

ARSBC

Sea King Project

HALKETT BAY, BC

The Artificial Reef Society of British Columbia (ARSBC) is proposing to build upon the success of the Annapolis artificial reef and its marine biodiversity study by enhancing the reef with a replica of the iconic CH-124 Sea King helicopter. The installation of the helicopter replica on the flight deck of the former HMCS Annapolis will amplify marine recruitment opportunities, support new citizen science experiments, and stimulate dive research and tourism in Halkett Bay Provincial Marine Park on Gambier Island.

BACKGROUND Since the April 2015 sinking of the former HMCS Annapolis, the ship has performed admirably by providing complex habitat to support species abundance and diversity in an area damaged by decades of log booming. Video footage by volunteer divers has contributed significantly to ARSBC's five-year citizen science



ABOVE Quillback rockfish CENTRE Ling cod



© Dirk De keersmaecker

monitoring program, known as Project ABIS (Annapolis Biodiversity Index Study).

The study demonstrates the efficacy of carefully planned long term artificial reef development. A summary report of the ABIS findings can be found on the ARSBC website Projects page; additional details can be found on the OceanWise Research Institute website in their 2020

review of the marine ecological health of Howe Sound. The Ocean Wise report contains the abridged data collected by the ABIS project between 2015 and 2020, which has been verified in cooperation with the Vancouver Aquarium marine taxonomy specialist.

AIRFRAME CONCEPT The airframe of the Sea King replica will afford a pinnacle adaptation rising from the flat surface of the flight deck. It will be constructed to full scale in a skeletal design using benign steel bars, allowing current to flow freely and thus create additional habitat opportunities. Divers will be able to swim through the 50-foot fuselage from the port side crew door to the starboard side rescue door, and take advantage of cockpit photo opportunities.

(continues overleaf)

BELOW Concept drawing of the full scale replica airframe of the Sea King helicopter. The fuselage measures 48 ft by 9 ft, and the entire structure from tail probe rotor to main rotor tip is 69 ft. Created by Apex Structural Design, of Red Deer, Alberta.





RCN Photo (1970)

LEFT Annapolis and Sea King prior to retrofitting the stern. The Sea King was officially retired from service on December 31, 2018, as the RCAF transitioned to the new CH-148 Cyclone maritime helicopter. The Canadian Armed Forces paid tribute to the Sea King in a parade held in 2018 in Victoria, British Columbia.

PARTNERS The ARSBC is working in partnership with Fisheries and Oceans Pacific Science Enterprise Centre (PSEC), building on the data collected through the ABIS Project, with new studies being planned by PSEC and Artificial Reef Society managers.

Installing a full-size replica helicopter – 16 feet high, 69 feet long, with five rotor blades – on the flight deck where the aircraft originally operated, is a symbolic tribute to all who served in the Royal Canadian Airforce aboard the former HMCS Annapolis. This

innovation represents our tenth Society project, which will complement an already-existing reef site.

TIMELINE The project is subject to final government approvals and remains a work in process. Check for updates on the Bulletin Board page at our website, www.artificialreefsocietybc.ca.

SUPPORTERS

- Apex Structural Design Ltd, Red Deer AB
- Burnco Rock Products, Burnaby BC
- Crosby Marine Film Services, Gibsons BC
- Department of Fisheries and Oceans – Pacific Centre Enterprise Centre, North Vancouver BC
- George Third & Son, Burnaby BC
- International Marine Transport Inc, Abbotsford BC
- Noble Crane, Vancouver BC
- Rotormaxx, Parksville BC
- Squamish Nation
- Tsleil-Waututh Nation

The SEA KING Joins ARSBC's Reefs

SINCE 1991 the Artificial Reef Society has sunk eight ships and one Boeing 737 off BC's west coast. Our tenth reef project will install a replica Sea King helicopter airframe on the flight deck of the former HMCS Annapolis in Halkett Bay Marine Park (#8 on map).



- | | | |
|------------------|---------------------|-------------------|
| 1 GB Church 1991 | 4 Columbia 1996 | 7 Boeing 737 2006 |
| 2 Chaudière 1992 | 5 Saskatchewan 1997 | 8 Annapolis 2015 |
| 3 Mackenzie 1995 | 6 Cape Breton 2001 | 9 YOGN-82 2018 |

ASSOCIATES

- SeaProof TV, Campbell River BC
- Lightstone Video, Surrey BC
- Neil McDaniel Photography, Vancouver BC

FOR MORE INFORMATION

Please contact Kiersten Enemark, ARSBC Communications

EMAIL comms@artificialreefsocietybc.ca

WEB artificialreefsocietybc.ca

Facebook [@artificialreefsocietybc](https://www.facebook.com/artificialreefsocietybc)



The Artificial Reef Society of British Columbia (ARSBC) is a registered non-profit society based in Vancouver, British Columbia. The Society has an experienced team of specialists who consult on the creation of long term stable marine habitats using ethical means of vessel preparation. As well as protecting environmentally and historically sensitive marine habitats, these new reefs also provide opportunities for eco-adventure scuba diving tourism.



ABOVE Inaugural dive to Naval Air Station Annapolis