

AVALANCHE NEWS NO. 14

FEBRUARY 1984

EDITORIAL NOTE

The intention of AVALANCHE NEWS is to assist communication between persons and organizations engaged in snow avalanche work in Canada. Short articles cover reports of accidents, upcoming and past events, new techniques and equipment, publications, personal news, activities or organizations concerned with avalanche safety, education and research. Contributions are expected from the readers.

Avalanche News is issued three times per year, usually in January, June, and October. There is no subscription fee. Requests for copies and notifications of changes of address should be sent to the publisher.

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AVALANCHE NEWS
Canadian Avalanche Association, 3904 West 4th Ave., Vancouver, B.C., V6R 1P5
February 1984, No. 14

CANADIAN AVALANCHE ASSOCIATION

Technical Meeting

The members of the Canadian Avalanche Association will meet for the purpose of exchanging ideas, brushing up on knowledge and techniques and renewing personal contacts.

Location

Revelstoke, B.C., Community Centre.

Date and Time

May 3, 1984, 1500-1700 hours: technical meeting
Evening: social contacts and informal dinner

May 4, 1984, morning and, if necessary, late afternoon: technical meeting

Topics

The Directors have proposed the following topics for discussion:

- a) Review of the Mountain Weather Forecast.
- b) Regulations and training for application of explosives (hand charges, avalauncher, helicopter bombing).
- c) Brush up and comments on observation and recording standards for weather, snowpack and avalanche occurrences.
- d) Review of the winter activity, accidents and unusual avalanches.
- e) Code of ethics for members of the Association.
- f) Equipment test programs, e.g. probes.

Members are invited to propose to Peter Schaeerer additional topics, announcements and progress reports which they would like to present. The participants of the meeting should come prepared for the discussion of the observation standards. This is the opportunity to ask questions, invite comments, raise arguments, seek clarification.

Accommodation

The Regent Inn in Revelstoke has offered special rates for the participants of the meeting (\$28 - single room, \$32 - twin room).

Annual General Meeting

The Annual General Meeting of the Canadian Avalanche Association will be held at 1330 hours on May 4, 1984, at the Community Centre in Revelstoke, B.C. The members of the Association shall receive by mail the agenda for the Annual General and the Technical meeting.

Director's Meeting

The Directors of the Association met at Rogers Pass on January 23, 1984. As well as deciding on the format and content of the meeting on May 3-4, 1984, the Directors dealt with the following business:

The draft of a code of ethics was discussed. After receiving advice from a legal council the revised draft will be mailed to the members for further discussion.

Chris Stethem has investigated a liability insurance for active members, but the topic is complex and needs further study. Further investigations may show that the Canadian Avalanche Association is too small for an economical group insurance policy.

The objectives of the professional avalanche courses of the National Research Council/B.C. Institute of Technology do not seem to be well understood by authorities and employers, and there is confusion about these and other avalanche courses offered for the general public. The Directors decided that the definition, qualifications of participants and the future management of the courses must be reviewed by a working group.

INTERNATIONAL COMMITTEE FOR ALPINE RESCUE

Information translated and submitted by
Peter Fuhrmann, Parks Canada, Banff

The annual conference of the International Committee for Alpine Rescue (I.K.A.R.) was held on October 15, 1984, at the Alpine Centre Rudolfshutte in Austria. The Committee operates with four sub-committees (Terrestrial Rescue, Air Rescue, Avalanche, Medicine) which conducted separate meetings and then reported to the meeting of delegates at the end of the conference. Following is the report of the Sub-committee Avalanche, chaired by Guy de Marliave, France.

During the winter of 1982-1983, 131 fatalities occurred in avalanche accidents throughout I.K.A.R countries.

France	36	Bulgaria	3
Switzerland	26	Germany	2
Austria	23	Norway	2
Italy and South Tyrol	16	CSSR	2
USA	12	Yugoslavia	1
Poland	4	Spain	1
Canada	3	Lichtenstein	0
		Great Britain	0

Throughout the countries, 1,142 avalanche dogs are available. This is an increase of approximately 195 dogs over the previous year.

It has been found that the newly developed avalanche rescue systems "Lawino" and "Recco" are not suitable for self-rescue within the party. The Recco system in principle is a re-vamping of the Forster-Probe and the Lawino Section Probe can be seen as an addition to other rescue systems such as the avalanche dog for example.

