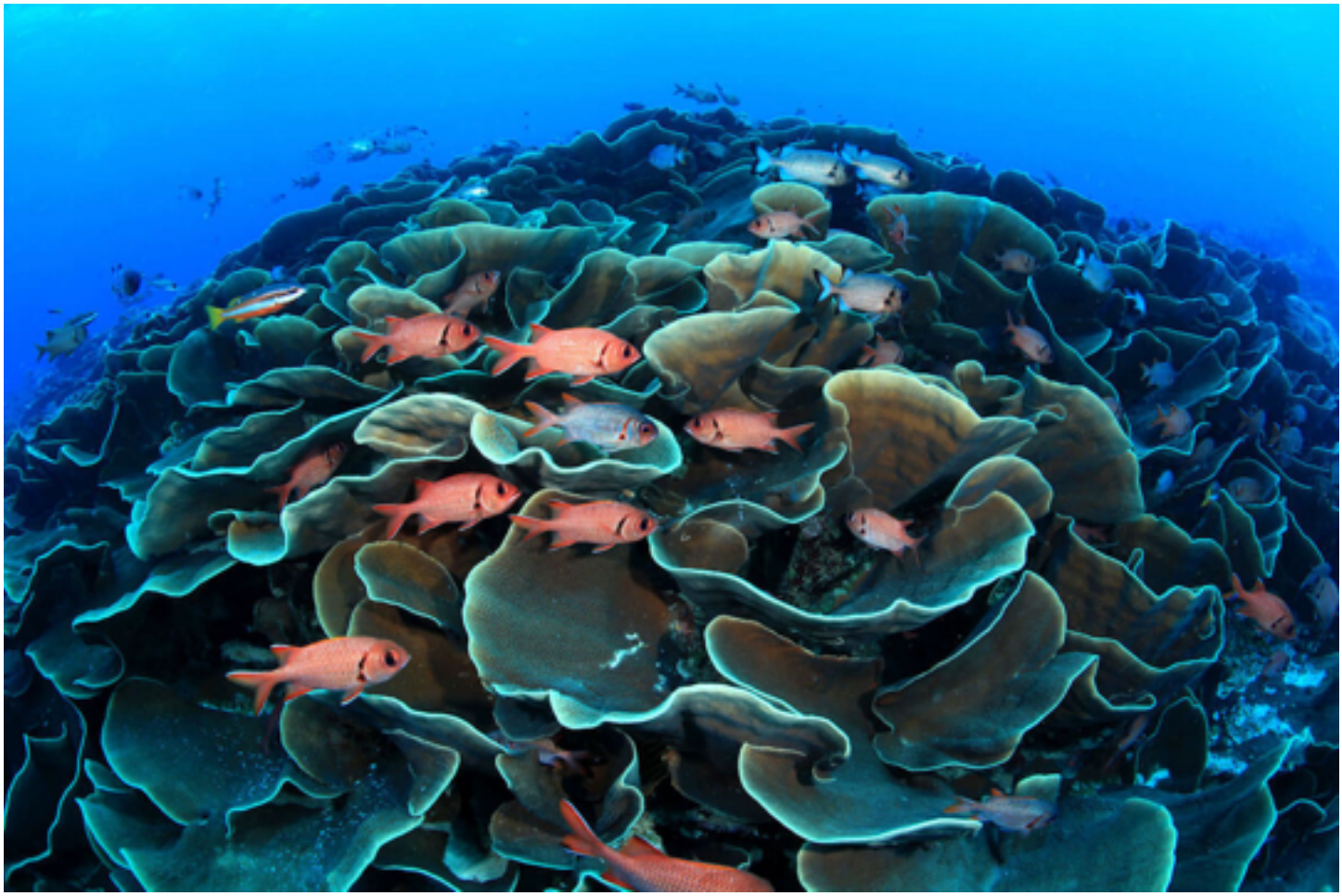
Newsletter - Triton's Call

NASJAX SCUBA DIVING CLUB

5 September 2018 www.nasjaxscubadivers.org



President's Waves

Greetings, divers!

At the September meeting we tried something new: a parking lot swap meet. Club members brought an astonishing assortment of dive gear, old and new, and everyone enjoyed seeing it. A few people walked away with some great bargains! We had a

perfect night with cooperative weather and I think most of us had fun socializing and talking about the gear.

The meeting itself was brief but we still managed to fit in some interesting dive reports. Keeping the meeting to half an hour meant we didn't have our monthly raffle or a guest speaker, but we will always make time for dive reports and safety!

This month we officially voted on membership for our newest members, Edd Dilworth and Jim Gilland. We also welcomed a new prospective member, Bob Bohnert. Ed Fite's son, Phil, attended visiting from Nashville, and Billy Schofield brought two grandsons with him.

Next month we will be nominating candidates for our club elected offices. If you are interested in running for president, vice president, secretary, or treasurer, let it be known at the October meeting. We will vote for the new officers in November and they will take over in January 2019.

Next month we will also start selling tickets to the club Christmas party.

Stay safe and keep diving!

Monster Molyneux

Upcoming Dive Trips and Events

- Mark Vogel, Edd Dilworth and about three more of us are planning a dive off Jupiter, Florida around the last of September or the first part of October with Jupiter SCUBA Diving. As we get more information we'll send it out via emails for anyone that wants to join us. Also, you don't have to have a dive buddy to dive with us.
- Our annual Dive Club Christmas Dinner will be Thursday 13 December at the Naval Air Station Jacksonville River Cove Conference Center (former Officers' Club). Social gathering will begin at 6:30 p.m. in the River View room followed by a buffet dinner at 7:00 p.m. We'll arrange special event base access for those that aren't military retirees or DOD employees. Dinner will be the Beef and Reef Buffet. The menu includes Roast Beef, Crab Legs, Steamed Shrimp, Baked Fish, Seafood Newberg, Salad, Garden Veggies, Rice or Potatoes, Iced Tea/Coffee and dessert. Cost will be $30 per person. You have to pay for your own sodas ($1 each) and alcoholic beverages.

