

## Tour of Whites Manufacturing

By: John Middleton



Vacuum cutting table on which a suit can be cut in three minutes.

It wasn't the Victoria UASBC chapter's usual third-Wednesday-of-the-month meeting time or place, but it was the time and place Frank White Jr. kindly made himself available to give UASBC members an inside look at how the iconic Whites family business makes drysuits! It was a warm sunny evening on Tuesday, 18 June when nine UASBC members gathered in the parking lot of the large manufacturing warehouse of Whites Drywear Ltd. located at 2820 Kirkpatrick Crescent, in Saanichton. Whites was founded by Frank White Sr. in 1958 shortly after opening Victoria's first dive shop in 1956. It became not only the first wetsuit manufacturer in Canada but also the first drysuit manufacturer in North America. Jacques-Yves Cousteau and Emile Gagnon had invented the first self-contained underwater breathing apparatus (SCUBA) in 1942 and from that the Aqualung company was formed. In 2010 Aqualung saw an opportunity to expand into drysuits and bought Whites highly successful operation on Vancouver Island. In 2023 Frank White Jr. re-acquired the company from Aqualung to preserve the family's legacy business. The first thing you notice when you enter the building is the not unpleasant smell of the vulcanized rubber and trilaminar fabric used in the manufacture of the drysuits.

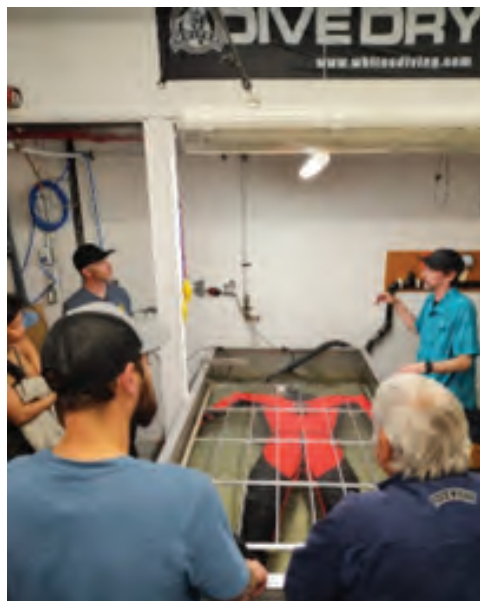
The first step in manufacture uses an automated cutter to cut anywhere from 15 to 40 patterned pieces from a large sheet of material.



Welding the seams of a suit using a 600 degree welder.

These pieces are then stitched together at sewing stations before moving to a seam taping station where 600 degree “welders” heat the tape and cover the seam to create a waterproof seal. Neck and wrist seals along with zippers and a range of options such as gear pockets and in some cases, pee-valves, are added to finish off the suit.

Whites drysuits set the standard for cold water diving and undergo relentless testing in pressure tanks at the plant and in the field where commercial dive company Soliton puts them through the rigors of real-life field use. Whites make suits for the military, public safety, coast guard and rescue teams as well as drysuits for recreational and professional divers. Elite combat forces from the US, France, Britain and Israel use their suits. Their most popular suit for recreational use is the Fusion style suit which was a huge leap forward in providing freedom and mobility when Whites first developed it in 2006.



Pressure testing a finished suit for leaks.

Frank finished off the tour by showcasing some of the more esoteric products which they make for the military including a weapons drybag which US Navy Seals use when they are required to do underwater shore approaches, often from submarines. The bags are single-use-only as once the weapon is fired it blows out the end of the waterproof bag. After a couple of hours, we all came to appreciate how much goes into making that important piece of dive gear we all use to keep warm and comfortable in the cold waters of the Pacific Northwest. A big thanks to Frank White Jr. for taking time out of his busy schedule to give us such an informative and entertaining insight into how a drysuit is made.

# Re-engaging with the Province

By: Ewan Anderson

On Thursday, July 18, Jacques Marc and I met with the BC Heritage Branch and the Archaeology Branch to get reacquainted with government staff and generate some interest in the Society's work from both organisations. The Heritage Branch is responsible for the conservation of designated historic places throughout BC and supports or facilitates a wide range of initiatives through partnerships with organisations like the UASBC. The Archaeology Branch is primarily a regulatory agency responsible for the issuance of Heritage Conservation Act permits which authorize studies of and alterations to automatically protected archaeological sites - a group that includes all shipwrecks and aircraft wrecks that have been abandoned for more than 2 years and any site pre-dating A.D. 1846 (primarily Indigenous cultural heritage sites). The Archaeology Branch also oversees all standards for documenting archaeological sites and maintaining records for over 62,000 sites documented in BC.

Attendance at the meeting was fantastic: a dozen staff joined us in person at the Heritage Branch office on Jutland Road; and another dozen tuned-in online. Over a 90-minute presentation we showed the Branches who we are, what we do, what we've accomplished and what we have planned for the future. Staff from the Heritage Branch had some excellent suggestions for public engagement and further development of online shipwrecks maps. We hope to continue conversations with them about partnerships involving statements of significance for underwater archaeological sites and contributing to the Heritage Branch's new online map of historic sites (coming soon!).