A large portion of the discussion was spent on the electronic detection devices concerning frequencies 2.275 kHz on the one side (Pieps, Ortovox, Redar, Ruf) as well as 457 kHz (Autophon). These instruments have now been used for approximately ten years. The tendency is to produce two frequency units.

It is noted that this two frequency situation not always, but regularly, leads to difficulties during rescue missions. This situation is a most undesirable one for the I.K.A.R. Therefore, based on the available practical and scientific knowledge, recommendations have to be made as the third generation of electronic detection devices is going into production. The most useful instrument with the best frequency shall receive the go-ahead. On an international basis, instruments will be improved from a point of quality, will be reduced in their price, and it is expected that producers will fulfill the wishes the consumer is making.

With this in mind, at a specific point of time, instruments should be produced only using one frequency. During the phase-out period of the two frequency situation, search operations will have to be carried out using a two frequency capability. It is recommended that the various I.K.A.R. countries accumulate, until the next I.K.A.R. Executive Meeting in the spring of 1984, all necessary data to clarify the practical and scientific knowledge so that comparisons can be drawn. On hand of that, further research and tests will take place with a hope that a unanimous opinion as to one frequency can be achieved.

The Meeting of Delegates accepted the recommendations of the Sub-committee and resolved:

1. A letter by the President of the I.K.A.R. to all electronic detection device producers. Answers are expected by March 31, 1984.
2. A discussion concerning the problems during the Executive Meeting in the spring of 1984.
3. It is expected that a recommendation to the producers will be formulated during the next Meeting of Delegates in 1984 requesting the production of one frequency only. Until that point, the situation shall not be publicized as it will only result in confusion and uncertainties.

RESCUE OF AVALANCHE VICTIMS

Information presented by Andre Roch, Switzerland
in connection with the I.K.A.R. Conference

Statistical data indicates that out of ten avalanche victims, two die immediately due to traumatic injuries, shock or compression by snow masses. Of the remaining eight, four survive the following hour, two survive for two hours, and only one remains alive over a period of three hours. This theoretical life expectancy curve, using a time factor, is basically asymptotic, which means that at the end the curve never reaches the zero factor. Therefore, it can be expected that no matter how small the margin may be the avalanche victims can still be rescued alive.

These experiences show that speed of locating a victim and excavating him are the two major factors necessary for live recoveries. However, rescue attempts should never be abandoned.

In Macugnaga, south of Monte Rosa, a Canadian woman was rescued alive after having been buried in a wet snow avalanche after 43 hours. Having been thrown forward an air pocket was created under her body. She was located by an avalanche dog. In Sweden, a trapper buried in an avalanche still lived after seven days. He had been pinned down on the ground by a birch tree which created an air canal along its trunk. Prior to having been found, he had consumed four grouse which he had previously shot and had also eaten all of his ski wax. His frostbitten feet had to be partially amputated.

Diverse location devices and apparatus have been recommended and tested. To date, the best instruments are those which are based on the transceiver principle. One of the first of these instruments was the Bachler apparatus which was able to locate over a distance of six metres. The American, Dr. John Lawton, constructed the Skadi and increased the distance to twenty metres. Through a competitive effort by the Swiss Army, the Barryvox was produced which reached a distance up to thirty metres. The late Prof. Dr. W. Fritsche, of Graz, developed and produced the most used transceiver model, Pieps. Recently introduced instruments are the Ortovox, Redar and Ruf. These numerous detection devices, approximately the size of a cigarette package, are switched to transmit and worn by ski mountaineers. In case of an avalanche accident, those not caught by the slide or those who were able to free themselves, switch their instruments to receive and locate the buried victims by following the transmission sounds to its origin. This system is not always simple. Strong winds can make it difficult to hear the sounds. During foggy weather conditions or heavy snowfall or drifting, it may be difficult to establish a systematic search pattern. It should be remembered that even with technically complete instrumentation, the finding of a victim may not be possible fast enough. Even if one has located the victim, he still has to be excavated from the snow. Often the digging process is most complex. An avalanche shovel increases the chances of excavating a victim alive.

Unfortunately, some of these instruments use different frequencies. Some use high frequencies of 457 kHz, the other lowers frequencies of 2.275 kHz. Thus, they are not compatible and results can be catastrophic. Last winter, a group of German skiers above the St. Antonien in Prattigau were caught in an avalanche. A nearby group of Swiss ski mountaineers could not locate the German group because of this difference in frequencies. Only after one of the German members was able to free himself from the snow cover, could he switch his instrument to receive and the search could successfully be started. After half an hour, the remaining five members of the party were located dead.

