

This **biography of RCN (ret) Surgeon Captain Derek John Kidd OMM DSC CD** was compiled and presented at the CNDA Reunion in Victoria British Columbia on 12 September 2015 by Robert “Red” Larsen in recognition of Dr. Kidd’s many accomplishments in the field of deep diving and safe decompression procedures.

Ladies and Gentlemen, tonight I am greatly honoured to introduce a very distinguished guest who is here with us tonight, Surgeon Captain (Navy) Derek John Kidd OMM DSC CD. With the help of his good wife, Patricia Kidd, his own recollections and my limited association with Dr. Kidd, I will attempt to enlighten you of the accomplishments of this very dedicated individual, and of his important contributions to our diving community.

Dr. Kidd was born in the Lambeth borough of London, England on 5 July 1922. He got a taste of diving at the rather early age of about 3 years old! Living in Cambridge, he wandered away from home one day and realized – no doubt with glee – his proximity to a quite busy body of water, the Cam River. By accident or design, he ended immersed in it, and was fished out rather ignominiously with a boat hook. Accidental? Who knows? Most likely the beginning of a life-long interest in using himself as a guinea pig for his own experiments! Later in life, he at least figured out that he would last much longer if he was properly equipped.

At the age of 17 years he joined the Royal Navy as an Ordinary Seaman in September 1939, at the start of World War Two, and after serving in HMS SANDWICH in the China Seas, he was drafted to Portsmouth, England in early 1940. Here he was assigned as the Coxswain of a launch, part of a flotilla that helped rescue British and Allied troops off the beaches of France at the Battle of Dunkerque in May 1940. Shortly afterwards he was posted ashore as an Upper Yardsman – this marked him as a future Commissioned Officer prospect. Because he was rated in the top 5% of his group, he was placed on a special navigation course for Officers destined for service in anti-submarine vessels. Thereafter, during the remainder of World War Two, he served much of his time as an anti-submarine Officer aboard the British Destroyer HMS WANDERER escorting Arctic Convoys and the support groups who aided the D-Day landings. This was in addition to many other successful action related forays. In reviewing HMS WANDERER’s wartime records, it was noted she had one of the most successful submarine “kill” records of that war. Due to his tracking skills in one particular sub sinking chase, Dr. Kidd was awarded the Distinguished Service Cross. He was also Mentioned in Dispatches (MiD) on two other separate occasions. It was at some time during this period that he recalls taking a diving course in Portsmouth. This probably stimulated his interest in researching the limits of underwater activity, however, until he immigrated to Canada, those opportunities were unavailable. From 1947 to 1954, Dr. Kidd attended the Charing Cross Hospital in London, England undergoing his medical training via a Government sponsored/assisted program as the result of his wartime service in the RN. He did his PhD research in the area of artificial acclimatization to heat and cold, and as his good wife suggests, it was a remarkably perceptive choice, given the present effects of climate change today. His wife Patricia says – who knows, he may yet be employable!

Turning down two offers of lucrative private practice in England, Dr. Kidd joined the Royal Canadian Navy in 1954. Alas, his hopes of following in the footsteps of the notorious “Captain Kidd”, his earlier pirate namesake, were dashed by his appointment to the RCN Arctic Icebreaker HMCS LABRADOR, in

which he sailed to the Arctic, where there was very little plunder to be had. He served as the ship's Doctor for both trips that HMCS LABRADOR made through the Northwest Passage, the first of which involved circumnavigating North America. Whilst in the Arctic, he deployed experimental diving suits designed specifically for use in Arctic waters. Among his awards and honours, he remembers with particular pleasure the awarding by Chief Petty Officer Clearance Diver James "Tug" Wilson of the "Certificate of Knee Deep Diving" after an adventurous dive in Bedford Basin in Halifax Harbour. Unfortunately, as we all know, Tug Wilson has just passed away on 31 August 2015. I was in fact just trying to call Tug on the night of 1 September 2015, to obtain a little more detail and background of this Knee Deep Diving award but, sadly, that story is now lost to the ages! *However, in light of this prestigious award from Tug Wilson*, Dr. Kidd was seconded in the early 1960's to the Chairman of the Defence Research Board (DRB), specifically to assess the current state of deep diving, then in practice. After visiting several countries around the globe, including a lengthy stint at the Royal Navy's Experimental Diving Unit in the United Kingdom, he presented his report and, on his recommendation, Canada decided to form its own experimental organization to pursue diving research. After much discussion, "the powers that be" (Ottawa) decided that the defence and Civil Institute of Environmental Medicine (DCIEM) in Toronto should be the location for an experimental diving program. Although far from Canada's coasts, the availability of many research scientists, a large local manufacturing base, a military environment, and the fact the Institute of Aviation Medicine (IAM) was already located there, and were investigating the opposite end of the "stick", so to say, by studying the reduction of pressure for aviation matters, versus the Divers requirement to study increases of pressure for diving related matters. These particulars probably influenced the rationale behind this decision. Dr. Kidd was then delegated to be the leader of this Experimental Diving Unit, which ultimately led to his meeting RCAF Wing Commander Royston "Roy" Stubbs, a superb physicist and former Pilot already attached to IAM, who also was interested in pressure related aviation problems.