Archaeology Branch staff encouraged us to continue submitting new site records and updates to existing shipwrecks records; and they sent us the complete list of existing shipwrecks records, so we know our starting point. We also discussed potential HCA permitting and conservation efforts needed to recover an artifact from the Hampden bomber wreck in Saanich Inlet, which the BC Aviation Museum in Sidney has requested for public display. We'll also continue the conversation about potential updates to the Shipwreck Recording Form (to meet current data entry standards) and a review of forms for recording aircraft wrecks.

Overall, we've made some great connections and put some faces to names. We're optimistic that this is just the beginning of productive relationships with the Province.

Please refer to  
[WWW.UASBC.COM](http://WWW.UASBC.COM) for latest Updates!

## UAD course

### **Saturday, September 28 & Sunday 29th Underwater Archaeology for Divers**

The UAD course is a 20-hour long course and consists of 8 modules online, a pool session and an open water dive. Graduates receive a Certificate of Achievement for successfully completing the course.

The cost per person is \$250 for UASBC members and \$290 for non-members.

**To register call Jacques (250) 474-5797 or email: [jmarc@shaw.ca](mailto:jmarc@shaw.ca)**

## UASBC Diver Explorations Fall Schedule 2024

### **Sunday, August 25th Search for John Rosenfeld**

We will be heading out to continue our search for the sailing ship John Rosenfeld which sank off Tumbo Island in 1886. The UASBC visited this site in August 2009 and found several small pieces of wreckage scattered around the reef. We want to see if we can find more parts. After checking out Tumbo Island Reef we will then do a dive on the barque Zephyr lost off Mayne Island in 1872 or the G.B. Church artificial reef depending on weather. We will depart from Tulista boat launch in Sidney.

Maximum 10 divers. Cost \$100.00 per person.

**Call Jacques (250) 474-5797 or email: [jmarc@shaw.ca](mailto:jmarc@shaw.ca)**

### **Saturday, September 21st for Fanny Wreck**

We will dive on the wreck of the Fanny lost off Discovery Island in 1868. This will be a monitoring photography dive. We will do two dives on site as the wreck lies in 3 separate pieces. We will depart from Tulista Boat ramp in Sidney.

Charter cost \$100.00 per person. Maximum 10 divers.

There may be some light current. All diver levels are welcome.

**Call Jacques (250) 474-5797 or email: [jmarc@shaw.ca](mailto:jmarc@shaw.ca)**

### **Saturday, October 5th for Idaho Wreck**

On this trip we will visit the Idaho wreck on Race Rocks and the Twenty First of May in Pedder Bay. The Idaho was a steamer that grounded on Rosedale Reef in 1889. It eventually drifted off leaving its internal equipment on site. The Twenty First of May was a sailing ship that grounded in Pedder Bay in 1880. The Idaho will be an exploration dive. We hope to trim some of the kelp on the Twenty First of May to try relocating several artefacts. There may be some current during the first dive, but we will be using a live boat for pickup.

Cost: \$100.00 per person. Limit 8 divers.

**Call Jacques (250) 474-5797 or email: [jmarc@shaw.ca](mailto:jmarc@shaw.ca)**

### **Saturday, November 9th Hampden 5433 Plane Wreck**

In December 2022 we did our first dive on a recently discovered Hadley Page Hampden bomber wreck in Saanich Inlet. We have since surveyed the site and identified the wreck as Hampden P5433. It crashed on a training run killing all 4 crew members. The plan is to place a memorial plaque on the site for Remembrance Day, to pay tribute to the crew lost.

We will depart from Tulista Boat Launch in Sidney.

Charter cost \$100 per person. Limit 7 divers.

**Call Jacques (250) 474-5797 or email: [jmarc@shaw.ca](mailto:jmarc@shaw.ca)**

# Victoria Explorers

## Fall Speaker Series Schedule 2024

Meeting Time 7 PM at the Maritime Museum of BC  
744 Douglas Street, Victoria



### **September 18th The Admiral's Telescope, A Story of Marine Archaeology and Global Maritime History**

**Speaker Tom Bown** will provide a talk on a telescope recovered from Esquimalt Harbour during the Navy dredging project in 2020. Turns out there is quite a story behind owner Admiral Chambers. Tom is a research associate at the RBCM and a director with the Archeological Society of BC.



### **October 16th Ocean Aid**

**Speaker Andrew Polanyi of Ocean Aid** will talk about their work in linking Artificial Intelligence (AI) with multibeam and side scan sonar to detect underwater objects in real-time. Currently they are using this technology in detecting shipwrecks, ghost fishing gear and in search and rescue, to name just a few applications. Andrew Polanyi is a software developer and executive director of Ocean Aid which pairs sonar technology with AI. Their company was rated one of "The 10 to Watch" by Douglas magazine.



