

SEARCH TEAM NEWS

J.W. FISHERS MANUFACTURING INC

JW
FISHERS

UNDERWATER SEARCH

ISSUE 6-1

CANADIAN FIRM USES HIGH TECH EQUIPMENT TO SEARCH FOR RARE AIRCRAFT



Ocean Scan Systems of Belleville, Ontario, Canada has taken delivery of an SSS-100K side scan sonar system. Ocean Scan, a longtime user of Fishers equipment, is adding side scan capability to their long list of available customer services, reports company president Ed Burtt.

The company has an arsenal of underwater search equipment including a SeaOtter ROV, a Proton 3 magnetometer, drop and tow cameras, and metal detection systems. Ed uses a sophisticated software package, the Melian II System, to integrate the outputs of several search systems into one control system where the information can be manipulated or stored for future reference.

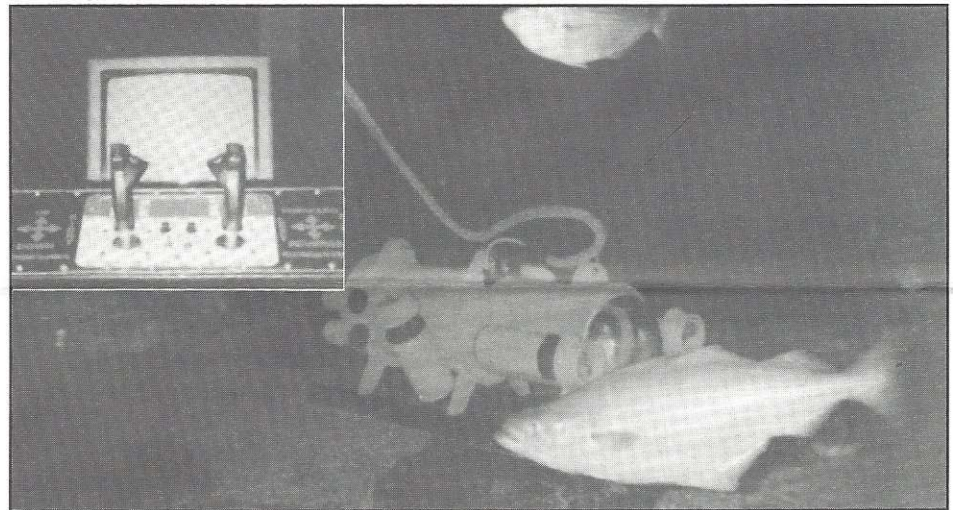
Ocean Scan has been searching and surveying the waters of Lake Ontario and the surrounding lakes for almost 20 years. The company has been contracted for a number of projects with various Canadian government agencies including surveying a Canadian marine park for Parks Canada.

Currently, Ocean Scan is involved in a project to locate prototypes of a very rare aircraft, the Avro Arrow. The Arrow's remarkable speed and handling capabilities turned heads throughout the world's aviation industry during the 1950's. However, the Arrow was never mass-produced. On Feb 20, 1959, a day many describe as one of the darkest in Canadian history, the Arrow project was squashed by then Prime Minister John Diefenbaker. The move put 15,000 people out of work and caused the only 5 Arrows ever produced to be disassembled and scrapped.

During the mid 50's Arrow researchers and design engineers spent countless hours monitoring the test flights of 1:8 scale models.

(continued on page 2)

VISITORS "FLY" ROV AT MYSTIC AQUARIUM IN CONNECTICUT



MYSTIC'S INTERACTIVE EXHIBIT WITH SEAOTTER ROV

Mystic Marineland in Mystic, Connecticut has installed the first of its kind exhibit with Fishers SeaOtter ROV. The exhibit is interactive which means visitors to the aquarium actually get to operate a real ROV.

Marineland wanted to add a new exhibit that would not only educate, but entertain visitors. The idea of an interactive exhibit using an ROV was the brainchild of Marineland's Jim Stone. Jim envisioned an exhibit which would be representative of a typical ecosystem found in New England waters.

