

COMMITTEE REPORT
SENATE

FURTHER: None

6/18/81

Date: January 19, 1982

Mr. President:

The Committee on FINANCE has had HB 18 (ofc failed)

making a supplemental appropriation to the Dept. of Public Safety for implementation of the statewide avalanche warning system

under consideration and (a majority of the committee) ~~(the committee)~~ reports it back with the following recommendations:

- do pass do not pass
- do pass with attached amendments *(s) new title*
- replace with CS for _____ same title
- and recommends _____ new title
- AND attaches a "Letter of Intent" New Fiscal Note
- reports it back without recommendation *1/12/82 Dept. Pub. Safety*
- referred to the _____ Committee

MEMBERS SIGNING
DO PASS

MEMBERS HAVING
OTHER RECOMMENDATIONS:

CHAIRMAN

A M E N D M E N T

OFFERED IN THE SENATE:

By: Finance Committee

To: _____ SENATE BILL No. _____

HOUSE BILL No. HB 18 (eff failed)

PAGE: 1

LINE: 14

DELETE EXISTING SEC. 2
ADD NEW SEC. 2 AND SEC. 3

Sec. 2. This Act takes effect immediately in accordance with AS 01.10.070(c).

Sec. 3. The unexpended and unobligated portion of the appropriation made by this Act lapses into the general fund June 30, 1983.

Funding Information
General Fund \$130,000
Other Funds -0-
\$130,000

Introduced: 2/4/81
Referred: State Affairs and
Finance

1 IN THE HOUSE

BY MILLER

2 HOUSE BILL NO. 18 (efd failed)

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a supplemental appropriation to the
7 Department of Public Safety for implementation of the
8 statewide avalanche warning system."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. The sum of \$130,000 is appropriated from the general fund
11 to the Department of Public Safety for contract services to prepare
12 orographic precipitation models of Southeastern and Southcentral Alaska for
13 use in the statewide avalanche warning system (AS 18.76.010).

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THE LEGISLATURE OF THE STATE OF ALASKA
TWELFTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. HB 18

Title "An Act making supplemental appropriation to Public Safety for Avalanche Warning." Requested by _____ Date _____

II. FISCAL DETAIL

Agency Affected Department of Public Safety

Program Category Affected Administration of Justice

BRU, Program, Or Subprogram(s) Affected Administration and Support

(Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
100 PERSONAL SERVICES		6.2	6.8	7.1	7.6	8.2
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LAND & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL		6.2	6.8	7.1	7.6	8.2

FUNDING (Thousands of Dollars)

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
GENERAL FUND		6.2	6.8	7.1	7.6	8.2
FEDERAL FUNDS						
OTHER (Specify Source)						

POSITIONS

	FY 82	FY 83	FY 84	FY 85	FY 86	FY 87
FULL TIME						
PART TIME		1.0	1.0	1.0	1.0	1.0
TEMPORARY						

III. ANALYSIS (See Fiscal Note Preparation Instruction, Section III)

Monitoring and administering the contract with the U.S. Forest Services for on-going operating costs would require the part-time services of an Accounting Clerk III (approximately 3 months). An inflation factor of 7% is included for subsequent years.

IV. DATE January 12, 1982

PREPARED BY *Marcia Lynn McKenzie*, Budget Analyst
AGENCY Public Safety

Original: Legislative Finance
cc: Budget and Management

PHONE 465-4349

Prime Sponsor (First Legislator Named)

33-001 (Rev. 12/81)



STATE OF ALASKA
OFFICE OF THE GOVERNOR

BILL ANALYSIS

Department Public Safety	Sponsor (Principal) Mike Miller	Bill Number HB 18
Department Position Support		
Division Director Walter V. Lawson	Date 1/29/81	Commissioner William R. Nix Date 3-4-81

GOVERNOR'S OFFICE USE

Comments:

Position Noted

By _____ Date _____

SUMMARY

1. a) Related Bills (Similar or Conflicting)	1. b) Other Agencies Affected by Bill
2. a) Organizational Support for Bill Unknown	2. b) Organizational Opposition to Bill Unknown

3. Program Effects of Bill
Unsubstantial.

4. Fiscal Impact: None Fiscal Note Attached

5. Amendments Proposed:

6. Comments:

The appropriation would be used as follows:

1. Enter into a contract with the U.S. Forest Service to sub-contract.
2. The product will be, based on projected time-frame for such a qualitative and complicated project, available within about 18 months after the bid was awarded. The bid could be awarded by early June, 1981.

- continued

It is recommended that the unused portion of the appropriation should, therefore, lapse into the General Fund sometime in December 1982 (preferably June 30, 1983)

Other Impacts

1. The operating expense required to monitor such a contract, it is anticipated, would be substantial.
2. Although firm figures are not yet available, preliminary discussions with the U.S. Forest Service indicate that a supplemental appropriation in the vicinity of \$300.0 would be required during FY 82. The Department of Public Safety would require a minimum amount to administer the project and it is anticipated that funding equivalent to three-months of an Accounting Clerk III would be needed.
3. The FY 83 operating budget of the Department should reflect these on-going operational costs that will be incurred both by the U.S. Forest Service and the Department of Public Safety.

September 16, 1981

John A. Sandor
Regional Forester
U.S. Department of Agriculture

Dear Mr. Sandor:

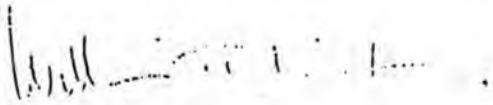
On September 8, 1981 Colonel Anderson, the Director of the Alaska State Troopers met with Chip Dennerlein, Director, Division of Park, Department of Natural Resources. The purpose of the meeting was to discuss the attached master agreement on the "Alaska Avalanche and Fire Weather Forecast System".

It was agreed that since the Department of Natural Resources have the major state manpower and program role, and the role of the Department of Public Safety is organizational and co-chairing; that the Department of Natural Resources should be the lead state agency.