Dive Club Executive Officers' Reports

Safety Officer - Ben Story Ben discussed the recent Safety email he sent to dive club members. He especially emphasized not to enter any cave system unless you are cave certified.

Treasurer - Evan Ball We have $943 in our dive club account. This includes subtracting $264.29 for new t-shirts. We'll need to add last night's t-shirt sales and membership dues paid, roughly $160.

Webmaster - Sharon Green **www.nasjaxscubadivers.org**
Sharon said we have been getting a lot of inquiries, 617 in the last month, on our webpage. She said the subject area that gets the most inquiries is the Safety page.

Secretary - Glen Akins Bob Bohnert filled out a membership form and paid his club dues tonight. We want to welcome Bob and his family to our Dive Club and Jacksonville.

Vice President - Venessa Wood We are in the early stages of planning a Halloween Party in October. This Labor Day holiday was special for Venessa, she retired after working many years. I'm sure she'll enjoy her time off.

DIVE REPORTS

#1 Jupiter, Florida Dives 24 - 27 August 2018 - Bob Carmichael

Bob dived with Jupiter Dive Center on one of their two boats recently. Seas were calm the whole duration, water temperature was 83 F, visibility varied from dive site to site, but overall it was good. Bob has been diving with JDC for 20+ years and thought he had seen all the dive sites out of Jupiter Inlet. The MD-111 Barge dive site that he dived on this time was a new one to him.

It's not a new artificial reef. It's an old inverted barge in 65 feet of water with some concrete pillars about 20 feet north of it. Goliath Groupers are congregating around the barge this time of the year. On Friday, the first day of diving on this site, the boat dropped Bob and another diver off a

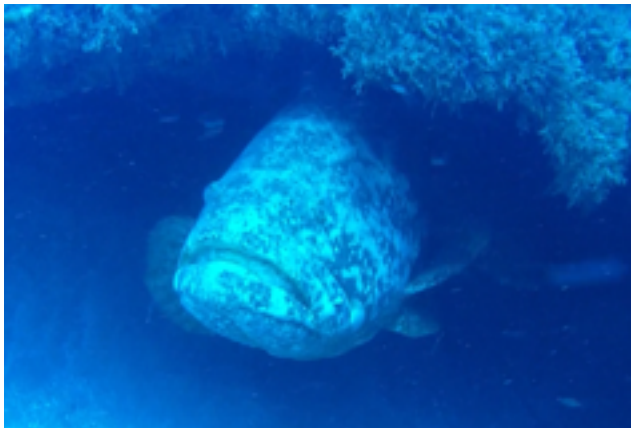
little late and they landed right on the pillars among all the Goliaths. The current was too strong to swim to the barge, so they enjoyed watching the groupers and then surfaced.

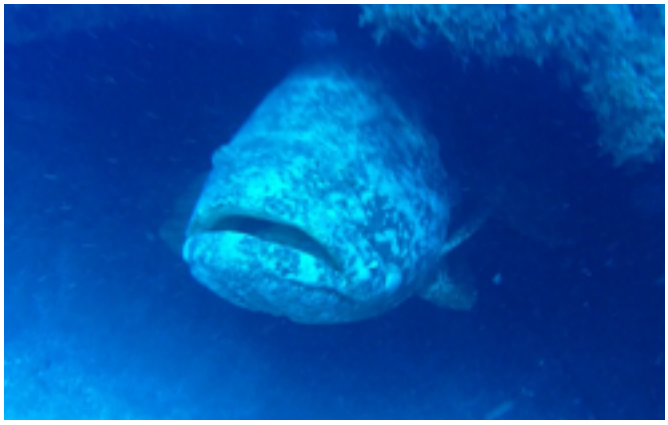
On Saturday Bob dived two reefs off Jupiter, saw nothing notable.

On Sunday he did another dive on the barge site and came down just at the front edge of the barge. Bob took a quick look around, then swam over the barge and spent much of the time in the pillars area watching the groupers up close.

On Monday he did his third dive on the MD-111 barge site. He decided he should experience the whole thing again and says he is glad he did. Bob dropped down about five feet from the barge where there was a structure he got behind. He was in front of the barge and out of the current. He could observe some "pass throughs" the groupers swam in and out of as they desired. On the opposite end of the barge there was another similar structure. It may have been part of the barge in years past, Bob's not sure. Bob could see several groupers moving around in the pass throughs. At one point, he was at the end of one of the pass throughs and one of the groupers moved toward him as to exit. Bob moved out of its way slowly and to the side of the opening. It stuck its head out, but didn't exit. Bob moved back up to the side of the exit slowly and they stayed there quite a while watching each other. Bob was no more than two or three feet from it. When Bob raised his arm slowly, he could see the grouper's eyeball following his arm! Bob found there is a flap of skin inside their mouths that moves with their breathing. When they breathe in, the flap lifts and lets the water in. When they exhale, it closes forcing the water out through the gills. At least that's what it looks like up close.

Bob made eight dives over the four day period. As always, he really enjoyed his three days diving out of Jupiter and highly recommends diving with the Goliath Groupers.





#2 Offshore Jacksonville, Florida 4 August 2018 Major Nimock

Major wasn't able to attend the dive meeting, but he dived on the Diamond Diver charter Saturday, 4 August. It was a good day to be on the water with lots of turtles and fish at the surface. He made two dives on unfamiliar wrecks offshore Jacksonville. The wrecks were at 75 feet depth. Visibility was 30 to 40 feet. Water temperature was 75 F. What was amazing, Major didn't see a single Lionfish.

#3 Offshore St. Augustine 17 August 2018 Eric Wilson

Eric couldn't attend last night's meeting, but he made two dives on Friday, 17 August on the Anniversary Wreck (est. 1750 to 1800 AD) about a mile off of St. Augustine, near the old inlet. The first dive was in 19 feet of water with about 6 inches visibility and a water temperature of 78° F. Eric's group installed some mesh bags on the dredges, lifted the airlift dredge to prepare it for operation and took level measurements on a couple of excavation units.