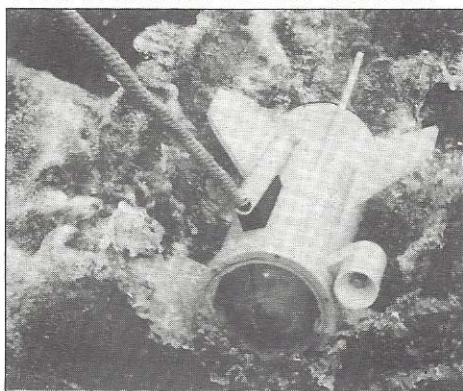
A 7000 gallon tank was constructed to house the exhibit. Chris Rawlings of the historic Mystic Seaport was enlisted to build a replica of a shipwreck for the exhibit. Chris did a beautiful job putting together the "shipwreck", part of a 35' schooner. The wreck lies on the bottom of the tank surrounded by pollock, scup, fluke and other fish typically found in the temperate Atlantic waters.

The focal point of the exhibit is the SeaOtter. A group at Fishers worked with Marineland officials to modify the standard SeaOtter system to adapt it to this special application. The control panel was mounted in a podium with a special joystick control much like an arcade game. This simplified control arrangement allows anyone to be an "expert" ROV operator within moments of grabbing the controls. Of course kids seem to be the best operators, undoubtedly due to their extensive "training" in the use of arcade games. Other modifications included changing the standard umbilical cable and "powering down" the ROV as a caution against over zealous operators. The operator, as well as other standby operators, see the fish through the "eye" of the ROV. The video image is displayed on several large monitors placed in various locations around the aquarium.

"There's always a long line at the SeaOtter exhibit", Jim says. "Everyone wants to fly the ROV."

"It's really a great exhibit. People get a chance to see and use an actual tool marine biologists and scientists use in doing their research. The ROV exhibit meets both of Marineland's two most important criteria for any exhibit: it educates and entertains our visitors!" JWF

ALASKAN BOTTOM FISHING STUDY PERFORMED BY TOWED CAMERA



DEPLOYING THE TOV-1 CAMERA

Bill Reynolds of Solutions Inc. in Fairbanks, Alaska is doing a study on bottom fishing in the Gulf of Alaska. Bill is conducting a high tech survey using the TOV-1 towed video system, a side scan sonar, and a 5 track recorder to capture and compare the information being produced by both instruments. The side scan surveys an area and the TOV's video footage is compared to the side scan printout to obtain detailed information on bottom composition.

The TOV-1 is also being deployed inside a trawl net to observe the different types of fish being captured. "The system did exactly what it was supposed to do", Bill reported. "We performed 35 tows, each approximately one hour in duration. We worked in depths ranging from less than 100 feet to 250 feet. The system worked magnificently!"

Bill's next project involves traveling to St. Thomas in the U.S. Virgin Islands to assist in locating some of the hundreds of vessels lost in the recent hurricane. *JWF*

AIRCRAFT (Continued from page 1)

Many of the Arrow scale models were launched from a finger of land near the Sandbanks Provincial Park, south of Picton.

It was here, at Point Petre, that nine of the 6 foot wide, 10 foot long, 750 pound scale models were mounted on rockets and launched into the skies over Lake Ontario. Information on the flight was communicated via electronic telemetry to researchers on the ground. When the rocket's fuel ran out, the planes glided into the deep icy waters where they remain today.

The group plans to continue their search for these rare prototype aircraft in the spring. Future projects for Ocean Scan include a contract to survey a 160 hectare site in Lake Ontario. Ocean Scan can be reached at (613) 968-3231. *JWF*

SINGAPORE FIRM USES SSS-100K TO FIND ANCIENT SHIPWRECKS

Singapore based Archaeological Salvage and Engineering has purchased the SSS-100K side scan sonar for wreck hunting, salvage operations, and seafloor mapping. Company representative, Australian Michael Flecker, came to the US to visit Fishers factory and see a demonstration of the system. Mike has been actively involved in searching for modern and ancient shipwrecks in Asian waters for over 11 years. He has plenty of experience using side scan, having worked with Klein, EG&G, and Wesmar systems. The company has recently located two wrecks with Ming Dynasty porcelain on board valued at over 5 million dollars.