SNOW RESEARCH IN CANADA

A workshop is being planned for the spring of 1985 to promote communication between snow researchers and identify areas where an exchange of manpower, funds, equipment and knowledge would be beneficial.

The workshop has been proposed by the Snow and Ice Sub-committee of the Associate Committee on Geotechnical Research of the National Research Council. The role of the Snow and Ice Sub-committee is to identify research needs for snow and ice problems in Canada and promote research to address perceived deficiencies. To assist in carrying out this role, the Sub-committee has set up an advisory group to review and promote snow research in Canada and its application, identify deficiencies and recommend implementation of solutions. In reviewing snow research in Canada, the advisory group noted that the snow research effort in Canada is fragmented. This is reflected by the fact that there are a large number of people who devote a small fraction of their time to snow problems. Thus, the overriding need is for improved communication.

To facilitate this communication, the advisory group is requesting all people who have a research interest in snow to describe in a short paragraph the project in which they are involved and main impediments (manpower, suitable snow, finances, time frames, equipment shortcomings). The responses received will help plan the structure of a 2-3 day workshop in the spring of 1985, which will allow snow researchers in Canada to form a stronger community and exchange information, ideas and most importantly, plans and needs. Presentations would be anticipated in terms of projects and discussion could be held under many headings. Several examples are:

- a) Snow and Traffic
- b) Spatial Distribution of the Snow Cover
- c) Collection of Data about Snowfall and Snow Cover
- d) Metamorphism of Snow
- e) Process of Melting
- f) Snow and Buildings
- g) Snow Making
- h) Snow Engineering
- i) Remote Sensing of Snow
- j) Snow Grooming
- k) Avalanches

The members of the Snow Research Advisory Group are:

Dr. P. Richard Kry (Chairman)
Esso Resources Canada; Calgary, Alberta

Dr. G. J. Irwin
Defence Research Establishment; Suffield, Alberta

Dr. D. H. Male
University of Saskatchewan; Saskatoon, Saskatchewan

Dr. Raymond Yong
McGill University; Montreal, Quebec

Dr. Ronald Perla
National Hydrology Institute; Canmore, Alberta

Dr. David McClung
National Research Council; Vancouver, British Columbia

Mr. Peter Schaerer
National Research Council; Vancouver, British Columbia

Replies should be mailed to Peter Schaerer (address on front page of Avalanche News) who will compile the projects and report to the Advisory Group.

AVALANCHE RESCUE DOGS

Submission by S/Sgt. D. G. Wiebe
Royal Canadian Mounted Police, Police Dog Service
Box 520, Innisfail, Alberta, T0M 1A0

The "Certification Standards for Provincial Emergency Program (P.E.P.) Dog/Handler Teams in Avalanche Search and Rescue" has now been completed and is in the hands of Mr. B. Thorshaug, S.A.R. Co-ordinator for P.E.P. Applications for acceptance and training as a P.E.P. Dog Handler must be made to the Provincial Emergency Program office in Victoria.

AVALANCHE INFORMATION COURSES

Backcountry Avalanche Institute

The Backcountry Avalanche Institute under the leadership of Al Schaffer offers a series of avalanche awareness programs for those who wish to travel safely in the mountain backcountry. The courses consist of a one-day introduction in the classroom at Canmore followed by one or several days in the field. Upcoming courses are:

- a) Level I - Weekend Course
February 25-26, 1984. Cost: \$55.00
- b) Week Course
March 5-9, 1984. Cost \$200.00

Information: Backcountry Avalanche Institute
Box 1050
CANMORE, ALBERTA
TOL 0M0 Telephone: 403-678-4102

Federation of Mountain Clubs of British Columbia

The Federation through its Safety and Education Committee, organizes several two-day introductory avalanche information courses, principally in the Lower Mainland of British Columbia. The course program and instructional material was developed by Frank Baumann.

Information: 1200 Hornby Street
VANCOUVER, B.C.
V6Z 2E2 Telephone: 604-687-3333

Course at Nelson/Whitewater Ski Area

The Professional Ski Patrol of Whitewater Ski Area offers weekend courses for the general ski touring public. The course dates are set according to demand.

