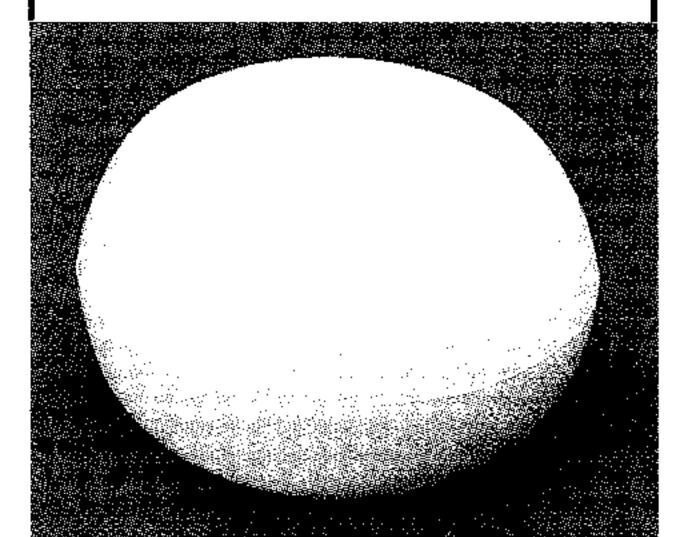




Seven references from Ø 75 mm to Ø 105 mm Flotability 140 to 410 g



## WURL **FLOTABILITY STRENGTH DURABILITY**



Las Mercedes, 31 - 4.° Dpto. 2 48930 LAS ARENAS (VIZCAYA) - SPAIN Tel and Fax: +34 4 464 11 24 Direct Tel: +34 4 480 25 31

Mobile Phone: 908 67 84 10

## Trawl spreading system to be tested

inventor of revolutionary new trawlnet spreading devices, is negotiating undisclosed with European fishing gear manufacturer the sea testing of his patented "Active Trawling System" (ATS).

ATS has been designed to replace trawl boards by remote-controlled rotors, tentatively called Variable Vector Devices Thrust (VTVD).

This innovative system will allow for active control over the position of the trawl in space by changing the rota-

aurice Shenker, the tional speed, direction and South African attitude of the rotors and would enable the skipper to "fly" the trawl the way one flies a plane or steers a submarine. The ATS would be capable of hunting down and catching fish on or off the seabed, and to either side of the trawler's path. Its controls can be integrated with fish-finding and navigation instruments on board.

> The ATS makes use of the Magnus effect in which spinning rotors are developing a sideways force (shear or lift force) when in motion through air or water.

> Up to now, tests have only been done with a single VTVD model. The presently negotiated stage in the development of ATS involves test

ing a large model or a commercial-size trawl equipped with VTVDs instead of doors. Initially, the ship-totrawl connecting link, providing control and power to the VTVDs will be by cable connection. In the future, however, a parallel development of a cable-less link is underway.

