

ANTARCTIC

"An Experiment in Antarctica"

The Alasheev Bay in the Kosmonaut Sea... The Soviet main scientific Centre "Molodezhnaya" is one of the largest on the White Continent. Working here at present is a group comprising a large number of scientists and specialists from the winter staff of the 33rd Soviet Antarctic Expedition.

Day after day, as part of national and international programs, we carry out integrated and thorough research of natural processes and phenomena taking place in Antarctica. We carry out year-round observations and a series of experiments in the areas of aerometeorology, geophysics, glaciology, geodesy, hydrology, medicine, the state of the environment... We collect information about the weather not only from our permanent stations, but also on the southern hemisphere together with specialists at the Australian main base Mouson³.

Methods of constructing moorages out of blocks of sea or fresh-water ice are being worked out at the experimental site under the direction of L. Savatyugin, Candidate of Geographical Sciences. A device for high-speed ice cutting by means of hot water and steam is being tested. The so-called hydro-thermocutter has displayed high effectiveness. A block of two cubic metres in volume is sawed out of the ice and delivered by tractor to the place of construction of the "moorage". The speed of cutting reaches one metre a minute. Serial home-industry equipment is being employed in the capacity of hot water or steam generators.

The engineering-glaciological investigations are being continued on the snow-and-ice aerodromes built earlier in the regions of the Molodezhnaya Centre and the Novolazarevskaya Station. Here, take-off and landing strips, radio navigation equipment, and technical supplies are being