During this meeting it was agreed that the Department of Natural Resources should be the lead state agency. They have the major state manpower and programmatic role, while the Department of Public Safety's role is that of co-chairman of the board and assisting in the channeling of the state's appropriated share to the Department of Natural Resources.

Therefore, I recommend that the Department of Public Safety role identified on page #2 of the agreement be assigned or delegated to the Department of Natural Resources.

Sincerely,



William R. Mix
Commissioner

WRN/WVL/djb

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
P.O. Box 1628, Juneau, AK 99802

3210
(S&PF)

SEP 23 1981



Mr. William R. Nix, Commissioner
Alaska Department of Public Safety
Pouch N
Juneau, AK 99811

Dear Commissioner Nix:

Thank you for your letter of September 16, regarding your Department's participation in the cooperative Alaska Avalanche and Fire Weather Forecast System.

We are making the change in the Master Agreement that you recommended. It is logical that the Department of Natural Resources represent the State in many of the on-the-ground operational programs. This appears to be delegated authority that you are transferring, under the basic provisions of the 1980 Statute, AS 18.76.010, Participation in Statewide Avalanche Warning.

I will send you a revised agreement for your signature, covering your Department's role with the State appropriations process and serving as State Co-Chairman of the AA/FWFS Executive Board. Until such time as the State law may be amended, I believe it is important that the Department of Public Safety representative be considered as the State Co-Chairman of the Executive Board. In this way, your Department would be fulfilling the responsibility for representing the State in the overall operation.

We appreciate your interest and cooperation.

Sincerely,

for R. J. Carl
JOHN V. SANDOR
Regional Forester

cc: William H. "Chip" Dennerlein, DNR
Wallace Watts, USDA FS
Theodore G. Smith, DNR

xc: Col. T.R. Anderson, AST

GD - 9/28/81

DEPARTMENT OF PUBLIC SAFETY
COMMISSIONER'S OFFICE
Juneau, Alaska

SEP 25 1981

Funding Information
General Fund \$130,000
Other Funds -0-
\$130,000

Introduced: 2/4/81
Referred: State Affairs and
Finance

1 IN THE HOUSE

BY MILLER

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Testimony before Senate Finance
Committee re: Avalanche Forecast Program

Jan. 19, 1982

I am Ellen Searby, resident of Juneau and trainer of SEADOGS, the Southeastern Alaska search and rescue dog team.

Our rescue team can only try to help people who get buried in avalanches and are lucky enough to survive until we get there. We cannot bring victims back to life or replace destroyed property. The only effective way to save large numbers of lives and prevent property losses is to have people and property stay out of avalanches. We need to acquire the data that allow us to predict when and where avalanches will occur--and that data will take several years to acquire. With increasing numbers of people skiing in the back country and increasing pressure to build and construct roads in avalanche areas, we have some catching up to do.

Presently the 4 of us on SEADOGS' callout list are the only canine rescuers available in all of Alaska. The RCMP have several dogs trained in western Canada. Obviously we can't get to many areas fast enough to help even those who survive the slide but are buried. In many areas, including some here in Juneau, the avalanche release zones are complicated. Part of the zone may release with an avalanche big enough to kill, leaving as much or more snow hanging above the rescuers. We need to know the condition of that remaining snow and its stability before sending in rescuers. The only accurate way to do that is with a forecast system built on as many years of complete data as we can get.

We need to have this forecast system in full operation with technicians working to acquire the needed data and assess the status of our snowpack daily. We need something a lot more complete and scientific than the method SEADOGS presently relies on (which doesn't help anyone else) of having me drive over to the Douglas side for a view of the Thane Road and ~~Douglas~~ ^{Juneau} side before calling the team to say "Hey fellows, take your dogs and packs to work today".



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL WEATHER SERVICE

Jan. 19, 1982

Mr. Chairman and members of the Finance Committee:

My name is Leif Lie. I am the Meteorologist in Charge at the Weather Service Forecast Office here in Juneau. I am here to represent the National Weather Service in support of House Bill No. 348. This bill provides for an effective avalanche forecast program for southeast and south-central Alaska. Five state agencies, several federal agencies, and the City and Borough of Juneau are involved in the funding of this bill. The total cost of the Alaska Avalanche Warning System is \$587,000.00. The State of Alaska contributes \$446,000.00 or 76%.

The National Weather Service supports House Bill No. 348 for the following reasons:

1. With an improved avalanche forecasting and warning system both lives and property will be saved.
2. A better snowfall forecast will result in a more effective avalanche control operation. This will lead to considerable dollar savings by helping the highway department know when to close and reopen public highways.
3. There will be an increase in avalanche related deaths and injuries unless the trend is reversed now. The trend is directly associated with the increase in recreational activities which include skiing, hiking, snowmobiling, and climbing.

The National Weather Service will provide meteorological and technical assistance to the Alaska Avalanche Warning System, and in Southeast Alaska will prepare and issue avalanche warnings until the Alaska Avalanche Warning Center can take over the responsibility.

I will be glad to answer any questions regarding our forecasting and warning system for avalanches...in particular, here in SE Alaska.



MY NAME IS BOB JANES AND I AM TESTIFYING FOR THE U.S. FOREST SERVICE TODAY IN SUPPORT OF HB18 AND HB348.

THESE ARE SUPPLEMENTAL APPROPRIATION BILLS FOR FISCAL YEAR 82, AND THEY ARE NEEDED TO CONTINUE OPERATION OF THE ALASKA AVALANCHE AND FIRE WEATHER FORECASTING SYSTEM. THIS IS A COOPERATIVE PROJECT BETWEEN STATE, MUNICIPAL, AND FEDERAL AGENCIES. IT WAS IMPLEMENTED IN 1980, WITH STATE PARTICIPATION AUTHORIZED UNDER THE ACT OF AS18, CHAPTER 76, EFFECTIVE JULY 1, 1980.

EACH MEMBER OF THIS COMMITTEE HAS BEEN PROVIDED WITH A PACKET OF INFORMATION SENT TO THE HOUSE FINANCE COMMITTEE, APRIL 16, 1981. I WILL THEREFORE NOT REITERATE THOSE DETAILS ABOUT THE NEED AND PURPOSE OF THESE TWO BILLS AT THIS TIME.