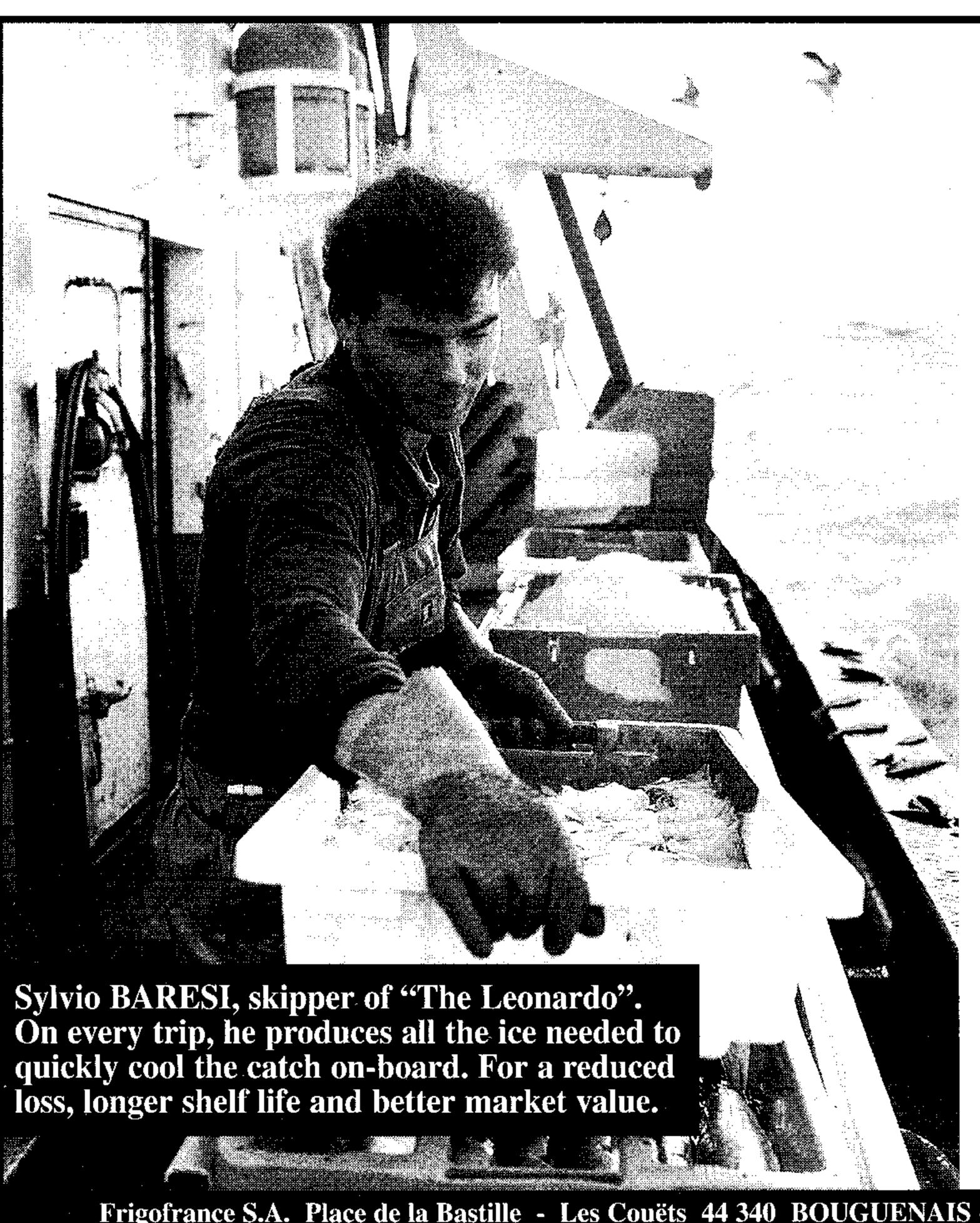
The ATS attracted considerable attention on the part of gear manufacturers and fishermen at the 1995 Cape-Town fishing exhibition. In a forthcoming issue of World Wishing we will print a feature on the ATS and the related integration of trawling operations.



For further information circle Nos. 40



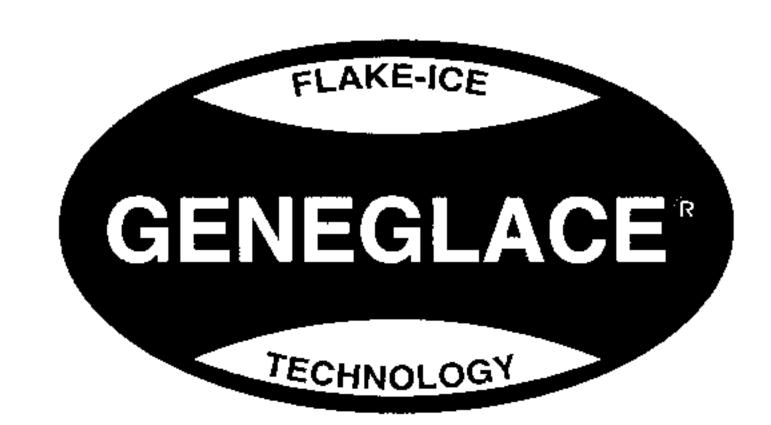
For further information circle Nos. 41



## is he faster we ice, the higher the price"

For 30 years, GENEGLACE flake-ice generators have built a reputation for efficiency and dependability in the toughest usage conditions and in all climates.

With capacities between 200 and 40 000 kg per day, this is the broadest range on the market today.



Wherever you are, we have the solution.

Frigofrance S.A. Place de la Bastille - Les Couëts 44 340 BOUGUENAIS - (FRANCE) Tél. (33) 40 32 06 06 - Fax (33) 40 65 04 88