Mike knew what he was looking for in a side scan. He wanted higher resolution than the low cost monitor based systems could provide, but a system more economical than the military spec thermal printer based systems available.

"If Fishers system could do what they said it would, provide high resolution printouts, I knew this was the side scan system I was looking for", Mike said.

After an afternoon on the water the SSS-100K, Mike was thoroughly satisfied the system would do the job for him. A variety of different targets were scanned including debris fields, changing bottom contours, pilings, and rocky areas. "Individual 12 inch dia rocks were clearly identifiable even in the 50m range".



DEPLOYING SIDE SCAN TOWFISH

"I am truly impressed with the performance of this system", Mike said at the end of the day. "I didn't think I would find a low cost side scan which could give this kind of resolution."

The next day Mike left for Singapore with his new SSS-100K side scan. Two weeks later he faxed, "We are getting outstanding results with the SSS-100K. The printouts clearly show even small details on the ocean bottom", an essential feature for locating centuries old wrecks covered with sand.

The company has several wreck hunting projects currently planned for their side scan in the South China Sea. One of their primary targets will be the shipwrecks of early Portuguese explorers to the region. *JWF*

INTERNATIONAL NEWS

.....The Royal Institute of Technology for Naval Architecture, Dept of Vehicle Engineering in Stockholm, Sweden has purchased a SeaLion ROV system with color Pal camera for use in their program.

.....Forschungsverbund Berlin E.V. in Berlin, Germany is using Fishers DHC-1 diver held camera system with Pal format camera for their u/w video inspections.

.....Germany's Max-Planck Institute has purchased a Pulse 8X for field survey work.

.....Promociones J.A.G. y Asociados in Caracas, Venezuela is successfully using the DV-2 deep dropped camera system for dam inspections. Company vice-president Jesus A. Gomez visited Fishers factory in Taunton, Ma to view the system before the purchase. "The camera is doing an excellent job for us", Gomez reports.

.....I.R.D.C. Exploration and Mining of Bangkok, Thailand have purchased the SSS-100K side scan sonar. The system will be used by a Thai government agency for off-shore survey work. I.R.D.C. is a member of the TEPARAK GROUP OF COMPANIES of Thailand dealing mainly with mineral exploration, mining development, and consultant services through out South East Asia and the Indo-China regions.

.....Offshore Survey and Engineering in Bremen, Germany has purchased a TOV-1 towed camera with color Pal camera. The system will be used for marine biological studies and other projects, reports spokesman Dr. Peter Holler.

.....PT. Tuban Oceanic Research and Recovery in Jakarta, Indonesia has purchased the Pulse 8X for recovery work.

.....Singapore office of international marine services company Greenbay Marine has purchased a SeaLion ROV for video survey operations.

.....S A Yacht & Marine in Alrode, South Africa has purchased a Pulse 8X detector for their recovery operations.

.....Hydro Quebec, the province's electric power supplier, in Montreal, Canada is using Fishers TOV-1 towed camera system to inspect their dam's turbine access openings.

.....Proton 3 magnetometer purchased by Grafinta Sociedad Anonima in Spain is being used by University of Zaragoza archaeology department in their Antarctica Expedition.

.....OWA, Ocean Works of Asia, in Oita-Ken, Japan have purchased the Pulse 12 boat towed metal detection system with three search coils. One of the primary applications for the system will be mine detection. *JWF*

NY DEP USES SEALION ROV TO FIND LEAK IN BIG APPLE'S WATER SUPPLY PIPELINE

New York's Department of Environmental Protection is using Fishers SeaLion ROV system, with 1000' depth rating, to help find leaks in pipes supplying water to New York City.