THE LEGISLATIVE HISTORY OF THE PREVIOUS SESSION SHOWS BOTH BILLS PASSED THE HOUSE FLOOR MAY 26, 1981. HB348 PASSED OUT OF SENATE STATE AFFAIRS MAY 29, AND HB18 PASSED THAT SAME BODY ON JUNE 18. ~~THEN, BECAUSE OF~~

~~LEGISLATIVE HISTORY FROM THE HOUSE OF REPRESENTATIVES~~

WE URGE YOU TO ACT FAVORABLY ON THESE TWO BILLS. THE FUNDING IS CRITICAL FOR CONTINUED OPERATION OF THE SYSTEM. AT THE PRESENT TIME THE ACTIVITY HAS BEEN SLICED BACK TO A BARE MINIMUM, WITH REDUCED APPLICATION IN SOUTHCENTRAL ALASKA, AND NO COVERAGE IN THE JUNEAU LOCALITY. THE RESULT IS WE'RE FALLING BEHIND IN THE PLANNED FIVE-YEAR DEVELOPMENT EFFORT FOR THE OVERALL STATEWIDE SYSTEM.

IF THESE APPROPRIATION BILLS ARE APPROVED, WE RECOMMEND THE FUNDING BE AUTHORIZED FOR EXPENDITURE THROUGH FISCAL YEAR 1983.

IT IS EXTREMELY IMPORTANT TO OBTAIN FUNDING AT THE EARLIEST POSSIBLE TIME,

Bob Janes
1/19/82

IN ORDER TO RESTORE AVALANCHE FORECASTING CAPABILITY AND PUBLIC EDUCATION EFFORT THROUGHOUT THE STATE. EARLY AUTHORIZATION WOULD ENABLE HIRING ONE AVALANCHE TECHNICIAN TO COVER THE JUNEAU LOCALITY YET THIS WINTER. THERE WOULD ALSO BE OTHER SIGNIFICANT CATCH-UP NEEDS ACHIEVED BEFORE THE END OF THE WINTER SEASON.

REMAINING FUNDS WOULD BE STRETCHED THROUGH FISCAL YEAR 1983. FOR FISCAL YEAR 1984, AUTHORIZED FUNDING WOULD BE THROUGH THE REGULAR PROGRAM BUDGETING PROCESS BY THE LEAD DEPARTMENT REPRESENTING ALL STATE INTERESTS AT THAT TIME.

WE APPRECIATE YOUR TIME AND EARLY SCHEDULING OF THESE TWO BILLS FOR HEARING. I WILL BE GLAD TO ANSWER ANY QUESTIONS ABOUT THE PROJECT.

Testimony presented by Bob Janes, Deputy Director for State and Private Forestry, USDA Forest Service, Alaska Region, at a Hearing on January 19, 1982 before the Senate Finance Committee.



THE CITY AND BOROUGH OF JUNEAU

CAPITAL OF ALASKA

155 SOUTH SEWARD ST. JUNEAU, ALASKA 99801

LAW DEPARTMENT (907) 586-3300

January 18, 1982

Senate Finance Committee
Alaska State Legislature
Pouch V
Juneau, Alaska 99811

FILE: House Bills 18 and 348 (Avalanche
Warning System Appropriations)

Dear Members:

The City and Borough of Juneau supports House Bills 18 and 348 and urges your speedy approval.

There is probably a higher per capita exposure to avalanches for Alaskans living in southeast Alaska than in most other areas of the state. Here in southeast, avalanche prone areas are both literally and figuratively in our back yards. We live and recreate in avalanche prone areas. The City and Borough participates in the cooperative local-state-federal avalanche warning system. While the system presently has several avalanche technicians, none are stationed in southeast Alaska. It is our understanding that, among other things, adoption of the subject appropriations would provide such a technician for southeast Alaska and would also pave the way for gathering and processing the information necessary to more accurately predict and prevent or control avalanches. These bills would be a significant step toward making the Alaska avalanche warning system an effective statewide system.

We urge your do pass recommendation on these bills.

Sincerely,

Gerald L. Sharp
Attorney

cc: Senator Don Bennett
Senator M. E. Dankworth
Senator Richard I. Eliason
Senator Frank R. Ferguson
Senator John C. Sackett
Senator Terry Stimson
Senator Arliss Sturgulewski
Senator Bill Ray
Representative Mike Miller
Jim Wakefield, Chairman
CBJ Legislative Committee

RESOLUTION

NATIONAL SKI PATROL SYSTEM INC. - ALASKA DIVISION
Annual Meeting - Anchorage, May 25-26, 1979

WHEREAS, The National Ski Patrol System, Inc. is a non profit volunteer organization of 23,000 individuals, with more than 300 patrollers in Alaska dedicated to protecting the health and safety of thousands of winter recreationists including, but not limited to alpine and nordic skiers using both developed and undeveloped mountainous terrain, and

WHEREAS, The State of Alaska had the highest number of fatalities, (29) in the Nation due to snow avalanches since 1970, followed by the State of Colorado and Washington with 24 and 21 deaths respectively, and

WHEREAS, Snow avalanche hazards exist throughout the State of Alaska, with: (a) 180 known avalanche paths that cross public highways and railroads; (b) over 500 human occupancy structures lying directly in avalanche paths; (c) thousands of avalanche paths within heavily used developed and undeveloped public recreation areas; (d) the Juneau area posing the greatest potential threat than anywhere in North America for a catastrophic avalanche, with resulting loss of many lives and immeasurable property damage, and

WHEREAS, central snow avalanche warning systems have proven effective in the States of Colorado, Washington, and Oregon, and

WHEREAS, there is a need for a Statewide Avalanche Warning System in Alaska, to alert its citizens to changing snow conditions conducive to severe snow avalanche danger, and

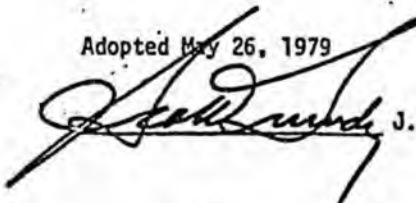
WHEREAS, the U.S. Forest Service through its Division of State and Private Forestry in the Alaska Region, has proposed a cooperative project to implement an Alaskan Avalanche Warning System (AAWS) with joint financing by various Federal and State agencies, now

THEREFORE BE IT RESOLVED, the Alaska Division of the National Ski Patrol System, Inc. strongly supports the proposed Alaska Avalanche Warning System and urges first-phase implementation to start for the winter of 1979-1980, and .