The second dive was in 21 feet of water. The visibility was also about 6 inches and the temperature remained about 78° F. Eric and his dive buddy took turns dredging on a unit, using the airlift. All went well. In fact, another dredge team found several concretions containing a pistol flint, a creamware fragment (looked like part of a dinner plate) and some wood with metal fasteners. All artifacts are set to be x-rayed soon.

#4 Key Largo Lobster Dives August 2018 Billy Schofield, Brandon Schofield, Bradley Schofield, Art LaRue & Marshall Gross

Billy, Brandon, Bradley, Art and Marshall dived Key Largo recently. They stayed at the Holiday Inn in Florida City. Prices were reasonable and the rooms were fine. On Saturday afternoon they dived with Quiescence Dive Center on one of their six-pack boats. Dive sites were the Benwood and French Reef. Visibility was not ideal with 10-15 knot winds and 3-5 foot swells, but they managed to make it enjoyable. Billy and Brandon experienced some queasiness and sat out the second dive.

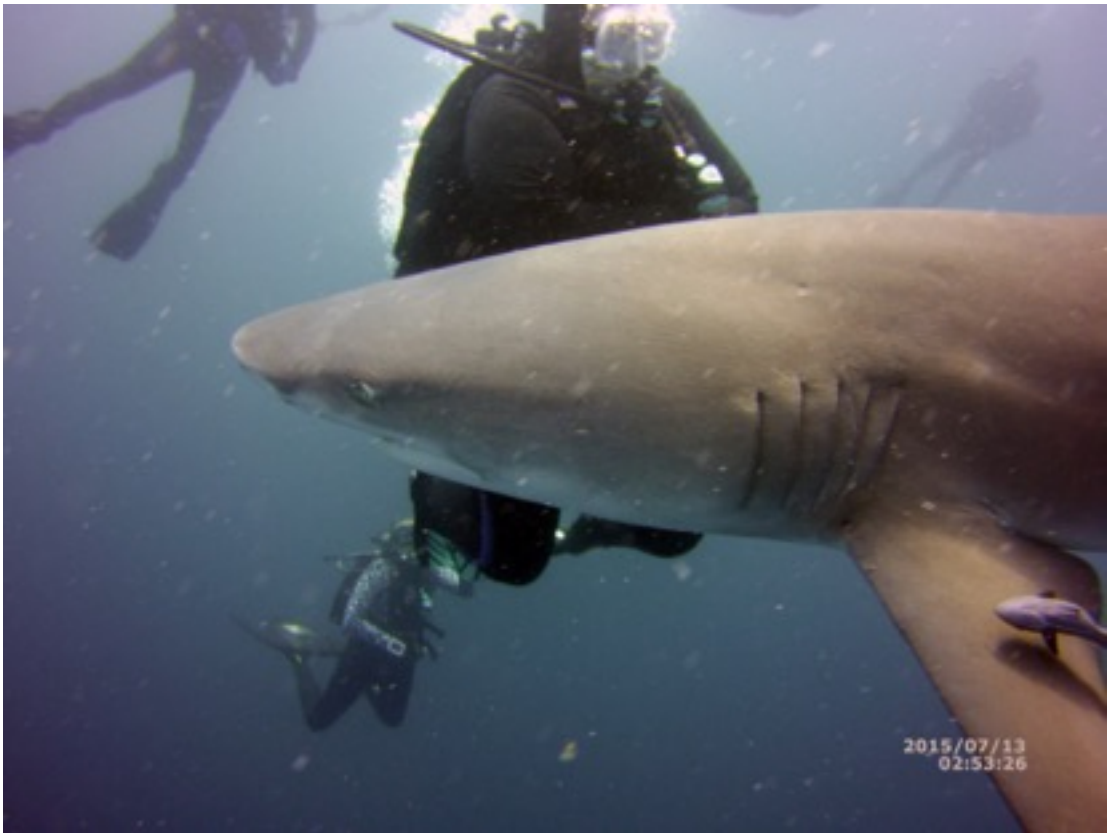
Day Two they dived off Conch Republic's large boat. There were about 20 divers aboard, but there was plenty of room and the dives were great. Weather was basically the same as Saturday, but on a bigger boat they were able to ride out the swells a bit better. They didn't remember the actual names of dive sites, but do remember snatching two lobsters, while missing several others. In fact, one got away and Brandon caught it as it was skittering away. On both days, they saw the usual reef creatures.