A group from the DEP is working with consultants Malcolm Purnie to try and isolate a leak problem at the Hudson River Pumping Station in Chelsea, NY. The pumping station is part of the aqueduct system which brings water from lakes in upstate New York to the Big Apple. The leak is occurring in an 800' deep elevator shaft at the station. The shaft was installed beside a section of the aqueduct where there is a steep vertical drop. The shaft is normally flooded with water. When maintenance of the pipes becomes necessary, huge pumps are used to remove the water from the 13' diameter, 800 foot deep shaft. Recently it was discovered a bad leak was preventing pump-out of the shaft. "The water was leaking into the shaft faster than the pumps could remove it", said DEP spokesman Paul Trusz. "We had to find the leak so that it could be repaired".

The SeaLion was specially rigged with extra weights and lowered into the shaft on a cable. The cable was marked with the depth increments. Paul and his group studied the blue print of the elevator shaft as the ROV descended. At regular intervals the descent was stopped and the SeaLion would use its thruster power to do a 360 degree video scan of the shaft walls.

The SeaLion descended to a depth of 750 feet and then proceeded to maneuver into a connecting horizontal tunnel about 4 foot in diameter. The ROV used its four powerful horizontal thrusters to "fly" 100 feet into the horizontal shaft to inspect a bulkhead which was the suspected leak area. When the SeaLion reached the bulkhead and did its video inspection, all were surprised to find there were no signs of a leak.

The SeaLion maneuvered back out of the hundred foot long side tunnel and back into the main shaft. Upon reaching the main shaft, the SeaLion continued its descent toward the bottom of the 800 foot deep shaft. Almost immediately the ROV experienced heavy turbulence in the water column. Silt and small debris swirled around the SeaLion like a cyclone. The leak area had been found!

JWF

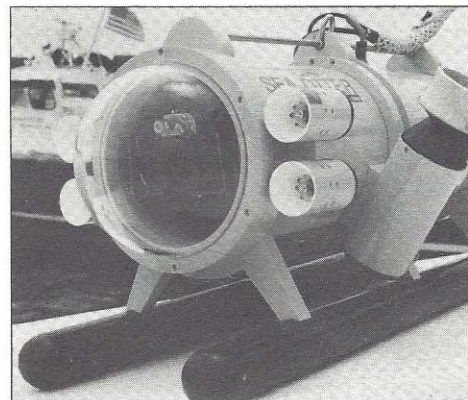
NEW JERSEY COMPANY USES METAL DETECTORS AND ROV TO SOLVE UNIQUE CUSTOMER PROBLEMS



COASTAL SERVICES' BILL GIFFORD SURVEYS SITE WITH PULSE 12 METAL DETECTOR MOUNTED TO AMPHIBIOUS ALL TERRAIN VEHICLE

Coastal Research Services of Pleasantville, NJ has an impressive equipment list that would be the envy of any serious treasure hunter or adventurer. The list includes an amphibious ATV, a Hover craft, a 100' research ship equipped with state of the art electronics and Fisher's SeaOtter ROV, Proton 3 magnetometer, and Pulse 12 metal detection system. The equipment is not the "expensive toys of rich boys". This equipment is the "tools of the trade" for principals Bill Gifford and Don DeMusz.

Coastal Research Services provides unique solutions to its customers environmental and inspection problems. One of the services Coastal offers is site inspection of ocean front properties using their amphibious All Terrain Vehicle equipped with the Pulse 12 metal detection system and the Proton 3 magnetometer. The ATV can cover any site whether above or below water and locate any metal objects such as storage tanks or drums, pipes or pipe lines, automobile parts, or just about any piece of metal junk there. "Using the Pulse 12 and Proton 3 together, I can determine if the target is ferrous or non ferrous metal", Bill reports.



