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Underwater Society
of America

FIN SWIMMING NEWS

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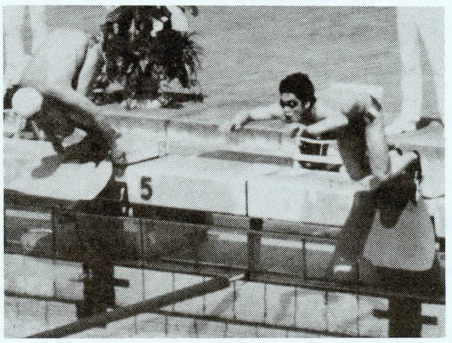
FIN SWIMMING COMES OF AGE

Fin swimming is a new sport in the United States. It is now an accepted sport by the International Olympic Committee (IOC), but it hasn't had much exposure in the USA.

In the United States, the sanctioning authority is the Underwater Society of America. All competitions must be sanctioned by the Underwater Society of America to be recognized as a legitimate competition by the World Underwater Federation, CMAS. CMAS is the authority for all underwater games, which includes such sports as underwater hockey, spearfishing, underwater rugby, and underwater orienteering. Fin swimming, and its related sport of underwater competition swimming, are the first such sports to be recognized by the IOC.

The Underwater Society of America, which has been competing in many of the other sports, recently became active in fin swimming. There have been several competitions so far in the United States, including those at Seaspace 86 in Houston, Texas and last year sponsored by BENEATH THE SEA, in Rye, New York. Also last year, the Underwater Society of America, using a generous grant from the Divers Equipment Manufacturers Association (DEMA), was able to send a team to the World Championships of Fin Swimming in Berlin, West Germany.

Our swimmers worked hard for the couple of weeks they had to prepare for the competition, but because of the lateness of their selection and their newness to the sport, our times were far from world class. However, they did learn a lot, and enjoyed the competition and the experience a lot. Jim O'Connor and Andrew Schloss represented the team as coach and trainer, respectively. Michael Gower not only competed, but also represented the society at the CMAS meetings. The other swimmers who participated were Babette Brundage, Joe Palmer, and Mark Cannard. Good Job!



A Chinese Fin Swimmer competes at the World Championships of Fin Swimming held in Berlin, West Germany. China now holds some world records

"BENEATH THE SEA" TO HOST THE 1988 USA CHAMPIONSHIPS IN FIN SWIMMING

As reported elsewhere, the BENEATH THE SEA CONFERENCE, held each year in Rye, New York, last year hosted the East Coast Fin Swimming Championships. This year it has sought and gained approval for the 1988 U.S.A. Championships for fin swimming from the Underwater Society of America Board of Governors.

This means that the qualifying swimmers from this meet will be eligible to go to the World Championships of Fin Swimming in Europe next summer. There will be a U.S.A. sponsored team, which will be sent to the Championships. A specific place and date have yet to be announced. As soon as it is available, we will print it and send it on.

We encourage anyone interested in the U.S.A. Championships to contact Mr. Gregory Kincheloe, BENEATH THE SEA, P.O. Box 644, Rye, New York 10580, phone: (914) 961-2088.

The Underwater Society of America encourages all interested competitive swimmers to compete in fin swimming. There is no penalty for doing so under FINA rules since recognition by the IOC was attained.

FIN SWIMMING GEARING UP FOR THE OLYMPICS

Fin swimming has gained International Olympic Committee (IOC) recognition. This does not automatically place it in the Olympic Games. However, there will be a exhibition fin swimming meet at the International Olympic Games in Seoul, Korea. The latest news we have is that there will be Olympic Competition in the 1992 Olympiad for fin swimming.

In order for the United States of America to compete in an Olympic fin swimming competition, we will have to have recognition by the U.S. Olympic Committee (USOC). This means that we must organize and participate in as many fin swimming competitions in the coming few years as possible.

In order to meet this goal, of USOC recognition, we need clubs to join the Underwater Society of America and devote themselves to fin swimming. These clubs must organize themselves into a separate council of the Underwater Society of America. The council must then adopt the USOC By-laws, which are somewhat different from the society by-laws, in order to be accepted into "Class 'D' Status" by the USOC.