BE IT FURTHER RESOLVED, the State of Alaska Legislature is urged to adopt legislation to authorize the establishment and continuation of a line item annual appropriation to the Department of Public Safety, for the purpose of representing the State's interests in the participating Departments of Public Safety, Transportation, and Natural Resources; the annual appropriation should be consistent with the enclosed suggested financial plan, based upon benefitting State agencies.

Adopted May 26, 1979

NSPS - Alaska Division

 J. Scott Grundy, Division Director

1/18/82

HOUSE BILL 18 (An act making a supplemental appropriation to the Department of Public Safety for implementation of the statewide avalanche warning system)

2-04-81 Introduced by Representative Miller
Ref: House State Affairs, Finance

2-13-81 Passed H. State Affairs with 3 'do pass' (Miller, Fuller, Brown)
and 2 'no rec' (Cuddy, Abood)

5-18-81 Passed H. Finance with 3 'do pass' (Freeman, Moss, Rogers); 1 'do
not pass' (Carney) and 4 'no rec' (Montgomery, Haugen, Malone, Adams)

5-22-81 Passed House 29-9-2. Held for reconsideration vote until 5/26/81

5-26-81 Passed House on reconsideration 28-11-1.
Effective date failed 26-13-1

5-27-81 Read in Senate
Ref: Senate State Affairs, Finance
S. State Affairs committee referral waived

Summary:

Appropriates \$130,000 from the General Fund to the Department of Public Safety for contract services to prepare orographic* precipitation models of Southeastern and Southcentral Alaska for use in the statewide avalanche warning system (AS 18.76.010). Appropriation lapses June 30, 1982 and provided for an immediate effective date. Note: Effective date failed in House by vote of 26-13-1 on 5-26-81.

Back up testimony on file.

*orography: The branch of physical geography dealing with mountains

POSITION PAPER

HOUSE BILL NO. 18

"An Act making a supplemental appropriation to the Department of Public Safety for implementation of the statewide avalanche warning system, and providing for an effective date."

HB No. 18 provides \$130,000 for preparation of orographic precipitation models of Southeastern and Southcentral Alaska to be used as part of the statewide avalanche warning system.

The Department does believe that an avalanche warning and control system is necessary to reduce the risk of avalanche which occasionally results in serious injuries or deaths.

The Department of Health and Social Services supports the concept of this bill.

Recommended by:

David Bruce
David Bruce, Deputy Director
Division of Public Health

Date:

February 2, 1981

Approved by:

Helen D. Beirne
Helen D. Beirne
Commissioner

Date:

2/5/81

THE LEGISLATURE OF THE STATE OF ALASKA
ELEVENTH LEGISLATURE

FISCAL NOTE

I. REQUEST

Bill/Resolution No. House Bill No. 18
 Title "An Act... for... statewide avalanche warning system"
 Requested by Commissioner's Office Date 01/22/81

II. FISCAL DETAIL

Agency Affected Department of Health & Social Services
 Program Category Affected Health/Division of Public Health
 BRU, Program, or Subprogram(s) Affected Emergency Medical Services
 (Note: If more than one budget component is affected, separate line-item amounts and funding for each component in the analysis section.)

EXPENDITURES (Thousands of Dollars)

	FY 80	FY 81	FY 82	FY 83	FY 84	FY 85
100 PERSONAL SERVICES	0	0	0	0	0	0
200 TRAVEL	0	0	0	0	0	0
300 CONTRACTUAL	0	0	0	0	0	0
400 COMMODITIES	0	0	0	0	0	0
500 EQUIPMENT	0	0	0	0	0	0
600 LAND & STRUCTURES	0	0	0	0	0	0
700 GRANTS, CLAIMS, ETC.	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

FUNDING (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER (Specify Fund Source)	0	0	0	0	0	0

POSITIONS

FULL TIME	0	0	0	0	0	0
PART TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

III. ANALYSIS (See Fiscal Note Preparation Instructions, Section III)

IV. DATE 01/22/81 PREPARED BY Mark S. Johnson
 AGENCY Emergency Medical Services/Div. Public Health
 PHONE 465-3027
 Original: Legislative Finance
 cc: Budget and Management
 Prime Sponsor (First Legislator Named) Mark S. Johnson 1/23/81

CMS
P + F

<u>Funding Information</u>	
General Fund	\$130,000
Other Funds	-0-
	<u>\$130,000</u>

Introduced: 2/4/81
Referred: State Affairs and
Finance

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BY MILLER

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UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE
P.O. Box 1628, Juneau, Alaska 99802

3210
APR 16 1981



Honorable Samuel R. Cotten
Alaska State House of Representatives
Chairman, House Finance Committee
Pouch V, State Capitol
Juneau AK 99811

Dear Mr. Cotten:

The enclosed material provides background information regarding two appropriation bills which have been introduced for continued development and operation of the Alaska Avalanche Warning System. These are H.B. No. 18 and H.B. No. 348, which have been referred to your Committee.

The State of Alaska is participating in this public service which was implemented last year. The extent of next winter's operation will be largely influenced by action the State takes during this Session.

We hope that a hearing for these two bills can be scheduled at an early date. Mr. Bob Janes, Deputy Director for State and Private Forestry from my staff, should be available to answer any questions during the hearing. If possible, please advise Mr. Janes by phone, 586-7510, of the time and place as soon as it is determined.