### **November 20th Sir Francis Drake on the West Coast Speaker TBA**



# UASBC Presidents' August 2024 message

*by: Keith Bossons*

*Hello Everyone,*

I hope everyone has been enjoying the pleasant summer weather.

Quit a few things have happened since my last message. We ran a very successful Shipwrecks Conference in Victoria this past April as well as completing the spring dive schedule.

Bill Meekel, our Interior Chapter Director has an article in this edition summarizing some of the exploration activities completed this spring in the Interior. Victoria Chapter Director, John Middleton contributed an article on the Victoria Chapter visit to Whites Manufacturing on June 18 to get a firsthand look at how dry suites are made.

More recently, in July our Exploration Director, Jacques Marc and Communications Director, Ewan Anderson met with representatives from the BC Heritage Branch and the Archaeology Branch to update them on UASBC activities and discuss opportunities for working together. More details of this meeting are pro-vided elsewhere in this edition of the Foghorn.

The fall dive schedule is out and Jacques has put together an exciting plan for fall dive trips. Details are provided elsewhere in this edition of the Foghorn and will be posted on the website. Check it out and sign up.

*All the best*  
**Keith Bossons**  
**UASBC President**  
keith@Bossons.ca)

Please refer to  
[WWW.UASBC.COM](http://WWW.UASBC.COM) for latest Updates!

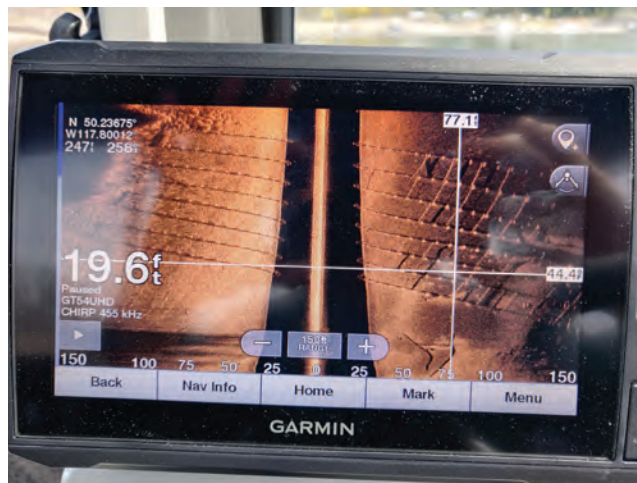
# UASBC KOOTENAY EXPEDITION - APRIL 2024

By: Bill Meekel, Director - UASBC Southern Interior

The April 2024 expedition to the Kootenays had several objectives including meeting new UASBC members, finding out more about reported – but unrecorded – wreck sites, using sidescan sonar to explore for wreck sites and doing some wreck diving.

On April 21, we assembled a team at Shelter Bay (Upper Arrow Lake) where we discussed the possible location of the SS Minto. We then went out onto the lake to demonstrate the UASBC sidescan and my boat's chart plotter. However, scanning conditions were poor due to the very rough conditions on the lake and it was decided to cease that activity. It was a slow and bumpy ride back to shore. Nevertheless, we enjoyed a good discussion about locating some of the other reported wrecks at the north end of Upper Arrow Lake and we agreed to plan some further exploration work.

After wrapping up the searches in Upper Arrow Lake, I headed for Nakusp, which was the site of an important shipbuilding and repair facility for CPR in the late 1800s. There are still remnants of this activity on the bottom of the lake including the shipways, which are underwater for most of the year but sometimes surface during low water.



Sonar Showing CPR shipways at Nakusp.

Next, I visited a retired tugboat captain who had worked on the Arrow Lakes moving log booms to the sawmill at Castlegar. He told me about a sunken barge in Slokan Lake that he used to swim from as a youngster, so I headed to Slokan Lake to search for it. The barge, which was reported to be a transfer barge used by the local sawmills for moving lumber, measures about 15 m wide x 20 m long and is located at the north-west corner of the lake. It has been sunk for about 70 years and it appears the decking has collapsed. I will need to return to collect underwater photos and more detailed measurements of the wreck site.



Sonar showing Slokan Lake Barge

Just south of the barge site, a sternwheeler boiler sits on the western shore of Slocan Lake. The boiler is reported to have been used to heat a large bunkhouse that once existed in the area. I scanned the bottom offshore of the boiler but did not pick up any targets.



Slocan Lake Boiler

On 25 April, I met up with another UASBC member and we dove at the location of the Silverton Ore Cars on the east shore of Slocan Lake. The visibility was very good, and the site is still mostly stable and has not changed much in the last few years. However, some boxcars have lost their roofs, and the walls are at risk of collapsing.

We also dove in Rosebery Bay which is the site of the front half of the sternwheeler SS Slocan. The wreck's condition has not changed very much since the site was last visited. The bow and hull of the vessel are still very impressive as they come into view, rising from the bottom of the lake. We also dove on a large transfer barge which is located at the entrance to Rosebery Bay.



The deck of the SS Slocan



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