Information: Tom Van Alstine
Whitewater Ski Society
Box 60
NELSON, B.C.
V1L 2W3 Telephone: 604-352-9828

Course at Cranbrook

A two-day information course is planned for February 4-5, 1984, through the East Kootenay Community College and will be instructed by Chris Sadleir.

Courses at Renton, Washington

Backcountry skiers and mountaineers in southwestern British Columbia might be interested in the avalanche seminars offered by The Mountain School, P.O. Box 728, Renton, Washington, 98056 (near Seattle); telephone: 206-226-2613.

Advanced Avalanche Awareness Course

Clair Israelson has compiled an outline for an awareness course on an advanced level with a duration of 16 hours classroom and 24 hours field trips. The proposed program will be reviewed at a workshop this coming spring.

INTERNATIONAL SNOW SCIENCE WORKSHOP

Attention is drawn to the workshop on October 24-27, 1984, at Aspen, Colorado. The Workshop provides an opportunity to meet friends, colleagues and well-known persons in the avalanche business. The organizers recommend early registration as there is a limit on the number of participants.

Address for information and registration:

ISSW Workshop Committee
c/o Mountain Rescue - Aspen, Inc.
P.O. Box 4446
Aspen, Colorado 81612

The Workshop registration fee is \$45.00 U.S.

PUBLICATIONS

Western Snow Conference Metrication Committee, Metrication of Manual Snow Sampling Equipment. Final report April 1983, 106 pp.

Available from The Western Snow Conference, c/o Robert T. Davis, Secretary, P.O. Box 14884, Spokane, Washington, 99214, U.S.A. Price \$10.00 U.S.

The publication is of interest to all observers and managers who measure water equivalents of the snow cover. The Committee tested ten different snow samplers and cutters in a variety of snowpacks in British Columbia, California, Montana and Ontario. Among the samplers under study was the Federal Snow Sampler which is widely used in the deep snowpack of Western Canada.

Correction factors are derived from the data which may be used to adjust measured values of snow water equivalent to true values for the existing cutters. Through the test program, the design of a nominal metric cutter evolved, capable of measuring true value of the snow water equivalent. Drawings and specifications are included for both large and small diameter samplers.

EQUIPMENT

Submission by Alan Dennis, Stewart, B.C.

Esso Resources has announced the closure of Granduc Mine, Stewart, B.C.

Offers are invited on any or all Avalanche Control Equipment. Specific offers should be sent to:

Canada Wide Mines Ltd.
Attention: E. J. Schnabl
Box 190
STEWART, B.C.
VOT 1W0 Telephone: 604-636-2223 (Extension 332)
604-636-2215 (Extension 20)

Enquiries are also invited from any qualified Dog and Handler to search for duds this summer.

Further details about equipment or dud search are available from:

Alan Dennis
Telephone: 604-636-9117

All offers to purchase equipment must be at the mine by March 15, 1984.

Rescue Equipment

500 metres	6 mm Aircraft Cable
1 pair	Jaws of Life "Hydra Spred'R"
14	Avalanche Transceivers
40	fitted sections - 1.25 m Avalanche Probes
10	3.5 m Avalanche Probes
1	Cascade Toboggans (with fittings)
3 pairs	Snow Shoes
1	1979 3/4 ton Flat Bed Pickup
	Various lengths and types of rope and assorted climbing/rescue equipment

Rifles and Avalaunchers

4	Mark 20 Avalaunchers
1	Mark 18 Avalauncher
3	75 mm Recoilless Rifles
2	105 mm Recoilless Rifles
350 rounds	75 mm Ammunition
150 rounds	105 mm Ammunition
250	Tailfins for Avalauncher
5	Guy Mounts
	Spare parts for 75 mm rifle and Avalauncher

Weather Equipment

2	Stevenson Screens
1	WSC 755 Remote Weather Measure Machine
2	Maximum-Minimum Thermometers
1	Barometer
1	Barograph
1	Rain Gauge
1	Snow Profile Kit

AVALANCHE RESOURCE AGENCIES

JANUARY 1984

1) AVALANCHE CONDITIONS, SEARCH AND RESCUE

The following agencies and individuals maintain continuous observations of the snow stability and avalanche hazards in their areas. They are also equipped for search and rescue work.