For further information, please contact Mr. George Rose, President, Underwater Society of America at P.O. Box 628, Daly City, CA 94017, phone: (415) 583-8492 or Mr. John Ratliff, Director of Fin Swimming, P.O. Box 339, Winchester, Oregon 97495, phone (503) 673-1434 (both are home phones).

SUPPORT NEEDED FOR FIN SWIMMING

Above all, we need your support. Some of you are already active in the sport. We need all the help we can get to compete on an Olympic level, which is our dream.

SPECIAL THANKS: DEMA, for their support; Jim O'Connor, for the photo.

Marathon Swims and a Record for Handicapped

Marathon fin swimming is a distinct sport from the pool competitions. It requires different equipment, different training, and develops the swimmer differently. It is also the most attractive part of the sport for those who are not now fin swimmers, but who need the sport for conditioning for their diving.

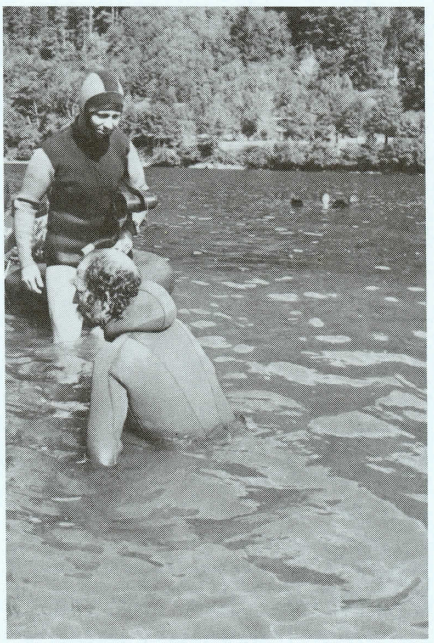
In August of 1986, a small group of veterans gathered for the first marathon fin swim competition in the United States in many years. In the 1960s, under Mr. Harold Drake of West Palm Beach, Florida, competitions were held in open water marathon swimming. But it wasn't until the veterans gathered for the "Veterans Swim for the Needy" that marathon fin swimming again was practiced in the USA.

The swim was organized by Bob Flaherty, a handicapped Vietnam Veteran. It was held in the Umpqua River on Oregon's South Coast, near Florence, Oregon. The route was 15 miles long, the water temperature near 80 degrees F., and spirits were high.

However, reality soon took over. The divers were dressed too warmly (being accustomed to cold water), the currents were against the swimmers in the beginning of the swim, the wind kicked up and a heavy chop developed. By the half-way point, most of the swimmers had dropped out. At the end of the swim, 81/2 hours after beginning, only John Ratliff, Director of Fin Swimming for USA, was left, and he recieved quite a welcome.

The group persisted. Their goal was met in raising money for needy people, and they planned another swim. This swim was made in support of seeing eye dogs for the blind.

U.S.A. would only sanction a shorter swim for these conditions (water temperature was in the fifty degree range in March of 1987 when the swim was held). However, several people swam the entire 15 mile route. For the sanctioned swim, Ron Korczak finished first, Ed Zivica second, and Doug Plagman third. Other finishers were Tim Grey, Bob Flaherty, Bob Varner, Lynn Rickles, Rick Middleton, and Lt. Brubaker of the Coast Guard station. Bob Flaherty also swam by a handicapped fin swimmer, at six miles. Quite an accomplishment for everyone involved; Congradulations!



Bob Flaherty (seated) and John Ratliff (standing) prepare for their swim on the Umpqua River

Fin Swimming Equipment

by Dr. Ach. Lioulias & Prof. Vas. Grammaticos, CMAS, from the Fin Swimming Manual by Karl-Heinz Kerll

Fin swimming relies heavily on adequate equipment. Unfortunately, to date no such large scale commercial production of the basic equipment exists, although some efforts are currently being made in this direction. So swimmers and coaches must show much ingenuity and a certain craftsmanship in fin construction. As a matter of fact, once the basic materials are selected a few hours work suffices for the completion of a monofin.