Sincerely,

Michael A. Barton
MICHAEL A. BARTON
Deputy Regional Forester

cc: Representative Mike Miller, Sponsor
Jos Mapranaph, Finance Officer,
Department of Public Safety
Members, House Finance Committee

ALASKA AVALANCHE WARNING SYSTEM AND FIRE WEATHER FORECASTING SERVICE (AAWS/FWFS)

The enabling legislation for State participation in this project was enacted in the last Session of the Legislature. A copy of the Act is enclosed, AS 18, Chapter 76, Alaska Avalanche Warning System, which became effective July 1, 1980. Two supplemental Appropriation Bills for F.Y. 82 have been introduced in the First Session of the Twelfth Legislature to assist in development and operation of the program. For F.Y. 83, the regular program budgeting process will be used by the Department of Public Safety, representing all State interests for continuation of the program.

1. House Bill No. 18 (\$130,000). This is for a capital investment need, development of two orographic precipitation models for use in mountain weather forecasting. The enclosed testimony of 2/12/81 before the House State Affairs Committee provides further details.

2. House Bill No. 348 (\$446,000). This is primarily for operation and maintenance of the system. The following table shows direct funding needed for, and in-kind dollar value given to, the system for the period 7/1/81 - 6/30/82. Amounts shown are based on an evaluation of both tangible and intangible benefits to the cooperating agency indicated. The general concept is that all cooperators will benefit through more effective management of their individual program responsibilities. At the same time, they will be contributing to the health and welfare of Alaska residents and visitors to the State.

Following the table, a specific narrative statement of purpose and benefit is shown for each participating State cooperator. These are within the three Departments of Public Safety, Natural Resources, and Transportation and Public Facilities.

Cooperating Agency	Direct Funding Needed		Estimated In-Kind \$ Value		Total Project	
	Thousand \$	%	Thousand \$	%	Thousand \$	%
A. State						
1. DPS	\$446(93)		\$3	1		
2. DNR-Parks	(195)		50	17		
3. DNR-Geol Survey	(40)		5	2		
4. DNR-Forest, Land, and Water Mgt.	(20)		10	3		
5. DOT&PF	(98)		16	5		
Sub total	\$446	76%	\$84	28%	\$530	60%
B. Federal						
6. Forest Service	70		30	10		
7. BLM	66		140*	47		
8. Weather Service			35**	11		
9. Soil Cons. Serv.			9	3		
C. Municipal						
10. City & Borough Juneau	5		3	1		
Sub total	\$141	24%	\$217	72%	\$358	40%
Total cost	\$587		\$301		\$888	

Note: Figures in parenthesis for State agencies represent dollar benefit to the cooperator.

*Includes salary, supplies, communications and the maintenance and mortgizing of the special capital improvements (equipment) needed for developing a fireweather forecast not being furnished by the National Weather Service.

** Includes salary, office supplies, office space and other services but not the cost to the National Weather Service for gathering the weather data and producing the weather forecast products needed for making weather forecasts.

1. Department of Public Safety (\$93,000). This Department represents all State interests in the program and acts as the central office for the \$446,000 "pass through" appropriation to the Alaska Avalanche and Fire Weather Forecast System administered by the U.S. Forest Service as outlined in the Master Agreement between all participating cooperators.

The Department will benefit primarily from an expected decrease in accidents caused by snow avalanches and fire. This should result in less impact and demand to State Troopers for emergency search and rescue missions, and a decrease in expenditures for such work. The basic objective of the combined system of avalanche warning and fire weather forecasting is to reduce loss of lives, property, and public expenditures.

2. Department of Natural Resources (\$255,000). Three Divisions are cooperating in the program:

a. Division of Parks (\$195,000). Thousands of Alaska residents and visitors use State Parks for winter recreation such as back country ski touring, snow-machining, and mountain climbing. These people will benefit from the service being offered by the Avalanche-Fireweather Forecasting Center by planning trips to avoid natural dangers as they develop. On the Chugach State Park alone last year, there were 153,000 winter visitor days. The increasing risks caused by increasing use results in a greater potential for an increase in accidents. The snow avalanche hazards and conditions that exist in Alaska have resulted in a high number of fatalities during the decade of the 1970's. The combination of the permanent ice and snow fields in the mountainous terrain of Alaska, with a heavy snowfall during the winter, creates the potential for yearlong avalanche danger.

During the period 1970-78 there were 109 deaths from snow avalanches in the United States. Of these, 23, or more than 20% of the total, occurred in Alaska. During the same period, the State of Colorado had 24, and Washington had 21 fatalities. Mr. Doug Fesler, Statewide Snow Ranger, Division of Parks, has studied the Alaska incidents for that particular period and he has concluded: (1) there were 16 avalanches that caused the 23 fatalities, and he estimates that for every fatality there have been 10 other people caught in an avalanche, but survived; (2) most avalanche deaths were in January (25%), followed by February (19%) and December and May (13% each); (3) regionally in Alaska, 56% occurred in Southcentral, 25% in Interior, and 19% in Southeast; (4) most deaths were associated with recreational activities which included skiing, hiking, and climbing.

Sec. 18.76.010 (3) of Chapter 76 pertaining to the Alaska Avalanche Warning System specifies "coordinate a public awareness program on avalanche danger." To do this, the State Division of Parks has been assigned responsibility for developing and operating an effective Statewide Snow Avalanche Education Program under the direction of the Alaska Avalanche and Fireweather Forecasting System.

To assist in carrying out the program for the 1981-82 winter season, \$77,600 of the State's appropriation in the AA/FWFS operating program will be transferred to the State Division of Parks. This amount is part of the \$195,000 benefiting State Parks.

b. Division of Geological and Geophysical Surveys (\$40,000). AS 41.08.020 and 6AAC 80.050 place prime responsibility for identifying and evaluating geological hazards in Alaska with the State Geologist. The Alaska Avalanche Warning System will help in this respect, by increasing the level of knowledge gained through additional technical personnel working on the program and by gathering basic weather and snow data in high mountain terrain. Two specific provisions of the Act relating to the warning system are (4) and (5) which affect the work of this Division. Sec. 18.76.010 (4) states "catalog a comprehensive atlas of avalanche paths and slide occurrences," and (5) states "assist local governments and state agencies in identifying hazardous avalanche zones and in developing snow avalanche zoning regulations."

c. Division of Forest, Land, and Water Management (\$20,000). A combined part of the Alaska Avalanche Warning System is operation of a Statewide Fire Weather Forecasting Service during the summer. This enables a forecasting center to operate in Anchorage to handle both the avalanche and fireweather forecasts on a yearlong basis. It will result in experienced, dedicated personnel operating in this specialty field. The State Forester is participating in the program and utilizing the fireweather forecasting aspects of it.