National Parks

Banff National Park:

Correspondence:

The Chief Warden
Banff National Park
P.O. Box 900
BANFF, ALBERTA T0L 0C0

Information concerning avalanche conditions:

Taped message on telephone 403-762-3600
Banff Wardens' office (open 24 hours per day)
Lake Louise Wardens' office 403-522-3866

Avalanche control offices at:

Sunshine Village Telephone: 403-762-2693
Tim Auger

Lake Louise Telephone: 403-522-3982
Clair Israelson

Mt. Norquay Telephone: 403-762-2640
Doug Martin

Emergency telephone: 403-762-4506

Jasper National Park:

The Chief Warden Telephone: 403-852-4401
Jasper National Park 403-852-3311 (24 hr
P.O. Box 10 emergency)
JASPER, ALBERTA T0E 1E0

Parks information office at Jasper Telephone: 403-852-4401

Glacier and Mount Revelstoke National Parks:

Correspondence:

The Superintendent
Glacier and Mount Revelstoke National Parks
P.O. Box 350
REVELSTOKE, B.C. V0E 2S0

Information concerning avalanche conditions:

Parks office at Revelstoke	Telephone: 604-837-5155
Information office at Rogers Pass	Telephone: 604-837-6274

Search and rescue:

The Chief Warden, Revelstoke	Telephone: 604-837-5155
Wardens' office, Rogers Pass	Telephone: 604-837-6274

Yoho National Park
Box 99
FIELD, B.C. V0A 1G0 Telephone: 604-343-6467
Attention: Chief Park Warden

Kootenay National Park
Box 220
RADIUM HOT SPRINGS, B.C. V0A 1M0 Telephone: 604-347-9615
Attention: Chief Park Warden

Waterton Lakes National Park
WATERTON, ALBERTA T0K 2M0 Telephone: 403-859-2352
Attention: Chief Park Warden

Kluane National Park
Haines Junction
YUKON Telephone: 403-634-2251
Attention: Chief Park Warden

British Columbia Ministry of Transportation
and Highways

Geoff Freer, Head
Snow Avalanche Section
940 Blanshard Street
VICTORIA, B.C. V8W 3E6 Telephone: 604-387-1738 (Bus)
604-347-9218 (Res)

District Avalanche Technicians:

Ed Campbell
Box 579
HOPE, B.C. VOX 1L0 Telephone: 604-869-2401

Randy Stevens
Box 460
LILLOOET, B.C. VOK 1V0 Telephone: 604-256-4255

John Tweedy
238-10th Avenue
CRESTON, B.C. VOB 1G0 Telephone: 604-428-9307

Bruce Allen
1113 2nd Street West
REVELSTOKE, B.C. VOE 2S0 Telephone: 604-837-5116

Bill Wellwood
P.O. Box 490
STEWART, B.C. VOT 1W0 Telephone: 604-636-2410

Mike Zyllicz
#300-4546 Park Avenue
TERRACE, B.C. V8G 1V4 Telephone: 604-635-6254

The Ministry of Transportation and Highways have trained personnel and
rescue equipment on all mountain highways with avalanche problems.

Parks Branch of British Columbia Ministry
of Lands, Parks and Housing

Chris Sadleir
Parks & Outdoor Recreation Division
East Kootenay District
Box 118
WASA, B.C. VOB 2K0 Telephone: 604-422-3212

Parks Branch
MANNING PARK, B.C. VOX 1R0 Telephone: 604-840-8836

Parks Branch
(Seymour Mountain and Cypress Park)
NORTH VANCOUVER, B.C. (ski reports) Telephone: 604-929-3911
604-929-2358

Parks Branch
(Kokanee Creek)
NELSON, B.C. Telephone: 604-825-4421

Parks Branch
(Alice Lake)
BRACKENDALE, B.C. VON 1H0 Telephone: 604-898-3024

Alberta Recreation and Parks

Kananaskis Country Region
Box 280
CANMORE, ALBERTA TOL 0M0

George Field - Snow Studies
Assistant Telephone: 403-678-5508

Lloyd Gallagher - Alpine
Specialist Telephone: 403-678-5508

Gavin More - Resource Specialist Telephone: 403-678-5508

Kananaskis Provincial Park Telephone: 403-591-7222

Bow Valley Provincial Park Telephone: 403-673-3663

Ski Areas

Whistler Mountain
Whistler Mountain Ski Corporation
Box 67
WHISTLER, B.C. VON 1B0 Telephone: 604-932-3434
Attention: Brian Leighton