SEAOTTER ROV IS USED FOR VIDEO INSPECTION SERVICES

The special metal locating ATV has also been instrumental in helping local police departments locate lost weapons which were involved in the commission of a crime.

Another service the company provides is the inspection of water tanks for a number of municipal water departments. "The SeaOtter works great for water tank inspection", reports operator Don DeMusz. "The ROV gives a beautiful picture in the clear water of the tank. We mounted a gauge in front of the camera so it gives some scale to the picture. Our customers can see exactly how big a crack or damaged area is. They love it when we provide them with a video tape of the inspection and they can see what the inside of the tank looks like as if they were swimming around in there themselves."

Other services Coastal provide include search and survey with the 100' R/V Lady Susan, or the "small" 50 foot, high speed search vessel. Other services include commercial diving services, custom fabrication in their fabrication shop, and transportation to hard to reach areas with their Hover craft. Coastal Services can be reached at (609) 646-6800.

JWF

FEDERAL AND STATE AGENCIES PERFORM UNDER-WATER SEARCHES

.....The Ohio Department of Natural Resources, Geological Survey Division is using Fishers TOV-1 towed camera system for survey work in the Ohio River. Spokesman Dale Liebenthal says "the TOV works great! It allows us to examine large tracts of underwater geology without having the limitations of scuba diving. It's the next best thing to being there."

.....US Department of Defense's Naval Surface Warfare Center Division has purchased a SeaOtter ROV system. When asked about intended applications for the system, a spokesman tells us, "That's classified information." Many US government agencies have purchased the SeaOtter system.

.....The Darling Marine Center at the University of Maine has purchased a DV-2 underwater camera system for video survey work on their project involving the infamous Penobscot Expedition of 1779, long considered the worst naval defeat in US history before Pearl Harbor.

.....USA Corps of Engineers in Detroit, MI has purchased the DV-1 dropped video system for use in their field survey work.

.....The US Navy in Pearl Harbor, HI has purchased Fishers diver held Pulse 8X metal detector and the Pulse 12 boat towed metal detector to locate ordnance.

.....New York Dept. of Environmental Conservation, Finfish and Crustaceans is using the DV-1 underwater drop camera system for their marine biological surveys.

.....The Marine Minerals Technology Center at the University of Hawaii has purchased the boat-towed Pulse 12 metal detector for research work.

.....The US Minerals Management Service in New Orleans, LA is responsible for the lease sites in the Gulf of Mexico where many of the major oil companies have oil drilling platforms. When a platform is removed from service the MMS must survey the site to insure all metal debris has been removed from the area. The agency has purchased a Pulse 8X for this application.

.....US Army Corps of Engineers in Confluence, PA has purchased the SeaOtter ROV for dam inspections.

.....National Park Service in Santa Fe, New Mexico is using its two Pulse 8X detectors for archaeological mapping and recovery work. "They work great!", says park service diver Matt Russell. **JWF**

LAW ENFORCEMENT AND DIVE RESCUE NEWS

.....New York City Police Dept. Scuba Team in Brooklyn, NY has purchased a SeaOtter ROV, a DV-1 drop video system, and several Pulse 8X detectors. The detectors are currently being used for evidence recovery. The camera systems are used for dive rescue operations and hull inspections in busy New York harbor.

.....Detective Myers of the North Charleston, South Carolina Police Dept. has been using the Pulse 8X for evidence recovery for some time. He was impressed recently when the 8X located an earring at a crime scene. The earring had been pulled from the ear of a rape suspect during the struggle.

.....National Park Service at New River Gorge National River in Glen Jean, West Virginia use their DV-1 drop video system for a variety of applications including rescue operations and weapons recovery. They are also using film footage shot by the camera in a promotional video for the park.

.....Thurston County Sheriffs Office dive team in Olympia, WA is using Fishers Pulse 8X for their weapons recovery operations. In training operations off nearby Fort Lewis, the team discovered how powerful their 8X really is. "We were picking up 223 casings buried 14 inches in the bottom, and we found a marijuana pipe about 2 feet deep" reported dive team member Jim Dunn.