The U.S. Bureau of Land Management has been transferring wildland fire control responsibility to the State, and by 1985 the State Forester's organization is expected to have the capability to be protecting the natural resources on 75 million acres of State and private lands against losses due to fire. Fireweather forecasting is an important management tool used for decisionmaking in fire prevention, presuppression, and suppression activity. Reliable fireweather forecasts can save not only life and property, but thousands of dollars each year in fire management practices.

3. Department of Transportation and Public Facilities (\$98,000). There are approximately 180 preliminarily identified avalanche paths crossing public highways and railroads within the State. This situation presents a constant hidden danger to the limited land transportation corridors, and since there are no alternate roads to use, the public is continually exposed to these avalanche prone routes during the winter months.

The warning and forecasting service will not only help to protect the public against these dangers, it will also enable the Department to make more effective management decisions for conducting actual avalanche control operations, closing highways to public use, etc. This should result in safer and more effective results, and there should be a substantial dollar savings from managing operations that would reduce the amount of overtime needed for emergency situations.



LAWS OF ALASKA

1980

Source
HCS CSSB 301

Chapter No.
119

AN ACT

Relating to avalanche warning and control systems; and
providing for an effective date.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

THE ACT FOLLOWS ON PAGE 1, LINE 9

Approved by the Governor: June 30, 1980
Actual Effective Date: July 1, 1980

AN ACT

Relating to avalanche warning and control systems;
and providing for an effective date.

* Section 1. AS 18 is amended by adding a new chapter to read:

CHAPTER 76. ALASKA AVALANCHE WARNING SYSTEM.

Sec. 18.76.010. PARTICIPATION IN STATEWIDE AVALANCHE WARNING SYSTEM. The Department of Public Safety, acting in cooperation with a municipality or with an agency of the federal government, shall participate in the development and implementation of a statewide avalanche warning system and shall represent the state in the operation of that system. The statewide system shall

- (1) establish and maintain a service center and primary and supplementary field stations to gather information and data concerning ground weather conditions, snow pack, and avalanche activity;
- (2) forecast snow avalanche conditions throughout the state;
- (3) coordinate a public awareness program on avalanche danger;
- (4) catalog a comprehensive atlas of avalanche paths and slide occurrences; and
- (5) assist local governments and state agencies in identifying hazardous avalanche zones and in developing snow avalanche zoning regulations.

* Sec. 2. AS 19.05.030 is amended by adding a new paragraph to read:

- (7) develop and implement an avalanche control plan to protect persons who use public highways.

* Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-

Funding Information
General Fund \$446,000
Other Funds -0-
\$446,000

Introduced: 3/17/81
Referred: Finance

1 IN THE HOUSE

BY MILLER

2 HOUSE BILL NO. 348

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a special appropriation to the Depart-
7 ment of Public Safety for the Alaska avalanche warning
8 system; and providing for an effective date."

9 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

10 * Section 1. The sum of \$446,000 is appropriated from the general fund
11 to the Department of Public Safety for the Alaska avalanche warning system.

12 * Sec. 2. The unexpended and unobligated portion of the appropriation
13 made by this Act lapses into the general fund June 30, 1982.

14 * Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-
15 070(c).

16 CC: EDA, S&PF
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Funding Information

General Fund	\$130,000
Other Funds	-0-
	<u>\$130,000</u>

1 IN THE HOUSE

BY MILLER

2 HOUSE BILL NO. 18

3 IN THE LEGISLATURE OF THE STATE OF ALASKA

4 TWELFTH LEGISLATURE - FIRST SESSION

5 A BILL

6 For an Act entitled: "An Act making a supplemental appropriation to the
7 Department of Public Safety for implementation of the
8 statewide avalanche warning system; and providing for
9 an effective date."

10 BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

11 * Section 1. The sum of \$130,000 is appropriated from the general fund
12 to the Department of Public Safety for contract services to prepare
13 orographic precipitation models of Southeastern and Southcentral Alaska for
14 use in the statewide avalanche warning system (AS 18.76.010):

15 * Sec. 2. The unexpended and unobligated portion of the appropriation
16 made by this Act lapses into the general fund June 30, 1982.

17 * Sec. 3. This Act takes effect immediately in accordance with AS 01.10.-
18 070(c).

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MR. CHAIRMAN AND MEMBERS OF THE HOUSE FINANCE COMMITTEE:

MY NAME IS BOB JANES, AND I AM REPRESENTING THE U.S. FOREST SERVICE TODAY IN SUPPORT OF TWO APPROPRIATION BILLS FOR THE ALASKA AVALANCHE WARNING SYSTEM AND FIRE WEATHER FORECASTING SERVICE. THESE TWO BILLS ARE H.B. NO. 18 IN THE AMOUNT OF \$130,000 AND H.B. NO. 348 IN THE AMOUNT OF \$446,000.

HOUSE BILL NO. 18 IS FOR A CAPITAL INVESTMENT NEED. IT WOULD ENABLE PROCEEDING WITH THE PLANNED DEVELOPMENT AND OPERATION OF THE STATEWIDE SYSTEM WHICH WAS AUTHORIZED BY THE LAST SESSION OF THE LEGISLATURE AND SIGNED INTO LAW JULY 1, 1980, AS CHAPTER 76 AMENDING AS 18.

