

MULDROW GLACIER, ALASKA, U.S.A., 1:10,000

(Orthophoto map: sheet no. 3 of a 5-sheet set)

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The new maps for the Muldrow glacier cover the major part of this glacier, from Gunsight Pass to the glacier terminus, with an altitude range from 3300 to 800m a.s.l. The set of five maps is the first of its kind for Alaska in terms of scale, accuracy and detail of glacier information. The maps are based on the field survey of 44 control points conducted by B. Washburn and his team in the summers of 1976 and 1977. The survey was usually carried out between 17.00 and midnight in order to take advantage of the best optical conditions. The equipment included a K & E Laser Ranger V, a Rangemaster II EDM and a Wild T-3. Aerial photography was done in summer 1976 from an altitude of 6100m a.s.l. and with 80% overlap. Computation of the field survey was carried out by H.R. Feldman, Boston and U.S. National Geodetic Survey. The photogrammetry and cartography were done by Swissair Photo + Vermessung, Zürich, using a Wild A-B autograph. The surface features of the glacier were represented by the orthophotosystem OR-1 of Wild-Heerbrugg and the maps were printed by the Swiss Federal Topographical Survey. The undertaking was characterized by true international cooperation between the U.S.A. and Switzerland.

The contour line intervals are 10m for the glacierized area and 20m for the surroundings. The large-scale orthophoto map presents surface features such as crevasses, supraglacial streams, moraines, ablation mounds, foliations and ogives. Details can also be recognised within the valley walls. The Muldrow glaciers surged in 1912 and 1956. The maps offer valuable information in case the surge recurs. The accurate contour lines may serve as a basis for determining changes in ice thickness. In this sense, further mapping - at least up to Harper Icefall at 4500m a.s.l. - is recommended. The map set (5 sheets) is available from the Swiss Foundation for Alpine Research, Binzstrasse 17, 8045 Zürich, Switzerland for US \$60. The included map is sheet no. 3.