Red Mountain Ski Area
Box 939
ROSSLAND, B.C. VOG 1Y0 Telephone: 604-362-7384
Attention: Simon Walker

Snow Valley Ski Ltd.
Box 788
FERNIE, B.C. VOB 1M0 Telephone: 604-423-6041
Attention: Dave Aikens

Mt. Washington Ski Area
4713 Oakridge Drive
COURTENAY, B.C. V9N 6A7

Telephone: 604-334-2966

Whitewater Ski Society
Box 60
NELSON, B.C. V1L 2W3
Attention: T. Van Alstine

Radio Telephone: N699424

Blackcomb Mountain
P.O. Box 98
WHISTLER, B.C. V0N 1B0
Attention: Ken Newington

Telephone: 604-932-3141

Canadian Ski Patrol System

Brian Weightman
Avalanche Officer
C.S.P.S. Calgary Zone
2198 Home Road N.W.
CALGARY, ALBERTA

Telephone: 403-253-7601 (days)
403-286-7245 (eve)

Peter Spear
National Avalanche Officer
117 Waskatenau Crescent
CALGARY, ALBERTA T3C 2X7

Telephone: 403-249-0055

George Evanoff
Pacific North Division-Avalanche Officer
1960 Garden Drive
PRINCE GEORGE, B.C. V2M 2V8

Telephone: 604-564-7814

Heli-Ski Operators

B.C. Powder Guides
Box 258
WHISTLER, B.C. V0N 1B0

Telephone: 604-932-5331

Mines Hotel, Bralorne, B.C.,
mid-February to mid-March

Telephone: 604-238-2234

Hans Gmoser, Mark Kingsbury, Jeff Boyd, Kobi Wyss
Canadian Mountain Holidays
Box 1660
BANFF, ALBERTA T0L 0C0

Telephone: 403-762-4531

Ernst Buehler
Canadian Mountain Holidays, Caribooos
Box 1660
BANFF, ALBERTA T0L 0C0

Prince George Mobile N699377
"Cariboo Lodge"

Klaus Fux Canadian Mountain Holidays, Valemount VALEMOUNT, B.C. VOE 2ZO	Telephone: 604-566-4487
Dominic Neuhaus Canadian Mountain Holidays, Monashees MICA CREEK, B.C. VOE 2LO	Telephone: 604-834-7223
Buck Corrigan Canadian Mountain Holidays, Revelstoke REVELSTOKE, B.C. VOE 2SO	Telephone: 604-837-2107
Colani Bezzola Canadian Mountain Holidays, Bobbie Burns Box 827 GOLDEN, B.C. VOA 1HO	Telephone: 604-346-3366 Golden Mobile N698837 Bobbie Burns Two
Leo Grillmair Canadian Mountain Holidays, Bugaboos BANFF, ALBERTA TOL OCO	Telephone: 604-346-3366 Vancouver Mobile N710064 Bugaboo Lodge
Ernst Salzgeber Panorama Heli-Skiing Box 937 INVERMERE, B.C. VOA 1KO	Telephone: 604-342-6941
Rudi Gertsch Purcell Helicopter Skiing GOLDEN, B.C. VOA 1HO	Telephone: 604-344-5410
Peter Schlunegger Selkirk-Tangiers Heli-Skiing REVELSTOKE, B.C. VOE 2SO	Telephone: 604-837-5271
Allan Drury Selkirk Wilderness Skiing MEADOW CREEK, B.C. VOG 1NO	Telephone: 604-366-4424
Mike Wiegele Wiegele Helicopter Skiing BLUE RIVER, B.C. VOE 1JO BANFF, ALBERTA TOL OCO	Telephone: 604-673-8344 Telephone: 403-762-4171

2) SEARCH AND RESCUE

The following agencies and individuals can assist in search and rescue work.

Dogs for Avalanche Search - Parks Canada

Alphie Burstrom
Jasper National Park Telephone: 403-852-4401 (Bus)
JASPER, ALBERTA TOE 1EO 403-852-3555 (Res)

Gordon Peyto
Glacier National Park Telephone: 604-837-6274 (Bus)
REVELSTOKE, B.C. VOE 2SO 604-344-5041 (Res)

Dale Portman
Banff National Park Telephone: 403-522-3866 (Bus)
LAKE LOUISE, ALBERTA TOL 1EO 604-343-6494 (Res)

Dogs for Avalanche Search - R.C.M.P.

