discoveries of Chinese artefacts from that period. "It's the biggest ship of its kind to be found," said professor Liu Wensuo, and archaeologist from Sun Yat-sen University. "It lay in about 25m (82ft) of water and was covered in mud - perfect conditions for preservation. Both the ship and its contents are in exceptionally good condition." The salvage team began building a massive steel cage around the 30m (98ft) -long vessel in May in order to raise it and the surrounding silt. The cage was made up of 36 steel beams, each weighing around 5 tons. Together with its contents, the cage weighed more than 3,000 tons. The heavy lifting began a day earlier than expected at 0900 on Friday due to favourable weather conditions. It was completed two hours later and placed on a waiting barge. As many as 6,000 artefacts have already been retrieved from the 13th Century vessel, mostly bluish white porcelain, as well as personal items from crew members, including gold belt buckles and silver rings. A further 70,000 artefacts are believed to be still on board, many still in their original packing cases.

VALUABLE CARGO

Underwater archaeology is a new field in China. In the mid-1980s a number of ships, containing enormous hoards of Chinese porcelain, gold and silver, were found by foreign treasure hunters. Their valuable cargoes were sold at auction houses in the West. At the time, China was too poor to bid for the artefacts. The loss of such an important part of its history spurred the government into action. Nanhai 1 will be the first major project to be undertaken by Chinese underwater archaeologists. Professor Liu is confident that the salvage will be a success. "This really is only the beginning, there are so many shipwrecks in this area, fishermen often snag artefacts in their nets, sometimes they even wash ashore," he said.

RECLAIMING HISTORY

It will also give historians much-needed information on a time when China was trading with the world. During the Song dynasty, most of the country's trade was with India and the Middle East. Later that trade would shift westwards. "People often think of ancient China as being a closed society, but in the Tang and Song dynasties, China traded with the world - much like today," Professor Liu added. The Nanhai 1 will eventually be moved to a new purpose built museum near Yangjiang in Guangdong province. The dramatic building - still far from completion - is being built on the beach. The ship will be stored underwater in a massive tank, in which the water temperature, pressure and other conditions will be identical to where it lay on the seabed, allowing visitors to watch as archaeologists uncover its secrets. China has invested about \$40m in this project, in the hope of reclaiming a part of the country's history, and this time ensuring it stays in Chinese hands."

Source: <http://news.bbc.co.uk/2/hi/asia-pacific/7156581.stm> . A 90second video can be viewed at http://www.bbc.co.uk/mediaselector/check/player/nol/newsid_7150000/newsid_7157100?redirect=7157193.stm&news=1&nbwm=1&nbram=1&bbram=1&bbwm=1&asb=1 . Further relevant web pages include: -

http://en.ce.cn/National/Local/200712/23/t20071223_14007358.shtml ,

<http://www.timesonline.co.uk/tol/news/world/asia/article3087296.ece> ,

http://news.xinhuanet.com/english/2007-12/22/content_7296095.htm and

<http://video.google.com/videoplay?docid=5530591697363744727> (video).

The Scuba Divers Federation of SA is a member of the following: -

Rapid Bay Jetty Design Group

SARFAC (SA Recreational Fishing Advisory Council)

Fleurieu Reef Advisory Group (Ex-HMAS *Hobart*)
TRAIL COMMITTEES - SA Trails Coordinating Committee (Office of Recreation & Sport) and
Port Noarlunga Reef Underwater Trail South Australian Trails

Contact the Federation's Secretary on sdfs@adam.com.au to be included on the mailing list for this electronic bulletin.

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