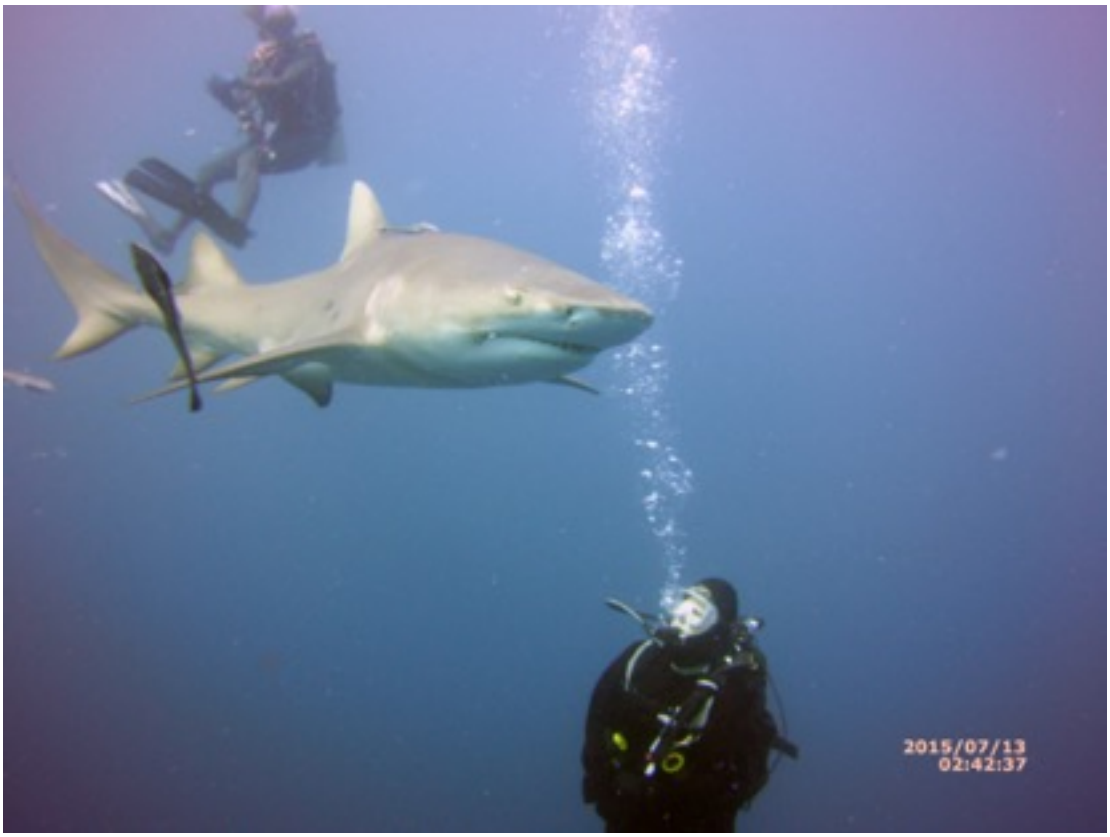
Of the two charters, they preferred Conch Republic. They offered a military discount and supplied snacks and drinks. Brad, who turned 13 on Labor Day, snorkeled both days. He's looking forward to being certified this time next year. Brad also free dived to 20 feet, while everybody else was using dive equipment.

#5 West Palm Beach "Shark" Dives & Blue Grotto 17 August and 1 & 2 September 2018 Chet and Dawn Tomlinson

Chet and Dawn made two West Palm Beach "Shark" dives on 17 August 2018. The water temperature was 87 F with a current of about 3 knots. Water visibility was 30-40 feet. The sharks they saw and swam with were Silky's, and Lemon. They saw two Bulls while diving on the reef. Dives were great and they took a lot of photographs.

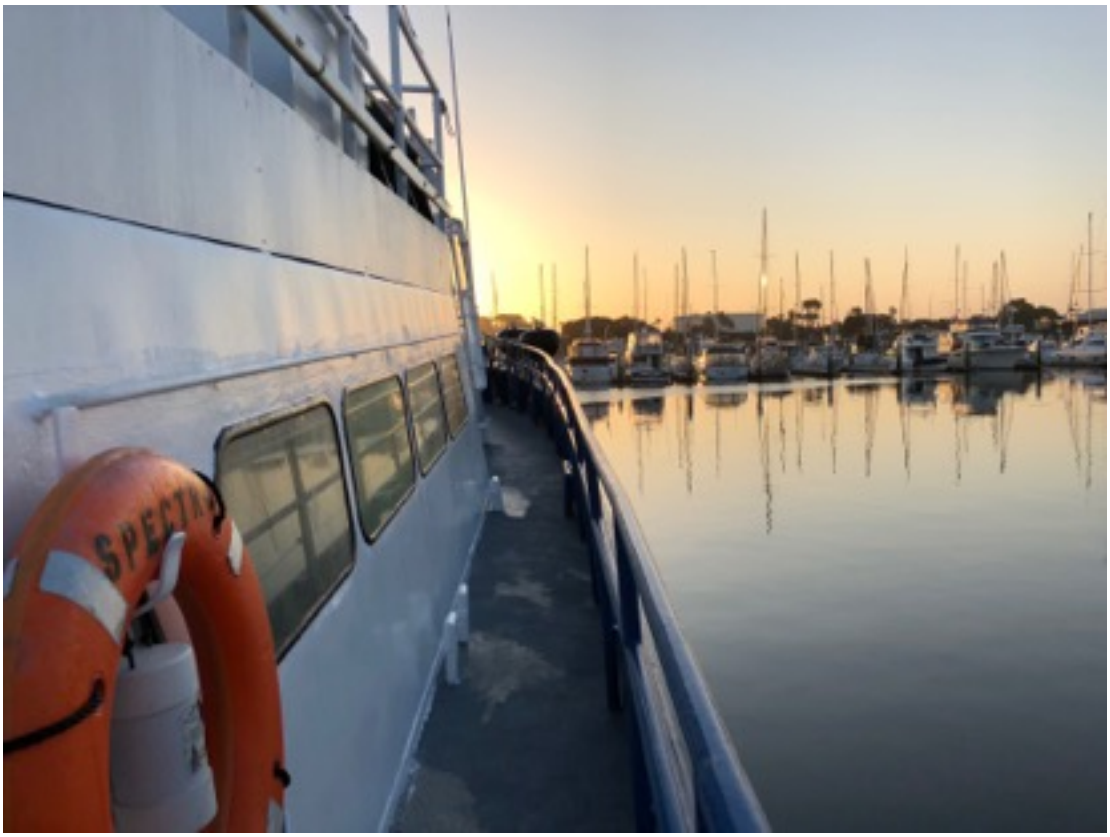
Chet made four dives at Blue Grotto 1 and 2 September 2018 certifying a new Open Water Diver. The water level was up over the main deck area. In the beginning the visibility wasn't very good due to green algae, then under the ledge it improved to 20 - 30 feet. The water temperature was 78 F.





#6 California's Channel Islands August 2018 Ben Storey

Ben had a chance to Dive the Channel Islands off the California coast recently. The highlight of the trip was seeing a Humpback Whale breach on the way out to the islands. Ben made two dives off Anacapa Island and one dive off Santa Cruz Island with the Spectre Dive Boat (https://spectreboat.com). Not the greatest visibility on the first two dives, but the third dive was outstanding. The water temperature was 68 F. Ben took a lot of great photos, a couple are printed below.