It was about this time that Dr. Kidd decided that diving decompression was the main obstacle to overcome. He decided then that the solution had to be an analogue computer. It would be designed to detect changes in ambient pressure on a continuous basis, in order to provide an analysis of the significance in relation to safety for the Diver. In essence it would provide the Diver with a constant safe decompression ascent path. Then, in conjunction with Roy Stubbs input, they designed, built and patented their initial model of a Pneumatic Analog Decompression Computer! I am privileged to have here in my possession, a very technical and interesting scientific history paper put together by Phil Nuytten of Can-Dive Services Ltd. which details Dr. Kidd's and Roy Stubb's work on the decompression computer. It makes for extremely knowledgeable reading. Over the years of this development, after many diving trials, and eventual conversions via modern day technology and electronics, has resulted in the modern day Diver's decompression computer which is now accepted throughout the world as a common item in our diving toolbox, along with compatible decompression tables that have been developed in parallel. Originally, most of the testing was done at the Toronto General Hospital's hyperbaric chamber facility, often during the midnight hours, when it was available. To facilitate the required testing of the decompression computer and other diving related equipment, Dr. Kidd was influential in having a 350 ft rated decompression chamber facility, including a water filled pressure chamber to be built at DCIEM. This facility is presently just reaching the end of its life span, but at that time provided an on-site capability for the required testing and research. I am sure there are many Divers here tonight, who were on the East or West Coasts during the late 1960's and early 1970's, who participated in the evaluation of several of the various computer models during deep water tasking, official trials, and other such evaluations. Those important results helped us to get to the final product, and to where we are today in the field of diving decompression computers.

In the late 1960's, Dr. Kidd and his team developed a one man transportable decompression chamber that could be carried in a variety of transports, in order to provide continuous treatment for a Diver suffering decompression sickness. He was also involved in the simultaneous development of a larger chamber that provided a capability for attaching the portable unit, and transferring the patient to a larger chamber, while both chambers were still under pressure. Of course, this procedure is very commonplace today. During the 1960's & 1970's, Dr. Kidd was our go-to guy when decompression sickness treatments turned sour, and we needed expert guidance and knowledgeable consultation. I personally was very relieved on a number of life endangerment decompression sickness treatment occasions, when Dr. Kidd gracefully appeared on the scene to take charge of a difficult situation, providing direction and support. By this time he was a full blown three ring Navy Commander, and was always the most confident and easiest person to get along with, thus providing confidence in all of us. For that, I would like to personally thank him at this time. As an aside, I will inform you that Dr. Kidd was very respectfully called "Dr. Pete Kidd" by most of us who worked with him. I do not know the background of where the name Pete originated, but we all felt comfortable calling him that, and we appreciated his "down to earth" approach. *NOTE: see footnote about his name Pete at the end.*

Dr. Kidd retired from the RCN in 1979, serving thereafter for many years as the main authority then available in Canada about diving accidents. He also was heavily involved with the Undersea & Hyperbaric Medical Society (UHMS), from whom he received their "Lifetime Achievement Award" in 2003. By 1985 he had swapped the salty sea for a sea of rhododendrons, planting 365 by last count in his Moss Street garden here in Victoria BC. In case you are wondering, according to Patricia no, they do NOT look after themselves, regardless of what the salesman tell you! Dr. Kidd's first wife, Vera passed away in 1981, and he married Patricia in 1985. Both he and Patricia have been blessed with two sons (yes, the first was born the year he became a senior citizen!), both of whom stay well away from deep water. In conclusion, all of your fraternal brothers and Veterans in the Canadian Naval Divers Association thank you and fully recognize you as being first among the first, for your contributions to our Divers safety in the Past, the Present and to all Divers in the Future.

Bravo Zulu RCN Surgeon Captain Derek John Kidd – now 93 years young!!!!

Footnote:- Dr. Kidd's wife, Patricia provided us with the clarification of how he came to be called "Pete". While growing up with his pals in England, they used to play "Sea Captains", much like how we in Canada played "Cowboys and Indians". Apparently Dr. Kidd always played "Piet Hein", the great Dutch Admiral and hero during the 17th century. Upon joining the Royal Navy along with his buddies, they thought it was a great joke to continue calling him Piet, and it has stuck with him ever since. According to Patricia, she always calls him Piet, even if she's mad at him! On checking with a Dutch born Legionnaire regarding how to pronounce "Piet", he immediately said "Pete". So there we have the background of why Dr. Derek Kidd is called Dr. Pete Kidd in our lingo!