.....Jack Shirk of Lebanon, Pennsylvania is a licensed underwater criminal investigator. "I've used my Pulse 8X dozens of times locating weapons for PA State Police and other law enforcement agencies."

.....Columbia County Emergency Management Agency in Evans, Georgia is using the TOV-1 towed camera for their dive rescue operations.

.....The Ministry of the Interior's police diving squad in the Republic of Czechoslovakia is using the Pulse 8X for their weapons recovery operations.

.....Connecticut State Police Emergency Services Unit in Colchester, CT has purchased a Pulse 8X for weapons recovery.

.....Det. Dahlen with North Bend Police Dept., North Bend, Oregon reports the department is successfully using a Pulse 6X for dive rescue and recovery operations.

.....Lee County Sheriffs Office in Fort Myers, FL is using their Pulse 8X for evidence recovery work.

.....Harrison Township Fire Dept. Dive Rescue Unit in Harrison Valley, PA purchased a Pulse 8X for evidence recovery. "Our first job for the detector was to find a handgun thrown into a local lake", said Chief David Jones. The divers had spent the previous three days groping the bottom of the lake trying to locate the weapon, without success. We received the detector and took it out into the lake in our first attempt at metal detecting. We recovered a bicycle, some home stereo components, part of a satellite receiver system, and the weapon! We're very pleased with the detector."

.....Tennessee Highway Patrol Diving Team spokesman Jim Grant reports, "the DV-1 dropped camera system we purchased works great. We've successfully used it to locate several drowning victims."

.....Charles County Dive Rescue in Waldorf, MD has purchased a Pulse 8X for weapons recovery work. "We had an opportunity to borrow a Pulse 8X from another department for a weapons recovery job last year. It worked great! We decided right then and there we had to have one of these for our unit", reported Chief William Porter.



SEARCHING WATERS EDGE WITH 8X

.....Nevada County Sheriff, William Jones, of Nevada City, CA has purchased a Pulse 6X for weapons recovery work.

.....Warrick, Rhode Island police have located another murder weapon using their Pulse 8X metal detector. A seventeen year old, Toll Gate High School junior was found beaten and stabbed on the shore of Gorton's Pond. The teenage girl, who was four months pregnant, was beaten with a metal instrument and stabbed with a knife. Police divers located the metal pipe in the pond shortly after the incident. **JWF**

TREASURE CORNER

.....Florida treasure hunter, John Sykes, has found a load of civil war era artifacts including a 1861 Confederate States half dollar valued at \$2,000 with his Pulse 8X.

.....Long time treasure hunter and Fisher equipment user, Krista Hanson of H & E Marine is now working a wreck site in the Jupiter, FL area, location of the famed 1715 shipwrecks. In the short time the group has been working, over 70 coins and other artifacts have been recovered with her Pulse 8X.

.....Neal Melton with the Diving Edge in Stateline, Nevada paid for his new Pulse 8X the first time he used it. He recovered a \$9,000 diamond ring for a visiting tourist. Since his initial find he's recovered a number of lost jewelry items including gold and silver rings, and a silver bracelet.



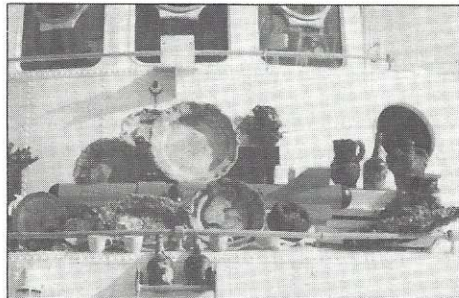
"KING" OF THE TREASURE HUNTERS, MEL FISHER

.....Internationally famous treasure hunter, Mel Fisher, has purchased a Pulse 12 boat towed metal detector with UA-2 altimeter option for his South American operations and a TOV-1 towed camera for his south Florida operations.