SPECTR

#7 Local River Dives August Ed and Phil Fite

Ed and his son Phil recently dived Black Creek and the St. Mary's river. The visibility was the same as always, ten to twelve inches. They found some good fossils in a whale "boneyard"; whale teeth, inner ear bones and vertebrae.

National Fossil Day on September 29

The Florida Museum of Natural History at the University of Florida in Gainesville will celebrate National Fossil Day on Saturday, September 29 as well as the opening of their latest exhibit: Permian Monsters: Life Before the Dinosaurs. The main reason I'm including this article in our Newsletter is a lot of our dive club members dive off Venice, Florida and in Florida rivers for sharks' teeth and fossils. In fact, a few members recently dived in the St. Mary's River finding very good fossils and sharks' teeth. Not only can you view fossils at the upcoming exhibit, there will be people on hand to identify your fossils for free. So if you go, take your fossils with you.

Step back in time 290 million years when distinctive creatures dominated life on land and sea, and learn about the greatest extinction the world has ever seen. This unique exhibition brings the past back to life with fossilized skeletons and full-sized replicas of the animals that ruled the world before the age of dinosaurs, in a time known as the Permian. Gain a glimpse into the period with paintings from award- winning paleo-artist Julius Csotonyi. See models of giant insects, bizarre-looking sharks and strange reptiles with mammal-like characteristics. Meet the top predator of the time, the giant saber-toothed gorgonopsid and sift through interactive dig pits.

Dippy Diver Award - For minor diving offenses. Art LaRue for leaving his $40 lobster snare at the Conch Republic Dive Center in Tavernier Key.

Coprolite Diver Award - For more serious diving infractions. None

This Month's Raffle Winners: No raffle this meeting.

Members present at the 5 September 2018 dive club meeting:
Glen Akins, Bill Allen, Evan Ball, Bob Carmichael, Bill Davis, Edd Dilworth, Ed Fite, Sharon and Richard Green, Marshall Gross, Carol Hughes, Art LaRue, Mitch and Kathy Maxson, Monster and Annette Molyneux, Elmer Osborne, Chris Rule, Billy Schofield,

Brandon Schofield, Ben Storey, Vera Thomas, Chet and Dawn Tomlinson, Mark Vogel, Kim Walther and Venessa Wood.

First Time Visitors to our Dive Club: Bob Bohnert (who paid his membership dues and is joining our club), Phil Fite (Ed's son) and Brad Schofield (Billy's grandson).

The next Dive Club Meeting will be 3 October 2018 at 7:00 p.m. in the Mandarin Golden Corral conference room, 11470 San Jose Boulevard, Mandarin. Come early to eat and socialize with other divers.

Our next Executive Board Meeting will be 26 September at 6:00 p.m. at the Bob Evans Restaurant on San Jose Boulevard, Mandarin.

NASJAX DIVE CLUB OFFICERS for 2018

President - Monster Molyneux

Vice President - Venessa Wood

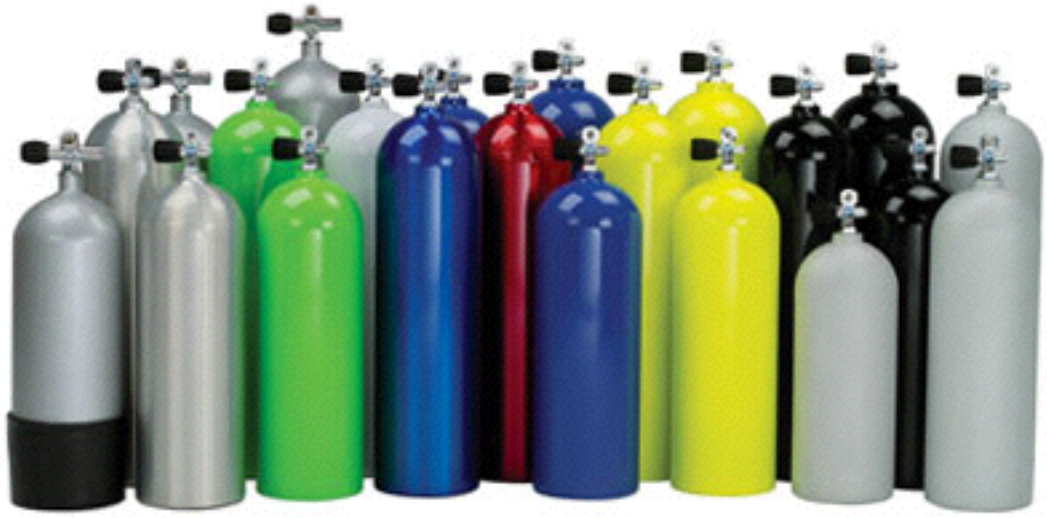
Treasurer - Evan Ball

Safety Officer - Ben Story

Secretary - Glen Akins

Web Master - Sharon Green

TANKING UP: A CLOSE LOOK AT SCUBA CYLINDERS



Overview
Few things are as seemingly simple as a scuba cylinder, but don't let that fool you. Although a cylinder may seem like a big hunk of metal, it does serious work. Filled to capacity, a typical cylinder carrying 80 standard cubic feet of air and compressed to a pressure of 3,000 psi carries enough energy roughly equivalent to an automobile traveling at jet airliner speeds. More important than that, our scuba cylinder carries our most precious cargo of breathing gas to sustain us for the duration of our dive. Without a doubt, a high-pressure scuba cylinder is something worthy of respect. To ensure our continuing safety below and above the waves, scuba cylinders demand at least a modicum of attention to selection, use, care and maintenance.