TWO COMPUTERIZED OROGRAPHIC PRECIPITATION MODELS WOULD BE DEVELOPED FOR USE IN MOUNTAIN WEATHER FORECASTING. BASICALLY, THEY WOULD DETERMINE THE EFFECTS OF TOPOGRAPHY ON WINTER PRECIPITATION FOR SPECIFIED GEOGRAPHIC AREAS. THE OBJECTIVE IS TO PROVIDE A FAST, SIMPLE, AND ACCURATE TECHNIQUE TO FORECAST THE WATER EQUIVALENT OF THE NEW SNOWFALL FOR THE MOUNTAINOUS ZONES WHERE AVALANCHES START. SINCE LOADING OF THE AVALANCHE STARTING ZONES IS THE PRIMARY TRIGGER FOR NATURAL AVALANCHES, THE SNOWFALL FORECAST WITH WATER EQUIVALENT IS VITAL TO ACCURATE FORECASTING.

ONE MODEL WILL BE FOR SOUTHCENTRAL ALASKA AND ONE WILL BE FOR SOUTHEAST ALASKA, COVERING MAJOR AREAS OF OCCUPANCY AND USE WHERE DANGEROUS AVALANCHE CONDITIONS EXIST. THE SOUTHCENTRAL MODEL WILL COVER NEARLY 90,000 SQUARE MILES ON A GRID 260 MILES BY 335 MILES STRETCHING FROM NEAR THE CANADIAN BORDER OF THE YUKON TERRITORY ON THE EAST, THEN WESTERLY TO THE KENAI

PENINSULA, AND NORTHERLY TO MT. MCKINLEY NATIONAL PARK. IT ENCOMPASSES THE CITY OF ANCHORAGE, WITH OVER 200,000 POPULATION, AND SMALLER COMMUNITIES OF GLENNALLEN, VALDEZ, CORDOVA, KENAI, HOMER, AND SEWARD; FOUR MOUNTAIN RANGES ARE INVOLVED, THE CHUGACH MOUNTAINS, OR BACKYARD PLAYGROUND OF ANCHORAGE, AND THE WRANGELLS, TALKEETNA, AND KENAI RANGES.

THE SOUTHEAST MODEL WILL COVER A GRID AREA OF ABOUT 150 MILES WIDE AND 300 MILES LONG, APPROXIMATELY 45,000 SQUARE MILES. IT STRETCHES FROM NEAR THE CANADIAN BORDER OF BRITISH COLUMBIA TO THE SOUTH, AND NORTHERLY TO THE CANADIAN YUKON TERRITORY BORDER. IT CONTAINS THE MASSIVE COAST MOUNTAIN RANGE SURROUNDING THE CITY OF JUNEAU, AND SMALLER CITIES OF KETCHIKAN, WRANGELL, PETERSBURG, HAINES, AND SKAGWAY; TO THE WEST, THE CITY OF SITKA LIES WITHIN THE GRID, AND SEVERAL TLINGIT-HAIDA NATIVE VILLAGES ARE INCLUDED IN THE MOUNTAINOUS ISLANDS.

THE PRODUCT WILL NOT BE A PROTOTYPE. THE BIDDER MUST SHOW THAT SIMILAR MODELS FOR OTHER GEOGRAPHIC AREAS MUST HAVE BEEN IN SUCCESSFUL OPERATION FOR THREE OR MORE YEARS. THOSE EXAMPLES AND THEIR OUTPUTS MUST BE SUBMITTED WITH THE BID AS AN INDICATION OF PERFORMANCE, INCLUDING A COMPARISON OF MODEL FORECASTS AND ACTUAL OBSERVED VALUES FOR BOTH SHORT TERM (1-24 HOUR) FORECASTS AND FOR THE SEASONAL ACCUMULATION.

THESE TWO MODELS ARE A HIGH PRIORITY CAPITAL INVESTMENT NEED FOR THE OVERALL SYSTEM.

THE SECOND APPROPRIATION BILL, H.B. NO. 348, IS FOR OPERATION OF THE ALASKA AVALANCHE AND FIREWEATHER FORECAST SYSTEM FOR THE PERIOD JULY 1, 1981 THROUGH JUNE 30, 1982. THE STATE APPROPRIATION OF \$446,000 SUPPLEMENTS \$141,000 OF OTHER FEDERAL AND MUNICIPAL FUNDS, AND AMOUNTS TO 76% OF THE TOTAL \$587,000 DIRECT FUNDING NEEDED FOR THE PROJECT.

THERE WILL BE AN ESTIMATED ADDITIONAL \$301,000* OF CONTRIBUTED DOLLAR VALUE FROM COOPERATORS WHO FURNISH PERSONNEL, OFFICE SPACE, EQUIPMENT, SUPPLIES, ETC. FOR BOTH THE STATEWIDE AVALANCHE AND FIREWEATHER FORECAST PROGRAM. OF THIS, THE STATE'S PROPORTION IS \$84,000 OR 28%. THE TOTAL ESTIMATED ANNUAL OPERATING COST IS \$888,000 WHICH IS FINANCED 60% BY THE STATE AND 40% BY OTHER AGENCIES. THREE STATE DEPARTMENTS ARE INVOLVED, WITH PUBLIC SAFETY REPRESENTING THE STATE IN OPERATION OF THE SYSTEM. THE OTHER TWO DEPARTMENTS ARE NATURAL RESOURCES AND TRANSPORTATION AND PUBLIC FACILITIES, EACH WITH VESTED INTERESTS IN THE PROGRAM. WITHIN THE DEPARTMENT OF NATURAL RESOURCES, THERE ARE THREE DIVISIONS PARTICIPATING IN THE PROGRAM: (1) PARKS, (2) GEOLOGICAL AND GEOPHYSICAL SURVEYS, AND (3) FOREST, LAND, AND WATER MANAGEMENT.

THE ENCLOSED PROPOSED OPERATING BUDGET FOR THE PERIOD JULY 1, 1981 THROUGH JUNE 30, 1982, AND THE DETAILED SPREADSHEET OF COOPERATING AGENCY PARTICIPATION AND BENEFITS, SHOW FURTHER EXPLANATION OF WHAT IS INVOLVED IN THIS REQUEST.