The followings dogs and their masters have received special avalanche training:

Chilliwack Sub/Division

Cpl. Terry Barter Telephone: 604-795-9424

Cranbrook Detachment

Cpl. Gordon Burns Telephone: 604-426-8422

Cochrane, Alberta Detachment

Cpl. Chris Banham Telephone: 403-932-2211

Courtenay Detachment

Cpl. Rod Nichol Telephone: 604-338-7421

Kamloops Sub/Division

Cpl. Jim Brown Telephone: 604-372-3111

Nanaimo Detachment

Cpl. Dale Marino Telephone: 604-754-2345

Nelson Detachment

Cpl. Wayne Murphy Telephone: 604-352-4104

North Vancouver Detachment

Cpl. Rick Clark Telephone: 604-985-1311

Penticton Detachment

Cpl. Jim Brewin Telephone: 604-492-4300

Prince George Detachment

Cst. Al Soniff Telephone: 604-562-3371

Terrace Detachment

Cpl. Ron Flack Telephone: 604-635-4911

Vernon Detachment

Cpl. Gary Gillette Telephone: 604-545-7171

Whitehorse Detachment

Cpl. Brian Boleen Telephone: 403-667-5521 or
403-667-5573

Provincial Emergency Program

The British Columbia Provincial Emergency Program co-ordinates most local search and rescue groups in the Province. Enquiries can be directed to:

R.E. Neale, Director
Provincial Emergency Program
931 Ellery Street
VICTORIA, B.C. V8V 1X4 Telephone: 604-387-5956

B. Thorshaug, Search & Rescue Co-ordinator
Provincial Emergency Program
931 Ellery Street
VICTORIA, B.C. V8V 1X4 Telephone: 604-387-5956

Regional co-ordinators are located at:

Victoria

(Bus) Mr. W.C. Dalley (Claude) Telephone: 604-387-3458
207-2951 Tillicum Road (24 hour)
VICTORIA, B.C. V9A 2A6 604-386-8523
(unlisted)

(Res) 1685 Tampico Place Telephone: 604-477-2463 (Res)
VICTORIA, B.C. V8N 5H2

Lower Mainland

Mr. F.G. Clegg (Frank)
(Bus) 10334 152nd A Street Telephone: 604-584-8822
SURREY, B.C. V3R 7P8 (24 hour)

(Res) 6892 Centennial Drive Telephone: 604-858-9980 (Res)
SARDIS, B.C. VOX 1Y0

Prince Rupert

Mr. J.A. Stott (Jim) Telephone: 604-624-2121 (Bus)
(Bus) Room 111, Courthouse Local 237/282
PRINCE RUPERT, B.C. V8J 1B7 604-624-2126
(after hours)

(Res) 2060 Graham Avenue Telephone: 604-624-2517 (Res)
PRINCE RUPERT, B.C. V8J 1C8

Omineca-Peace

B.C.E. Akehurst (Barry) Telephone: 604-562-8131 (Bus)
(Bus) 1600 3rd Avenue Local 283/337
PRINCE GEORGE, B.C. V2L 3G6 604-562-8139
(after hours)

(Res) 753 Faulkner Crescent Telephone: 604-563-5531 (Res)
PRINCE GEORGE, B.C. V2M 5E1

Nelson

E.H. Gower (Ean) Telephone: 604-352-2211 (Bus)
(Bus) 552 Stanley Street 604-352-2131
NELSON, B.C. V1L 1N2 (24 hour)

(Res) 617 Carbonate Road Telephone: 604-352-7892 (Res)
NELSON, B.C. V1L 4P6

Invermere

Columbia Mountain Rescue Group Telephone: 604-342-6042 (Res)
A. Larson (Arnor), Co-ord. 604-342-9741 (Res)
J. Hetherington, Deputy Co-ord.
Box 399
INVERMERE, B.C. V0A 1K0

Kamloops

M.E. Dyer (Murray) Telephone: 604-374-9717 (Bus)
(Bus) 1259 Dalhousie Place 604-372-3213
KAMLOOPS, B.C. V2C 5Z5 (24 hour)

(Res) 2478 Young Street Telephone: 604-376-3453 (Res)
KAMLOOPS, B.C. V2B 4M8

First Aid Ski Patrol

P.O. Box 2651
VANCOUVER, B.C. V6B 3W8

West Kootenay Rescue Group

Box 764
NELSON, B.C. V1L 5R4

To activate, call either:

Nelson R.C.M.P. Telephone: 604-352-3511

Dennis Herman Telephone: 604-357-2102

Cpl. Wayne Murphy
Nelson R.C.M.P. Telephone: 604-354-4104

3) EDUCATION

Outdoor Recreation Council of British Columbia

Suite 100, 1200 Hornby Street
VANCOUVER, B.C. V6Z 2E2 Telephone: 604-687-3333

Safety brochures and slide packages.

