

SCUBA WORKSHOP

EDUCATION THROUGH PRESERVATION

Dedicated to the preservation and restoration of our scuba equipment heritage.

by Kent Rockwell

Pro single hose regulator. Rose Aviation took over parts and service and we still have those "PRO Hydro-Pak" sheets.

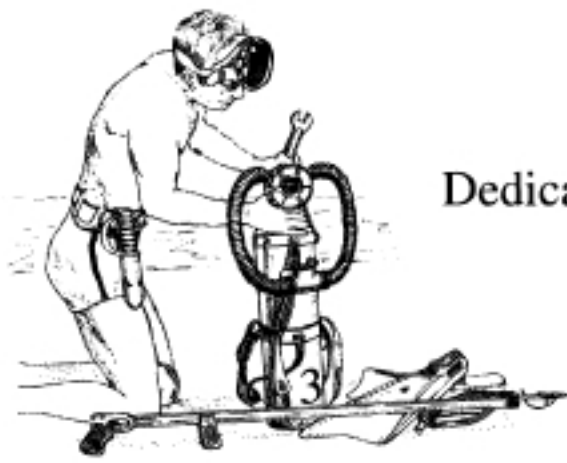
Fortunately we have not one, but four, Scotts to work with. They include an early Hydro-Pak mask, a very late mask overhauled by Scott, a rare twin tank unit and rarer U.S. Navy single tank Scott. All of our rubber pieces were found to be in excellent condition and still quite usable revealing that even in the 50's quality rubber could be made. The metal parts are either stainless steel or very heavy chrome plated brass. Called the "Cadillac" of diving lungs, a 1958 Scott Hydro-Pak sold for \$250.00 while a comparable Northhill Air-Lung sold for \$160.00.

Several years ago we talked with John Barone, of Scott Aviation and learned that Scott had nothing in their archives to reflect their diving heritage. No parts, no drawings and no literature remained. Fortunately, John had begun his career at Scott refurbishing customers' Hydro-Paks and was the first person to contribute to Scuba Workshop, sending us his personal H-46 manual and a Hydro-Pak introductory brochure. John has remained supportive and interested in this column and later mentioned that Scott Aviation would like to display a Hydro-Pak should any member have one they are willing to loan.

Once again we looked to Fred M. Roberts's book *Basic Scuba* for Hydro-Pak instructions and drawings. HDS members Dan Barringer, Al Betters, Skip Dunham, and Mark Howell supplied copies or originals of the *Scott Hydro-Pak Instructions and Parts Catalog Handbook H-46*, the *NAVSHIPS H-48 Technical Manual* and old *Skin Diver Magazines* provided an article and advertisements.

We purchased another plastic parts box from Home Depot, assembled our tools and began dissecting the Hydro-Pak. Do follow along with your *Scott H-46 Manual* and become familiar with the parts and their names as we prep our Hydro-Pak. It goes without saying that you should read this entire article before starting on your Scott.

The full-face mask features a round, 5 1/2" diameter laminated safety glass lens of 1/4" thickness. As our Navy lens was broken we ventured to a local auto glass shop and had an identical lens manufactured for \$15.00. The stainless steel lens frame clamp will give you a good idea as to the age of your Hydro-Pak. The early models featured two soldered on lugs for the clamping screw, while mid-production and late models (1956-61) used stamped brackets held



Project Three

Scott Hydro-Pak full face mask scuba (Part One)

Founded by Earle M. Scott in 1932, Scott Aviation Corporation of Lancaster, New York, remains the oldest company in the U.S. to have designed and produced scuba units (Desco was founded in 1937). The Scott Hydro-Pak full-face mask scuba featured innovations that included a single hose regulator, a tilt valve second stage and purge button, a snorkel/surface vent system and a regulated exhaust valve. The first stage regulator featured a manual reserve system and the tank harness featured a cam actuated tank band and a breakaway shoulder harness. Some of these features, borrowed from Scott's Air-Pak, were ten years ahead of their time. We acknowledge that a few features may have originated from Desco's Dolphin Lung and actively seek help in determining dates between Scott and Desco's units.

To understand how advanced this system was, Phil Nuytten, of HDS Canada, tells of a friend who removed the second stage from his mask, added a mouthpiece and had himself a neat single hose regulator. With the fairly large supply hose (Aeroquip - 6 or 3/8" I.D.), large area tilt valve and large 3 1/4" diameter diaphragm, this would make a fairly advanced regulator for its day. It preceded Sportsways Waterlung by as much as five years.

Flight crew oxygen masks and "walk around" oxygen bottles led to the firefighter's Air-Pak in 1945, and it didn't take long for firemen to use the Air-Pak underwater. A Scott document, discovered in HDS founder Leslie Leaney's archives and titled, *Instructions For Underwater Use Of Scott Air Pak*, was issued in December of 1946. It detailed a way of swimming underwater with the Air-pak in an emergency. After testing the Air-Pak underwater, the Royal Canadian Navy asked Scott to design a scuba based on that unit in 1950. The Hydro-Pak was delivered to the U.S. Navy in late 1952 and reached civilian markets by early 1953. Scott ended production in the 1961-62 era. In 1965 I wrote to Scott looking for a Hydro-Pak manual, and was directed to Rose Aviation, makers of the Rose