Creating Cylinders
While cylinders are marketed under a number of brand names, only a handful of manufacturers produce scuba cylinders in the United States, including Catalina, Faber, Luxfer, and Pressed Steel Tank Co. (PST). Steel cylinders are made using a process called "deep draw," while aluminum cylinders are made by "backward extrusion." After the material is put through a series of punches and dies, the result is a shell. In both processes, heat is applied to the top or neck of the cylinder to create a narrow opening, which is then threaded for insertion of the cylinder valve. At this point, the cylinder is stamped with appropriate markings, hydrostatically tested and is ready for service. As part of the manufacturing process, the cylinder is tested for defects and then the neck of the cylinder is stamped with information required by the Department of Transportation (DOT), the agency that regulates interstate transportation of cylinders.

A Broad Selection

The most common materials are aluminum and steel, each of which has characteristics that make them more suitable for particular diving applications. Due to the strength-to-weight ratio of the base material, aluminum cylinders tend to be larger and more buoyant than steel cylinders of the same capacity. They also cost less than their steel counterparts and for this reason have gained tremendous popularity among recreational divers. Steel cylinders tend to be physically smaller for the same capacity and are less buoyant when submerged. For these reasons steel cylinders are often the favorite of cold-water divers and those who dive in the close quarters of overhead environments. Just as cylinders come in a variety of sizes and air capacities, the service pressure for cylinders can also vary dramatically. High-pressure steel cylinders are available with pressure ratings as high as 3,500 psi. Most aluminum cylinders are rated for 3,000 psi, but some are rated to 3,300.

Cylinder Valves

Although they are sometimes sold separately, the valve is considered an integral part of the cylinder. Just as there are a variety of cylinders, valves too, can be categorized according to their performance, features and capabilities. The basic distinction among cylinder valves is between the standard yoke (K-style) valves with which most divers are familiar and the DIN valves (for Deutsches Institut fuer Normung, a European association of engineers and manufacturers that sets standards for compressed gas cylinders and valves). The DIN fitting of the regulator first stage actually screws into the female threaded DIN valve body, capturing the O-ring and making it virtually impossible for the O-ring to fail and cause a loss of breathing gas. Technical and cave divers often prefer DIN valves for precisely this reason. One feature common to all cylinder valves is a pressure relief device (PRD), also known as a burst disk. This tiny, frangible disk is designed to break and release the pressure within the cylinder when it reaches a critical pressure (close to the hydrostatic test pressure of the cylinder). This can happen as a result of overfilling or due to an increase in the temperature of the cylinder. If a new valve is installed or valves are switched between cylinders, care must be taken to ensure a PRD is installed that corresponds to the cylinder's service pressure.

Tank Buoyancy

One fact that divers sometimes overlook is the changing buoyancy of their cylinders. Regardless of whether the cylinder is made of steel, aluminum or a composite, the air which we compress into that cylinder has mass and weight. Since the cylinder is essentially a rigid container, its volume doesn't change (noticeably) when filled to capacity; however, its weight does. The greater the capacity of a cylinder, the greater the weight difference between empty and full. A standard cubic foot of air weighs about 0.0807 pounds. A typical aluminum 80 weighs about 31 pounds when empty, and about 37 pounds when full. A cylinder that carries 120 cubic feet will weigh about 10 pounds

more when full than it does when empty. The actual buoyancy figures are different depending on the material and cylinder design. A typical aluminum 80 might be a pound and a half negatively buoyant when full, with a positive buoyancy of about 4.5 pounds when empty. A steel cylinder of similar capacity might be around 6 pounds negative when full, and neutral when empty. Consequently, a diver using an aluminum cylinder would generally need to carry more weight on his belt to avoid becoming positively buoyant at the end of a dive than one wearing a steel tank of the same capacity.

Choosing the Right Cylinder

Divers and cylinder manufacturers have long debated the pros and cons of aluminum vs. steel scuba cylinders. Without a doubt, both are rugged and reliable, and will safely meet the needs of some — if not all — divers. The best choice for a diver depends on a number of variables, including his physical makeup and the environment in which he dives. Obviously, buoyancy characteristics are a major consideration when choosing a cylinder. Since aluminum cylinders are more buoyant, they may be a better choice when diving in warm water where a diver wears less buoyant exposure protection, and thus needs less weight to achieve the correct buoyancy. For a diver in cold water wearing a thick wet suit or dry suit, the steel cylinder would lighten the load on the weight belt. Also important are the physical dimensions of the cylinder. A tall diver might be quite comfortable with a tall aluminum cylinder strapped to his back, whereas a shorter diver might prefer a stockier steel cylinder to avoid the brain-bashing that can come when the cylinder length approaches the length of one's spine. Capacity is also critical. A heavy breather or a cold-water diver might require more air to meet his diving needs than one who consumes air more efficiently or dives in warmer water. Needless to say, those who dive deeper or venture into caverns, caves and wrecks may also require considerably more air capacity than their shallow, open-water counterparts. If you intend to travel to remote areas with a high-pressure cylinder, keep in mind that not all air stations can fill to higher pressures. Check to see that high-pressure fills are available at your destination.

Safe Handling Techniques

Scuba cylinders are heavy and if not handled properly, can easily damage other gear or injure a diver. Rule No. 1 is to make certain the cylinder is secured properly during transport. Never leave a cylinder standing in an upright position, since it can easily be knocked or tipped over. When it comes to carrying or moving a cylinder, there's general agreement that a cylinder can be safely lifted and carried by the valve, but doing so can put excessive strain on a diver's muscles and joints.

Tanking Up

Regardless of the type and size of cylinder, it's important to get a good and safe air fill. The first thing to make certain of is that the technician filling your cylinder knows the correct cylinder pressure to fill to. It's easy to make an assumption that leads to an over-fill or under-fill — either of which poses a safety concern. The service pressure for the cylinder assumes a temperature of 70 degrees Fahrenheit, so even a properly filled cylinder will show higher (if hot) or lower (if cold), depending on the temperature. Make certain your cylinder is being filled with the right stuff. Remember that aside from air, many air stations now provide NITROX, oxygen and argon to meet the needs of NITROX and technical divers. Having the wrong gas in your bottle can lead to serious consequences; so take the time to verify what's being put in yours. Air quality is always a potential concern, especially when diving in out-of-the way places. If the fill station seems suspicious, ask to see the station's air quality monitoring or maintenance records. Take a look at the compressor inlet, and if it's located where exhaust fumes or other contaminants could be present, think twice about filling your cylinder. Oxygen and carbon monoxide monitors are readily available, and can add peace of mind for divers who travel to locations with "backwoods" filling stations. Before connecting the fill line, the connector should be either blown or wiped dry. It's easy for water to be forced into your cylinder during the filling process and that can spell both corrosion and air quality problems. Finally, the fill shouldn't be done too quickly. NOAA recommends a fill rate of 300-600 psi per minute to prevent excessive heating during the fill.