.....Steve Farmer is working with a group from the Barbados military to locate and recover shipwrecks in that country's coastal waters. Steve is using JWF's Proton 3 magnetometer and Pulse 8X detectors.

.....A group of well known treasure hunters including Paul Mathias (Polaris Imaging), Barry Clifford (located WHYDAH shipwreck), and Charlie Burnham are searching the frigid North Sea waters off Scotland for a shipwreck containing the personal fortune of England's King Charles I. Among the equipment being used in the search is Fishers Pulse 8X detectors. Keep watching the Discovery channel for more on this one.

.....Longtime treasure hunter and Fisher equipment user Mic O'Conner continues to recover coins and artifacts with his Pulse 8X. "I've used a lot of different detectors, and I haven't found one yet that beats the performance and reliability of my 8X." **JWF**



TREASURE RECOVERED!

UPDATE on the 1994 *Search Team News* article, **NEW ENGLAND TREASURE HUNTERS SEEK FAME AND FORTUNE**. The "eight guys from Maine" are now bringing up the loot.

The group is currently working on several wreck sites in Haitian waters in cooperation with the Haitian government. Their base of operations is a 95 foot renovated Canadian Coast Guard cutter renamed the, "R/V Silver Seas".

The salvors are presently recovering artifacts from a site they have named "The Porcelain Wreck" because of the large number of porcelain pieces being recovered. Artifacts recovered include cups, plates, platters and pitchers. The items are dated from the late 1600's to early 1700's.

"We believe the wreck is a French merchant ship", says crew member Greg Brooks. "The crew is very excited about our finds. It looks like we have many years of work and adventure ahead of us in Haiti. We are looking to add a second salvage vessel to the company in the very near future to expedite the recovery of artifacts."

Below is a photo of the crew and artifacts recovered with Fishers Pulse 12 boat towed metal detector and the diver held Pulse 8X detector.

For more information on the groups continued efforts you can write them at Silver Bars L.P., P.O. Box 161, Westbrook, ME 04098. **JWF**



"R/V SILVER SEAS" CREW WITH PULSE 12 AND TREASURE FOUND

FLORIDA CO. USES SIDE SCAN TO SEARCH FOR SHIPWRECKS

Harry Andrews of Moorings, Inc in Carrabelle, Florida has the equipment that is the "object of desire" of any serious wreck hunter, a side scan sonar. Harry purchased his SSS-100K side scan from Fishers earlier this year and has been busy ever since. Of course, some of what he was busy with was the clean up from the latest hurricane. But despite the tough hurricane season, Harry has managed to get in some serious side scan time.

Mr. Andrews is the owner/ operator of Moorings, a marina-resort complex in this quiet Florida panhandle community. Like all successful business people, Harry is always looking for new growth opportunities for his business. One of the growth opportunities Harry explored was the purchase of a side scan sonar. Purchasing the SSS-100K seemed an ideal choice because it allowed him to combine his vocation with his avocation, wreck hunting in the Gulf.

Harry provides his customers with complete side scan survey capabilities. His service includes the boat, the side scan, the side scan operator, and the boat operator. All this is provided at a rate which is below what some of his customers were previously paying just to rent another companies side scan sonar, with no boat and no operator. "A lot of people call me", Harry reports.

Recently the company completed an underwater survey for an Alabama gas company for the purpose of pipeline placement. The contractor, who had personally used several other side scan models, was impressed with the print outs Harry was able to provide, and thought the cost of his service was, "very low cost".

"I have the capabilities to do sonar surveys to depths of over 300 feet. My side scan is attached to a stabilizing downrigger which allows me to run the towfish down deep, while stabilizing the fish for beautiful printouts".

Harry likes the fact his SSS-100K has the ability to print out records on film or paper. "Some customers insist on the film, which is no problem, but I can use the more economical paper on my personal projects."

Future projects include a 7 day contract surveying sponge beds and "cruising the Gulf looking for anything sticking up off the bottom."

