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Design of a Stratification Scheme
for the Baffin Island Area

by

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The given stratification scheme was designed by using a 1 : 1 copy of the relevant section of the Canadian chart Nr. 7011 of Davis Strait (Natural Scale 1 : 1 500 000). The depth contours in metres as shown in the design were fitted by eye according to the soundings in fathoms contained in the original chart.

No stratification was applied to inshore areas of less than 200 m depth and west of 64° W respectively including Cumberland Sound, Frobisher Bay, and the area around Resolution Island as well as to offshore areas of over 1500 m depth.

For convenience in planning and prosecution of surveys (e.g. random selection of stations etc.) the different hatching or cross-hatching of the sampling strata corresponds to every 2, 4 or 10 minutes latitude and 10 or 20 minutes longitude respectively.

The strata areas given in table 1 were measured by planimetry in cm^2 and converted to nautical square miles using average values per cm^2 corresponding to the different distances in cm between latitudes on the original chart as given in table 2.

Table 1. Strata areas in nautical square miles according to depth zones. Total stratified area: 32 712 nm^2 .

Strata 101-200 m	Strata 201-300 m	Strata 301-500 m	Strata 501-1000 m	Strata 1001-1500 m
9 1080	1 771	3 1559	5 735	18 1186
	2 1763	4 1115	14 1564	19 1799
	10 2157	6 1028	17 1583	
	11 1242	7 1658	21 2188	
	12 1115	8 1188	22 2475	
	15 1521	13 1244		
		16 1857		
		20 1884		
Total 1080	8569	11533	8545	2985

Table 2. Nautical square miles per cm^2 (conversion factors).

Range of latitudes	Conversion factors
61° - 62° N	66.10
62° - 63° N	62.33
63° - 64° N	58.42
64° - 65° N	53.67
65° - 66° 15' N	51.02