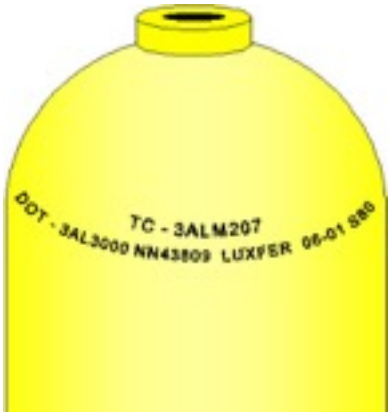
Cylinder Care and Maintenance

While cylinder maintenance isn't very difficult or time-consuming, failure to properly care for your cylinder can lead to expensive and dangerous consequences. First, make certain your cylinder is visually inspected and hydrostatically tested on a regular basis. An annual visual inspection is recommended, but if a cylinder is used frequently in warm, humid climates, the inspections should be performed more frequently (every three to six months). Hydrostatic tests are required every five years or any time a cylinder is damaged. Regular maintenance for cylinders includes washing with a warm, soapy water to remove salts and other contaminants that can cause corrosion or other damage. If your cylinder has a boot, it should be removed to ensure that no corrosion is forming beneath the boot. Inspect the cylinder for pitting, corrosion, dents, scrapes, cracks or other damage. If any such damage is evident, have a professional inspect the cylinder to ensure it does not pose a safety concern. Don't completely empty the cylinder while diving, except in an emergency. Relieving all the pressure in a wet environment can allow moisture to enter the cylinder. If a cylinder must be emptied for transport (such as by an airline), put some tape or other covering over the valve inlet to prevent contaminants from entering the cylinder. For long-term storage, cylinders should have only a few hundred psi, and should be stored upright in a cool, dry location.

CYLINDER INSPECTIONS

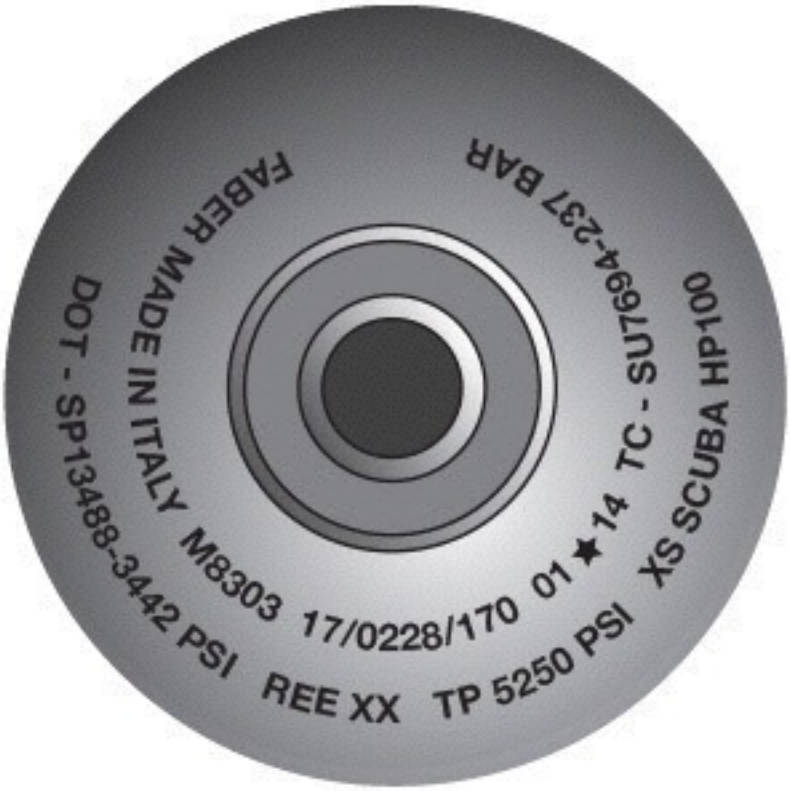
Like any piece of dive equipment, a scuba cylinder requires proper care and maintenance if it is to serve us well over time. Since fill stations put themselves at risk every time they fill a cylinder, they pay strict attention to the indications that the required inspections have been completed. First is the visual inspection, designed to find any mechanical or corrosion damage to the cylinder, both inside and out. Inspectors check the exterior of the cylinder for many forms of damage, including cuts, gouges, dents and bulges, signs of heat damage, general abuse, the condition of coatings and a current hydrostatic test date. The valve is removed and the interior inspected for debris, water, corrosion, pitting, thread integrity and internal neck cracks (in aluminum cylinders). If corrosion is found, it may be necessary to “tumble” the tank — a process that involves insertion of abrasive material and then rolling the tank to remove the corrosion. When a visual inspection is completed, a sticker is applied to the cylinder indicating the test date. Under DOT regulations, all cylinders pressurized to more than 900 psi must also undergo hydrostatic testing every five years to verify their structural integrity. Although there are variations in the process, it typically involves filling the cylinder with water, placing it in a water-filled pressure chamber, and measuring the expansion of the cylinder as pressure is applied. Hydrostatic test pressures vary depending on the cylinder material, but is typically 5/3 the service pressure. The PST HP Series (3,500 psi) and the new E-Series with a service pressure of 3,442 psi, manufactured under the E-9791 permit, are tested to 3/2 the service pressure. If the permanent expansion of a cylinder is 10 percent or more, the cylinder is condemned and removed from service. When a cylinder passes its hydrostatic test, new markings are stamped into the crown of the cylinder to indicate the test date.