IT IS IMPORTANT TO NOTE THAT THE AVALANCHE AND FIREWEATHER FORECASTING SYSTEM WILL BE A CONTINUING PROJECT, HAVING STARTED APRIL 1, 1980. IT IS PROGRAMMED FOR GROWTH AND DEVELOPMENT WHICH WILL PRODUCE A FULL-SCOPE INTENSIVE OPERATION BY THE WINTER OF 1985. BY THAT TIME, THE STATE MAY DESIRE TO ASSUME THE LEAD ROLE FROM THE USDA-FOREST SERVICE IN OPERATION AND ADMINISTRATION, WITH THE OTHER FEDERAL AND MUNICIPAL COOPERATORS CONTINUING THEIR SUPPORT.

ADDITIONAL NEW COOPERATORS MAY PARTICIPATE AT ANY TIME. THE LEVEL OF STATE FUNDING IS EXPECTED TO REMAIN AT ABOUT 75%, WITH AN ANNUAL OUTLAY OF APPROXIMATELY \$450,000, PLUS AN APPROPRIATE INCREASE FOR INFLATION. ADDITIONAL CAPITAL EXPENSE NEEDS ARE EXPECTED TO NOT EXCEED \$50,000 PER YEAR.

I APPRECIATE YOUR TIME, AND WILL BE GLAD TO ANSWER ANY QUESTIONS ABOUT THE OVERALL PROJECT.

*Does not include the cost to the National Weather Service for gathering and producing the weather products needed for a weather forecast.

PROPOSED BUDGET

ALASKA AVALANCHE WARNING SYSTEM & FIRE WEATHER FORECASTING SERVICE

(For Period 7/1/81 through 6/30/82)

I. PERSONNEL

		<u>Cost to Nearest \$100</u>	
		<u>Avalanche</u>	<u>Fire</u>
Program Director	150 days x \$165/day	\$21,500	\$3,300
Meteorologist	260 " " "	25,600	17,400
Meteorologist	260 " " 140/day	19,900	16,600
Meteorologist (Fire)	116 " " 110/day	0	13,000
Met. Tech. (Hackett)	10 " " 100/day	1,000	
Met. Tech. (Fire)	116 " " 85/day	0	10,000
Met. Tech. (Fire)	116 " " 85/day	0	10,000
Met. Tech. (Valdez)	180 " " 100/day	18,000	
Met. Tech. (Valdez)	180 " " 90/day	16,200	
Met. Tech. (Juneau)	180 " " 85/day	15,300	
Met. Tech. (Juneau)	180 " " 85/day	15,300	
Met. Tech. (Anchorage)	240 " " 100/day	24,000	
Met. Tech. (Kenai) (60% AAWS; 40% CNF)	180 " " 85/day	9,200	
Clerk (AAFC)	180 " " 55/day	9,900	
	Sub total Salary	\$175,900	\$70,300

II. TRAVEL

A. Per Diem and Commercial Travel

Program Director and Meteorologists	8,000	11,700
Met. Techs. (Fire)		2,000
Met. Techs. (Valdez)	4,500	
Met. Tech. (Juneau)	4,500	

Met. Tech. (Anchorage)	5,000	
Met. Tech. (Kenai)	<u>1,000</u>	
Sub total Travel	\$23,000	\$13,700

B. Vehicle Rental

AA/FWFC GSA vehicles 15 months X \$165/mo	\$2,500	
20,000 miles @ 0.40/mi	<u>7,700</u>	5,200
		\$5,000
Juneau Met. Tech. vehicle (GSA)		
12 months x \$188/mo	2,256	
4,000 miles @ 0.434	<u>1,736</u>	4,000
Anchorage Met Tech vehicle (GSA)		
12 months x 188/mo	\$2,256	
20,000 miles @ 0.434	<u>3,680</u>	\$10,900
Valdez Met. Tech. (State DOT&PF furnished)		0
Kenai Met. Tech. (vehicle-Chugach NF furnished)		<u>0</u>
Sub-total Vehicles	\$20,100	\$5,000

C. Aircraft Charter - Helicopter and Fixed-wing

Anchorage Area: Hatcher Pass	\$5,000	
Chugach State Park	5,000	
Kenai	<u>5,000</u>	15,000
Valdez Area: (State DOT&PF furnished)		0
Juneau Area		<u>8,000</u>
Sub-total Aircraft	\$23,000	

III. SUPPLIES AND EQUIPMENT

Safety Equipment	\$9,000	
Weather Equipment	16,000	
Misc. Items	<u>5,000</u>	\$5,000
Sub-total E&S	\$30,000	\$5,000

IV. SERVICES

Radio Maintenance	\$4,000	
Remote Instrumentation Maint.	2,000	
GOES Platform	3,500	
Telephone	<u>8,000</u>	<u>3,000</u>
Sub-total Services	\$17,500	\$3,000

V. CONTRACTING

Weather Observations. - Hatcher Pass	\$12,000	
" " Summit Lake	2,000	
" " Mile 14 (Valdez)	2,000	
" " Salmon Cr. Res.	2,000	
" " 3 undesig. sites	<u>6,000</u>	
		\$24,000

VI. SNOW AVALANCHE EDUCATION PROGRAM

To be transferred to State Division of Parks:

Contractual Services		\$20,000
Supplies and Equipment		5,000
Transportation	Per Diem & Comm Travel	\$6,000
	Vehicle	<u>6,000</u>
		12,000
Park Ranger III (new position)		<u>40,600</u>
(Avalanche Information Specialist)		
Sub-total		\$77,600

VII. CAPITAL INVESTMENT

Bird Ridge Cabin - for use with DOT&PF avalanche control program - Seward Highway and local forecasting		
Sub-total		<u>\$25,000</u>

VIII. SUMMARY OF COSTS

	<u>Avalanche</u>	<u>Fire</u>	<u>Total</u>
Operation	\$391,100	\$94,000	\$485,100
Capital Investment	25,000	0	25,000
Contingency	18,000	6,100	24,100
General Admin. Asses. (9%)	<u>45,100</u>	<u>7,700</u>	<u>52,800</u>
Total Project Cost	\$479,200	\$107,800	\$587,000