One starts with a pair of conventional rubber fins. Medium quality, soft rubber fins are the best. We start by cutting out a round piece at the heel of each fin, large enough for the ankle to slip through, and a piece at the toes through which we will fit the upper part of the fiberglass plate. Then we cut away the extra part of the rubber fin, as in figure 1. The rubber shoes are glued onto the fiberglass plate carefully smoothed with sandpaper. Cyanoacrylic glues can do for a rapid work, but a neoprene glue is best as it does not attack the rubber and will not harden. For the fiberglass part of the fin insulating plates used for printed electronic circuits are currently used. Depending on the desired hardness, one can start with a thickness of 1.7 mm to 2.0 mm. The thickness of individual fiberglass sheets varies a lot, and if there is a choice one must choose the finer ones as they allow for a more detailed design of the fins. While very fancy designs of monofins exist even an extremely simple one, as the one shown in fig. 2, can do at the beginning. The way one shapes the fiberglass plate is by taking out successively single layers of fiberglass. First one marks the edge of the part to be removed with a cutter and then detaches the sheet with a knife or if this proves very hard, with a chisel. Although all this sounds like a formidable task, it proves very easy once one has got the knack of it.

The snorkel is made out of plastic tubes (used for plumbing or electrical installations) which come in thicknesses of 0.5 to 1.0 mm. Internal diameters ranging from 19 to 23 mm can be used (the smaller being reserved for the youngest swimmers). In order to shape the snorkel one cuts out a piece about 60 mm long, fills it up with closely packed sand, closes the two ends with corks and softens the tube by heating it, for example, in boiling water. A wooden frame...can then be used to easily shape the snorkel tube, the upper part of which can be more or less bent according to the swimmer's preference. The mouthpiece is cut to fit and a rubber ring is put around it for a better bite. The head piece is made from a thin aluminum band, which is shaped around the snorkel and holds the snorkel by a screw, then the end pieces are shaped around the swimmer's head, and foam neoprene is placed on the band to protect the head. A rubber band goes around the swimmer's head from end piece to end piece.

Normal swimming goggles are used for fin swimming while the basic equipment is complemented by small neoprene toe protectors, although certain swimmers prefer to wrap their feet in plastic bags to keep the fin's foot pocket from rubbing holes and blisters into the swimmer's feet.

For the immersion events, commercial

commercial (short) double fins can do for the beginner. One can learn the monofin movement working with these double fins, while adapting himself to the use of the snorkel and goggles.

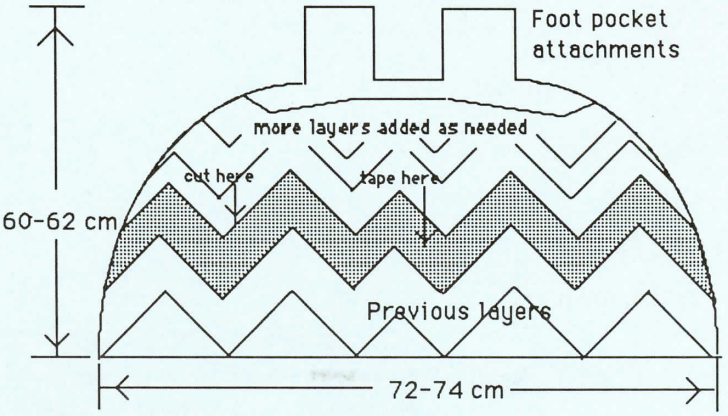
Editor's Note: The above description is somewhat inadequate to actually build a monofin. What isn't noted above is that a "mold" must first be built out of plywood, waxed with car wax, and then used as a base upon which the fiberglass is applied. After purchasing a monofin and having it examined by a boat builder, he said that the layers are placed on the mold one at a time. Each layer is allowed to dry, then the next is placed on top of it. Masking tape is used to mask areas which are not to be in the next layer. The best fiberglass is very close-weave material which is used on printed circuit boards, but other types can be used. Also, it is best to use a very flexible resin for the monofin, and it must be able to flex. Finally, the resin should be applied thick enough to saturate the material, but with all the excess wiped off using a rubber squeegee. Using this method, any number of different designs can be created and tested.

