REPORT

SNOW AVALANCHE DAMAGES IN NORWAY 1982/83

by Krister Kristensen

58810-6 September 1983



PREFACE

THE WORK DESCRIBED IN THIS REPORT WAS SPONSORED BY THE ROYAL NORWEGIAN COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH (NTNF). THIS SUPPORT IS GRATEFULLY ACKNOWLEDGED.

THE REPORT CONSTITUTES PART OF THE EFFORT IN THE FIELD "SNOW AVALANCHE MECHANICS" DESCRIBED IN THE LONG RANGE RESEARCH PLAN FOR NGI, 1982-86 (RESEARCH AREA 4, PROGRAM 4.2.)

NORWERIAN GEOTECHNICAL INSTITUTE

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Norwegian Geotechnical Institute NGI

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INTRODUCTION

A short survey of accidents and damage caused by snow avalanches is published after each winter by the Norwegian Geotechnical Institute. Data are mainly obtained from press mentions and statistics from the insurance companies. Some serious accidents were also investigated by the Avalanche Section. These are handled in separate reports published by the NGI.

THE WINTER 1982/83

In most of the mountain regions in Norway, severe weather conditions during midwinter discouraged mountain travel. This is probably the main reason why fatal accidents involving skiers werelimited to only one this winter.

However, considerable material damage was done to cottages and constructions in the mountain areas. Bad weather and avalanches also caused great problems for road and railway connections.

During the winter there were at least 17 avalanche accidents involving people, and two of these, claimed deaths. 7 of the avalanches were

Norwegian Geotechnical Institute NGI



most likely released by the people involved, while 10 were released naturally. Alltogether 43 people were caught in avalanches; 14 of these were completely buried, while 29 were only partly buried. The people involved list into the following categories: 15 were soldiers bivouacking in the mountains, 9 skiers (outside of developed ski areas), 6 persons in cars on public roads, 3 road maintainance workers, 2 children playing near their homes, 2 mountain climbers, 2 hunters, 1 farmer near his house, 1 mountain hiker and 2 persons in a construction camp. Of the 43 people caught two were killed; one ski tourist and one playing child. This is the lowest number of avalanche victims since the winter 1975/76.

All of the survivors were rescued either by bystanders or party members, or they managed to free themselves without any other help. Both the victims were found during organized search; one by an avalanche dog and one was located while probing.

Description of fatal accidents:

27. November 1982. Kattfjorddalen, Troms: Two skiers climbing with alpine ski touring equipment in the Storsteinnes mountain area released a slab avalanche. One of the skiers, 48-year old Swedish citizen Bruno Rabogalliatti, was caught in the avalanche while his companion managed to escape to the side. The police was notified and a large scale search operation was started. 130 men and 10 avalanche dogs searched the 500m long and 150m wide debris. About 10 hours after the skier was caught, he was located by an avalanche dog in the lowermost part of the debris. He was found at a depth of 1.5m. The post-mortem concluded that death from suffocation had followed within 1-2 hours after burial.

5. February 1983. Henning, Nord-Trøndelag. 13-year old Joar Nysæther was playing alone in a gravel-pit near his home, when he released a small slab avalanche and was buried under snow. As the boy did not return to his home, his father went out looking for him. He soon found the avalanche site and the boy's footprints near it. Together with neighbours he started digging for the boy in the debris. The police arrived to the site, and a search with sounding probes was started. Shortly afterwards the boy was found at about 50cm depth. He had then been buried for 3 to 4 hours and



a physician could only establish the boy's death.

The avalanche had a vertical fall height of about 20m.



SUMMARY OF AVALANCHE DAMAGES IN NORWAY 1982/83

County	People		Buildings			Vehicles		
	Killed	Caught or buried	Residents	Agricultural	Cottages	Other	On public roads	Parked
Buskerud					2	2		
Finnmark		2					1	
Hordaland		1						
Møre og Romsdal		6		1	8		2	
Nordland		7				12		
Nord-Trøndelag	1							
Oppland					14			
Sogn og Fjordane		4		2	6	7	1	1
Telemark		1					1	
Troms	1	20					1	
Norway	2	41	_	3	30	21	6	1