## Manhattan Comes to Grips with Icefields

ABOARD THE SS MANHAT-TAN-The world's largest icebreaker began the job she was designed for as Humble Oil & Refining Company's especially converted tanker pointed her bow into an extensive ice pack in Baffin Bay.

The SS Manhattan warily approached the pack, some 1,500 miles after departing Halifax, Nova Scotia, at dusk last evening shortly after crossing the Arctic Circle at 66 degrees and 33 minutes north, latitude, 58 degrees west longitude.

Humble's mighty icebreaking tanker approached the ice pack along a path strewn with towering icebergs, bergy bits, cottage-sized pieces of bergs, and growlers, chunks of ice the size of a family

automobile.

Working her way through the maze, the Manhattan shared the seaway with the John A. MacDonald, a Canadian Department of Transport icebreaker. The Canadian vessel joined the Manhattan Saturday night for her attempt to cut a channel through the Northwest Passage.

Humble's ship, which was certified as a tanker-oceanographic research vessel by the U.S. Coast Guard after extensive modification and ice-strengthening, is to be the first commercial vessel to ever attempt a passage through the Canadian Arctic.

Humble is using the elaborately instrumented vessel to precisely determine the ice conditions a proposed new generation of tankers might expect during yearround use of the Northwest Passage.

Data acquired by the Manhatten will also be used to determine the design and economic feasibility of ice-strengthened tankers that could bring new crude oil supplies from Alaska's North Slope to the United States' East Coast.

"Today's test will give us a real idea of the behavior of the vessel and the performance of our instrumentation in ice," S.B. Haas, project manager said. "The Baffin Bay pack will not be a severe test for us, the ice is three feet or so thick according to reconnaissance reports, but it offers us an excellent opportunity to develop a 'feel' for the project before we reach the truly difficult ice in the Passage."

Mr. Haas said the Baffin Bay pack contained stretches of ice that included the remains of old

ice ridges.

"These will be relatively hard spots, and we should obtain some good data testing them," he said.