

MISSION

Why would anyone want to live in a place where temperatures drop to 113° below zero? Where a night is five months long? And where the air is so thin that newcomers pant and cough like a man on his death bed?

In size, the Antarctic Continent is as big as the United States and Mexico combined. At the South Pole the ice is nearly two miles thick, and if the ice cap covering the land mass were to melt, the oceans of the world would rise 200 feet and flood every coastal city on earth.

So how does all this involve icebreakers and why us? During the International Geophysical Year, 1957-58, a multinational all-out scientific assault was made on Antarctica. Meteorologists, glaciologists, biologists, geologists and scientists representing almost every field of science known to man descended on the frozen continent. Their aim—through exploration, to discover the mysteries of this last frontier. Meteorologists were interested in Antarctica's weather and what effect it had on conditions in the United States. Glaciologists sought to measure the movement of glaciers and their growth or reduction rate. Biologists were concerned with animal and plant matter and how they survived the sub-zero climate. Geologists hoped to catalogue the mineral resources of the untouched continent.

The Navy, by Department of Defense decision, was assigned the task of providing support for the nation's scientific programs of that year. So much valuable information was gathered from this effort that there has been an annual migration of scientists to Antarctica ever since. The Navy continued her role of providing support for the United States Antarctica Research Program. With the transfer of all icebreaking responsibility to the Coast Guard, we inherited the task.

This year, for the second successive season, **Westwind** was assigned to Operation DEEP FREEZE (the code name applied for Antarctica operations). Her construction is ideal for heavy-duty work in the ice-filled oceans of the Arctic and Antarctica. A reinforced hull of 1 5/8" armor plating, and a sharply slanted bow make it possible for this 6,382 ton vessel to break ice 12 to 15 feet thick. Power for this arduous task is provided by her 6 diesel engines which are capable of producing up to 12,000 horse-power. In addition, she can carry supplies for a six month trip and enough fuel (550,000 gallons) to go non-stop around the world.



Cargo operations to provide Hallett Station with scientific equipment and other supplies.

Icebreaker duties are many and varied. Except for nuclear-powered submarines, these rugged vessels because of their special construction, are the only ships capable of gathering oceanographic data from controlled platforms within the polar packs. In addition, icebreakers may be called upon to free ships entrapped in the ice; to render assistance to injured and sick personnel, and provide for their transport to medical facilities; and to rescue pilots of downed aircraft in the polar areas. Should the occasion arise, an icebreaker, would be ideal for providing assistance to a nuclear submarine that experienced equipment failure within the ice. Her primary job, however, is escorting supply vessels safely through the ice mass surrounding polar land bases.

To assist icebreakers in these duties, they are furnished with an air wing consisting of two helicopters. These aircraft, provided by the Navy and manned by naval personnel, play an important role in each mission. Through information gathered from ice reconnaissance flights the breaker is able to proceed to her destination through a path in the ice that offers the least resistance. In addition, assistance provided in ferrying equipment, supplies and scientific personnel contribute materially to the scientific effort in Antarctica. Another service provided, the delivery of mail, plays a vital part in bolstering the morale of the men on these long absences from home. Without these aircraft the vision and capability of **Westwind** would be greatly impaired.

With the completion of another DEEP FREEZE Operation, and **Westwind's** bow pointed north, thoughts once more turn to families and loved ones at home and how wonderful it will be to see them again. A moment of reflection, prior to departure, brings into focus the completion of another successful mission and the realization of a significant contribution to the scientific program in Antarctica. Personnel of **Westwind** and her air wing can take great pride in their achievements and in **Westwind's** ability to "lead the way."

Breaking an initial channel through four feet of pack ice.