Federation of Mountain Clubs of British Columbia

1200 Hornby Street
VANCOUVER, B.C. V6Z 2E2 Telephone: 604-687-3333

Two day awareness courses.

Avalanche Films

"Avalanche" - 50 minutes

Film Library
Tourism British Columbia
1190 Melville Street
VANCOUVER, B.C. V6E 3W1

Telephone: 604-668-2732

"The Snow War" - 25 minutes

National Film Board
811 Wharf Street
VICTORIA, B.C. V8W 1T2

Telephone: 604-388-3868

National Film Board
1161 West Georgia Street
VANCOUVER, B.C. V6E 3C4

Telephone: 604-666-1716

National Film Board
545 Quebec Street
PRINCE GEORGE, B.C. V2L 1W6

Telephone: 604-564-5657

Canadian Ski Patrol System

Brian Weightman
Avalanche Officer
C.S.P.S. Calgary Zone
2198 Home Road N.W.
CALGARY, ALBERTA

Telephone: 403-253-7601 (days)
403-286-7245 (eve)

Peter Spear
National Avalanche Officer
117 Waskatenau Crescent
CALGARY, ALBERTA T3C 2X7

Telephone: 403-249-0055

George Evanoff
Pacific North Division-Avalanche Officer
1960 Garden Drive
PRINCE GEORGE, B.C. V2M 2V8

Telephone: 604-564-7814

Kananaskis Country Region

Joel Christensen - Visitor Services Telephone: 403-678-5508

Kananaskis Provincial Park
Rom Chamney (Film - Swept Away) Telephone: 403-591-7222

Backcountry Avalanche Institute

Box 1050
CANMORE, ALBERTA T0L 0M0 Telephone: 403-678-4102

Awareness courses.

5) WEATHER OFFICES

Atmospheric Environment Service

Correspondence and equipment:

Regional Director
1200 West 73rd Avenue
VANCOUVER, B.C. V6P 6G5 Telephone: 604-732-4673

Mountain Weather Forecast -
Supervising Meteorologist Telephone: 604-732-4298

Officer in Charge
Pacific Weather Centre
1200 West 73rd Avenue
VANCOUVER, B.C. V6P 6G5 Telephone: 604-732-4163

Attention: Chief Meteorologist

Alberta Weather Office
Edmonton International Airport
EDMONTON, ALBERTA T5J 2T2 Telephone: 403-437-1250

LIST OF WEATHER OFFICES IN BRITISH COLUMBIA

November 1, 1983

<u>OFFICE</u>	<u>TELEPHONE</u>	<u>OPEN HOURS</u> (local time)
CASTLEGAR	604-365-3131	0630-1630
KAMLOOPS	604-376-0727	0700-1700
KELOWNA	604-765-6598	0445-0015
PENTICTON	604-492-0539	0700-1700
PORT HARDY	604-949-6559	0700-1700
PRINCE GEORGE	604-963-7552	0400-2330
REVELSTOKE	604-837-4164	0400-2200
TERRACE	604-635-3224	0710-1710
VANCOUVER	604-273-2345	24 HOURS
VICTORIA	604-656-3131	24 HOURS
PACIFIC WEATHER CENTRE	604-732-4298	24 HOURS

(The Pacific Weather Centre is the main contact during hours when the local weather offices are closed.)

BANFF, ALBERTA	403-762-2088	0415-1715
WHITEHORSE, YUKON	403-668-2293	24 HOURS

CHANGES

Changes, additions, or deletions to this list should be reported to the Snow Avalanche Section, British Columbia Ministry of Transportation and Highways.

FROM:

Snow Avalanche Section
Ministry of Transportation
and Highways
940 Blanshard Street
VICTORIA, B.C.
V8W 3E6

Jim Bay
Box 1193
REVELSTOKE, B.C.
VOE 2S0

