

EYES OF THE ICEBREAKERS
By LTJG Gilbert Shaw, USCG

When ice chokes the life out of the vital Great Lakes shipping industry, it is up to the Coast Guard to see that this life is restored and the ore, coal, grain carriers, and other commercial vessels can carry their important cargoes to their destinations.

The UF and HO3S aircraft from Coast Guard Air Station, Traverse City, Mich., are an irreplaceable cog in the wheel of ice operations on America's great inland seas.

In spring, when ice shifts position almost daily, and an emergency situation endangering thousands of tons of commercial shipping can arise in less than an hour, an almost constant watch must be kept on widely scattered areas. It is the aircraft and crews of the only CG air station on the Great Lakes that become the eyes of the ice operation. While one flight is surveying the ice conditions around Buffalo, N.Y., another crew might be taking a look-see at the white blanket of ice and snow covering the shipping routes ready to end their hibernation in the vicinity of Duluth, Minn., on the western end of Lake Superior.

The Grumman Albatrosses not only report the location of ice, but also keep the busy icebreakers informed as to the type and condition of the ice. Saying that Saginaw Bay or the Straits of Mackinac are frozen is helpful, but coupled with the information that there is drift ice that is rotting or windrowing and that the area is 80 percent covered, the helpful becomes the readily useful.

In addition to the aircraft used on ice surveys, an HO3S helicopter from TVC is normally carried aboard the 290-foot icebreaker, USCGC MACKINAW (making her the only "aircraft carrier" on the Great Lakes) while she is on ice operations. The 'copter is used for ice surveys, logistics, and, if the occasion arises, search and rescue.

Often when working with one of the smaller icebreakers (buoy tenders and tugs with reinforced bows are used as icebreakers during the ice season) the Pensacola-trained Coast Guard pilots become, in fact, seeing eye dogs for the vessels, whose surface visibility is somewhat limited. The aircraft search out leads and radio the information directly to the vessels, enabling them to reach the area in which they are needed more quickly and safely, and as anyone who has been aboard an icebreaking ship readily knows, more comfortably.

The annual ice operation in no way relieves the Coast Guard aviators or, for that matter any other Coast Guardsmen, from their primary search and rescue duties. At the Air Station one of the UF's is always on "Status Bravo-zero", meaning ready to be airborne in a matter of minutes. Another is usually on Bravo two or six (two or six hour standby). The helicopters are kept in similiar readiness.

All the pilots at the station, except the CO, XO and Engineer (who is the only pilot not presently qualified in helicopters) take their turn at flying the 'copter assigned to the MACKINAW. According to the Operations Officer, the average tour is about a week.

On one mission during the 1957-1958 winter when LT J. L. Sigman was flight officer on the "Mighty Mack", he was called on to save two boys from an ice floe in the Detroit River. This dangerous night mission was considered little more than routine by the Coast Guard pilot, although, according to Station records no one had ever taken off and landed on the MACKINAW's deck in darkness.

A rated aviation machinist's mate always goes to the MACK with the helicopter. He is both air crewman and maintenance man. This doubling as flying crew and ground crew is the rule and not the exception

throughout the Coast Guard. Due to limited personnel allocations all aviation ratings are trained in both ground and flying assignments. In addition, most are qualified to work on all types of aircraft at their station.

At the Air Station the 14 officers (12 of them pilots) and 90 enlisted men (32 flying crewmen) have little spare time. The flyers all have collateral duties which take up all the non-flying time they have. Atypical example is LCDR T. R. Fallon, who is the station Public Works Officer. His primary job - flying - takes about 60 hours a month. His collateral duties take many more hours. The sizeable station containing 14 buildings are his responsibility. Jobs as far removed from piloting as boiler repairs, lawn mowing and barracks painting are things his small "bull gang" are required to handle.

The use of Traverse City's planes during the ice season has substantially increased the efficiency of the whole operation and especially aided the work of the Ice Breaking Task Force, under the command of Rear Admiral E. H. Thiele, USCG, commander of the Ninth Coast Guard District.

Spring opening, 1958, was tough icebreaking at Port Huron, Mich., where Lake Huron squeezes itself through a narrow cut into the St. Clair River. The ice coming down under the influence of northeasterly winds plugged the cut as effectively as a tight cork plugs a bottle. No shipping could move up or down without the aid of an icebreaker, and at times the merchant vessels couldn't even move under close escort when the Cutters were chopping up the natural dam. Involved were the Coast Guard Cutters Mackinaw, Acacia, Tupelo, Ojibwa, and Kaw, with the

Mackinaw working above the cut and the smaller vessels operating below. Adding to the difficulty of this hazardous operation was the Blue Water Bridge, a span connecting Port Huron with Sarnia, Ontario, Canada. The steel bridge formed a shield, often disrupting and occasionally totally destroying communications between the Coast Guard's large size floating ice-picks. Overcoming this problem was easily solved by using the HO3S as a relay point. The small Sikorsky helicopter flew and hovered over the bridge keeping vital communications flowing freely.

Accompanying the operations around some areas of the highly industrialized Great Lakes is the usual smoke and haze. Early in 1958 the heavy ice was pushing hard at the southern shore of Lake Michigan, often windrowing (broken sheets of ice that are piled one on top of the other) to heights of 15 feet. The commercial tankers required continuous assistance. Visibility due to the industrial haze and smoke was often no more than one mile, hampering the movement of traffic. Once again the maneuverability of the small HO3S eased the situation. A steady stream of reports on ice conditions and movement, and pinpointing the location of the vessels made the operation a smooth and efficient one. When the visibility was extremely bad the MACKINAW assisted the 'copter home on radar.

The HO3S's use is not limited to ice, logistics and SAR missions. On one occasion, when one of the numerous aids to navigation was reported out, the aircraft went out and relighted a pierhead light. Coast Guard policy is to keep all fixed lighted aids burning, and since the frozen harbor was unnavigable by boat, the helicopter was assigned the somewhat unusual task.

Most of the pilots agree that the worst part of operating from the MACKINAW was the landing and takeoff problem. The "Mack" has no regular landing deck making it necessary for the pilots to put the helicopter down over the gunwhale, and amid the bitts and other deck gear normally found on the stern of the vessel. This, coupled with the problem of not always being able to maneuver the ship in ice to provide favorable winds for landings and takeoffs makes the operating conditions somewhat less than ideal. Even with these adverse conditions there were no operational mishaps during the entire ice season.

The experience of the Coast Guard flyers' varies from the skipper, CDR J. A. Palmer, a CG Academy graduate with 3681 flying hours to LT J. L. Sigman, an active duty Reservist with 3139 hours logged, to LT Eugene Baumann an ex-quartermaster, on his first flying assignment since graduation from OCS and Flight Training, who has 951 hours as a pilot. The average pilot time for the 12 fliers is about 3000 hours, with LCDR D. J. Garrett leading the parade with 4858, 463 of these being in rotary wing aircraft.

The men who fly the Coast Guard's aircraft around the Great Lakes are well aware of the importance of their missions. Well versed in their primary SAR job, they realize that keeping the merchant fleet moving with their cargoes of ore, coal, grain and other materials from the heart of American industry, is as much a part of their job as it is the job of their brother Coast Guardsmen who man the vessels.