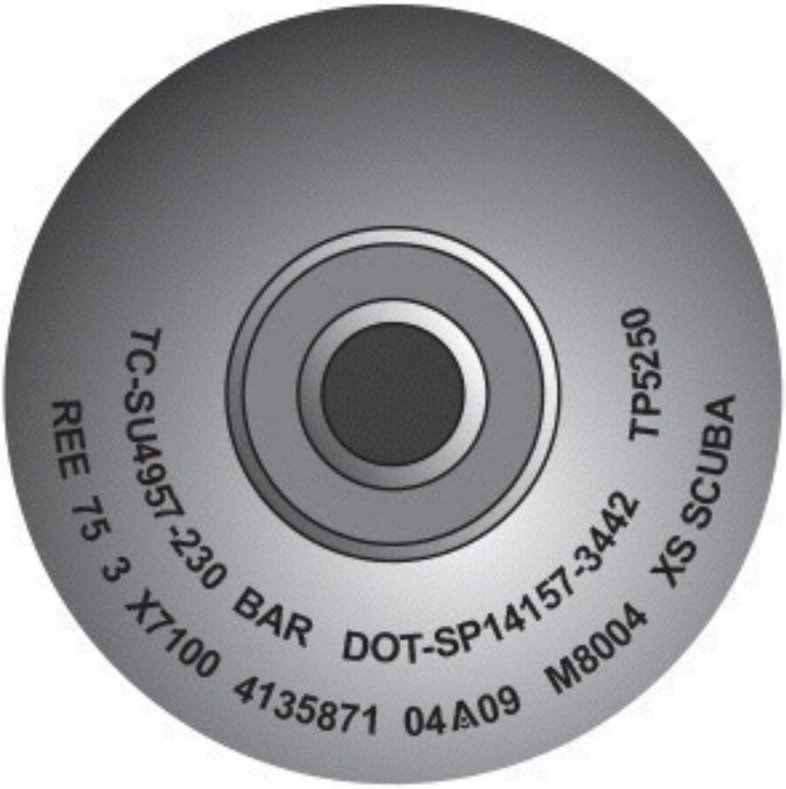
Message On A Bottle: What do the markings on a cylinder mean?



While the markings on the neck or “crown” of a scuba cylinder may appear as mysterious as ancient Sanskrit, decoding the message is quite simple once you understand the basic format and symbols. The first grouping of letters

and numbers identifies the governing agency (DOT for U.S.-manufactured cylinders. The TC - 3AL … represents Transport Canada and Canadian markings. Steel cylinders generally carry the 3AA designation or E9791 for those rated for 3,500 psi. Most aluminum cylinders carry a 3AL designation; however, older aluminum cylinders may have a designation of SP6498 or E6498. Next comes the service pressure followed by the cylinder volume. For U.S. made cylinders the pressure is given in psi (e.g. “3000” for a 3,000 psi cylinder). Some steel cylinders will have a “+” following the service pressure, indicating that during the first five years following manufacture, the cylinder can be filled to 10 percent over the indicated service pressure. Some manufacturers also include the capacity of the cylinder as part of the markings on the first line. In the example above, the S80 indicates a 80 standard-cubic-foot air capacity. If your cylinder has two lines of letters and numbers,the first grouping of numbers on the second line is the serial number for the cylinder. The serial number is typically a combination of six to eight letters and numbers. Following the serial number on some cylinders is the manufacturer. Some also display the “M” number or the manufacturer identification number issued by the governing agency (DOT). The markings end with the month and year of manufacture separated by a manufacturer’s unique symbol. Each time a cylinder is hydrostatically tested, a new month and year is added to the markings, separated by a unique symbol designating the independent inspection agency performing the test. Thus, it’s easy to tell whether a cylinder has a valid hydrostatic test. Not all manufacturers follow the same format for cylinder markings, but this simple guide will at least provide the pertinent data and overall context of the message on your bottle.


DOT - SP13488-3442 PSI
MADE IN ITALY
FABER
M8303
17/0228/170
01 ★ 14
TC - SU7694-237 BAR
REE XX
TP 5250 PSI
XS SCUBA HP100


REE 75 3 X7100
TC-SU4957-230 BAR
4135871
DOT-SP14157-3442
04A09
TP5250
M8004
XS SCUBA

Above are the engravings on a steel 117 cubic foot cylinder. Here's an interpretation of what's printed on them.

1ST ROW
Faber - manufacturer
M8303 - DOT manufacturer identifier facility
17/0228/170 - serial number
01 - month of manufacture
* - mark of independent DOT inspector
14 - year of manufacture
TC - transport Canada (similar to DOT)
SU7694 - Canadian special permit number
237 BAR - service pressure (BAR)

2ND ROW
DOT-SP 13-88-3442 - U.S. Department of Transportation. 3442 is the working pressure in psi.
SP13488 - DOT special permit number
3442 PSI - Service Pressure (PSI)
REE 100 - Rejection elastic expansion from the hydrostatic retest in milliliters
TP 5250 - Test pressure for hydrostatic retest in psi
BSE 117 - cylinder size in cubic feet
XS Scuba - Distributor
HP100 - XS SCUBA part number (cylinder size)

Summary
Although this article is long and detailed, it gives us a very good perspective of a SCUBA cylinder and valve. Most of us probably take our SCUBA cylinders for granted. They are a very important part of our dive equipment; they contain the gas that sustains us under water. If the cylinder valve doesn't function properly or we get a bad "air fill" it could result in a serious situation. We can prevent a potential problem by cleaning/maintaining our dive tanks after each dive, inspecting them often and transporting them correctly.

Our Dive Club now has four different colors of t-shirts for sale for $15 each. We have all sizes. If you would like one, contact Venessa Wood. We've added lime and sapphire blue to our line of shirts.