Harry can be contacted at Moorings, U.S. Hwy 98, P.O. Box M, Carrabelle, FL 32322, PH (904) 697-2800. **JWF**

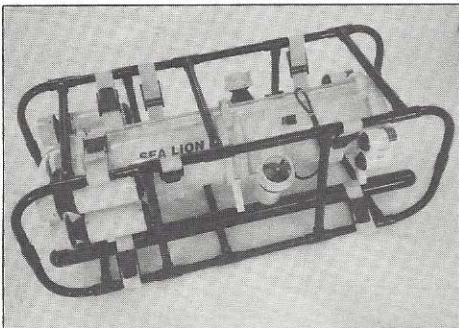
NEW PRODUCTS!

SEALION ROV AVAILABLE WITH 1000' DEPTH RATING

J.W. Fishers SeaLion ROV system is now available with an optional 1000 foot depth rating. This low cost, yet powerful ROV is capable of working at 1000 foot depths, penetrating pipes up to 1000 feet in length, or working in 3 to 4 knot currents. The standard SeaLion system has a 500' depth rating.

SSS-100K SIDE SCAN AVAILABLE WITH ANALOG OUTPUT

Fishers SSS-100K side scan sonar, the only low cost side scan on the market which comes standard with a 17" wide high resolution thermal printer, is now available with analog output data port. This feature allows the SSS-100K to interface with numerous software programs such as the Melian II Search System.



"CRASH CAGE" AVAILABLE FOR SEAOTTER AND SEALION

A Crash Cage is now available for Fishers SeaOtter and SeaLion ROV systems which surrounds the vehicle providing 360 degree protection. The high impact PVC tubular frame can prevent damage to the ROV during operations, deployment, and storage. The PVC tubing is filled with epoxy which adds rigidity and negative buoyancy. The corrosion proof frame is attached to the ROV with heavy duty nylon belts with quick release plastic buckles. The belts can be quickly and easily detached to remove the frame for "tight quarters" operations. The cage reduces the potential of snagging or hanging up the ROV when working in hazardous environments. The crash cage can be purchased as an option for any new SeaOtter or SeaLion model, or can be retrofit to older models. The crash cage is only \$595.



LOW COST MANIPULATOR ARM

A single function manipulator arm is now available for Fishers SeaOtter and SeaLion ROV systems. The compact arm can be mounted on the ROV with the claw opening horizontally or vertically. The arm is made of corrosion-proof PVC. A servo motor is used to open the spring loaded claw. Applications for the manipulator arm include picking up lightweight objects from the ocean floor, attaching lines to objects on the bottom, and deployment or retrieval of acoustic beacons. The arm is available on any new SeaOtter or SeaLion system, or can be retrofit to any system presently in the field. The manipulator arm option is priced at only \$3995.

TOV-1 TOWED CAMERA AVAILABLE WITH 500' DEPTH

Fishers very popular TOV-1 towed camera system is now available in a 500' depth rated version. The standard TOV has a depth rating of 250'. For applications where tow depths greater than 250 feet, and up to 500 feet, are required, the deep tow version of the TOV-1 is ideal.

J.W. FISHERS MOVES TO A NEW LARGER FACILITY

Yes, we've moved to a new larger facility which is only 3 miles from our old facility. The new building gives us triple the space of the old building. More space is required to produce the larger products on the line, such as side scan sonars and ROV systems. The new building has an indoor pool to permit on site testing and demonstration of ROVs and other equipment. Our new address is listed below.

BOAT-TOWED METAL DETECTORS INTERFACE WITH PCs'

Fishers Pulse 10 and Pulse 12 boat-towed metal detectors are available with optional RS232 output. The RS232 option converts the Pulse 10 and 12's analog readings to a digital format which can be downloaded to a computer. Software is required to manipulate the data in the computer.



If you have a story you would like to share, send us a photo and write up or call Chris or Jack at (800) 822-4744 or (508) 822-7330. FAX (508) 880-8949

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