After the blade is made, the foot pockets must be fitted to the blade. Two methods are currently being used. One is to purchase a set of fins, cut the blade off, then grind and sand unwanted portions of the blade and ribs, if any, from the fin. What's left is two foot pockets, which must be attached to the blade. The best fins for foot pockets are the "duck feet" type fin, with an open heel. The fin's foot pocket is cut open on the bottom of the toe, and the fiberglass blade is fitted inside the foot pocket, but below the blade. Because of the difference in the resilience of the blade, the taper should be on the top of the foot pocket (down when swimming).

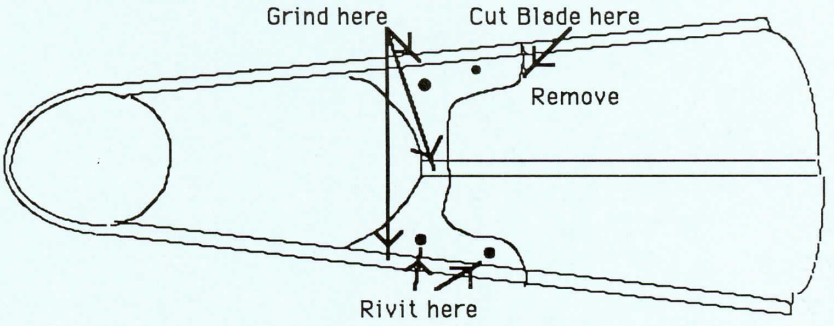
Some fin swimmers, using a second method, are melting down their old fins and pouring the molten rubber into a self-made mold. They are actually recasting the fin pocket itself; the result is a foot pocket which conforms exactly to one's foot.

There are commercial outlets for mono fins from either Germany or Italy. The only commercial outlet here is Peppo De Conte International, 633 Missouri St., Suite 6, San Diego, CA 92109, (619) 459-4234

Monofin Construction



The monofin is made of tapered fiberglass. Each additional layer adds rigidity and strength. The back end needs the most flexibility. This is where the fin creates its propulsive motions, and the tapered layers of fiberglass allow this type of resilience.



The foot pocket for the monofin must be made from a regular fin which is cut to fit on the new blade. A slot is cut in the bottom front of the foot pocket to accept the fiberglass monofin, which fits inside the foot pocket and is glued to the foot pocket bottom. Rivets hold the fiberglass monofin to the fin blade at points in the sanded area.

Society joins AAU

The Underwater Society of America has just received approval to again become a member of the Amature Athletic Union. The purpose of the AAU is to "offer lifelong progression of amateur programs for persons of all ages, races and creeds, to enhance the physical, mental and moral development of amateur athletes, and to promote good sportsmanship, good citizenship, and safety." This is a good start for the Underwater Society of America toward U.S. Olympic Committee recogiction.

Membership Application

Name: _____

Address: _____

Phone Number: ( )

Certified Scuba Diver: Yes No

Dues:		
	Council Membership,	**$10**
	Independent	**$15**
	Supporting	**$50**
	Patron	**$100**

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200 "	01:56.77	USSR	01:26.00
400 " "	05:02.31	USSR	03:08.00
800 " "	11:19.84	USSR	06:39.39
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100 " Women	00:59.61	China	00:41.53
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Immersion			
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50 " Women	00:27.86	USSR	00:18.00
100 " "	00:59.61	USSR	00:39.80
400 " "	None	USSR	03:16.80

The Director's Corner

This is our first issue of what I hope will become a quarterly newsletter on fin swimming. As our sport grows, we need input and participation from you, the competitor and promotor, in order to be successful. I surely hope that someone will wish to put on a meet in your area, and it might as well be you. We need to know by April in order for us to get it published in the CMAS calendar for the next year. If you are interested, please call or write. John C. Ratliff