

Overview

Alaska

Railroad

# ALASKA RAILROAD CORPORATION



P.O. Box 107500 • Anchorage, Alaska 99510-7500

April 15, 1991

Rep. Gene Kubina, Member  
House Transportation Committee  
Alaska State Legislature  
P. O. Box V  
Juneau, Alaska 99811

Dear Representative Kubina:

The enclosed briefing book will provide you with background information in advance of our discussion on Tuesday, April 16, 1991. If you have any questions regarding the contents of the book, Chairman Lounsbury and I will be able to address them at that time.

I look forward to meeting with you.

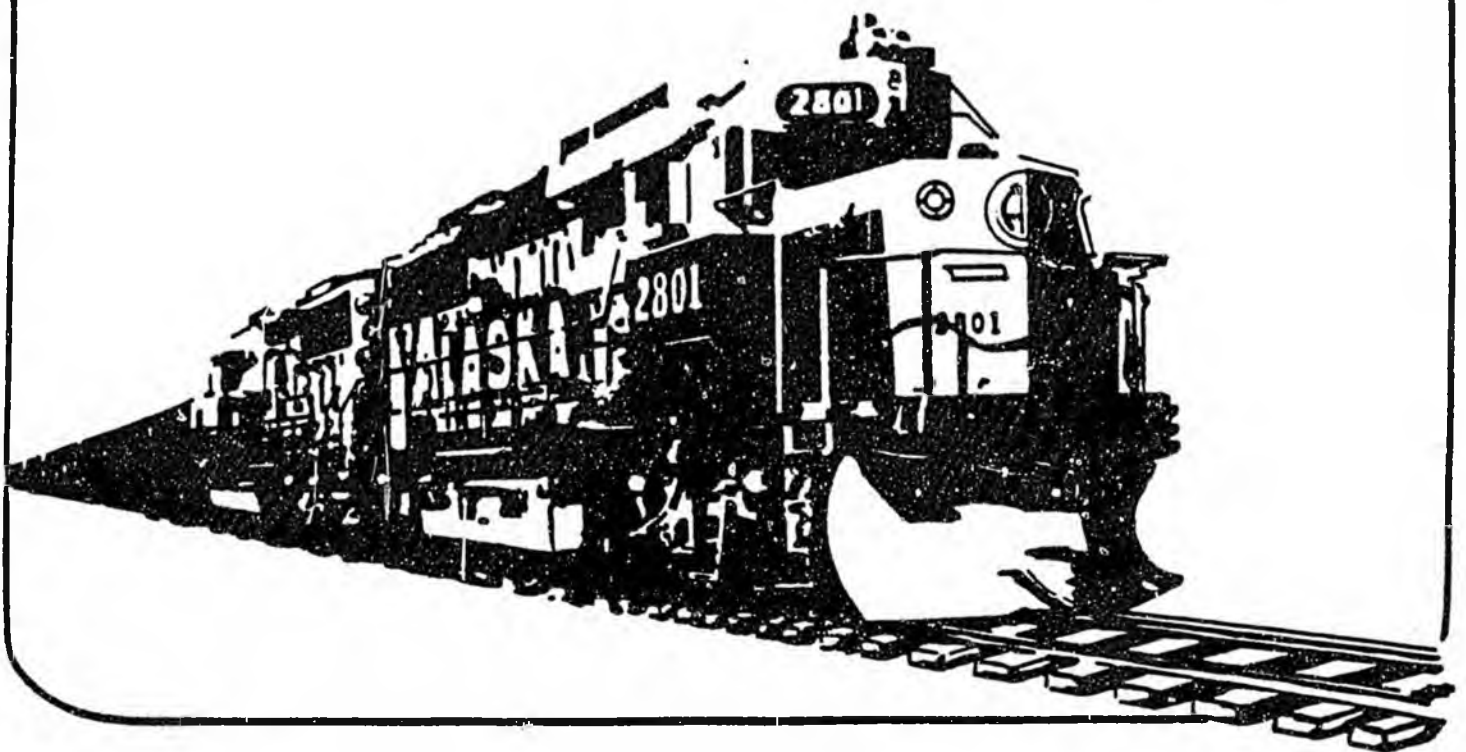
Sincerely,

A handwritten signature in cursive script, appearing to read 'R. Hatfield, Jr.'.

Robert S. Hatfield, Jr.  
President and Chief Executive Officer

**Presentation to the  
Senate and House Transportation Committees  
April 16, 1991**

**ALASKA RAILROAD CORPORATION**



**Representative Kubina**

**House Transportation Committee**

**Presentation to the  
Senate & House Transportation Committee**

**April 16, 1991**

- A. Executive Summary
- B. Marketing Overview
- C. Integrated Vegetation Management (IVM)
- D. ARRC Emergency Response Plan
- E. Moose Contingency Plan
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A

## **Executive Summary** **1990**

The Alaska Railroad Corporation is pleased to once again have an opportunity to appear before you and report the status of your investment made in 1985. The success of any major corporation is a combination of skilled management teamed with a highly motivated labor force. The following information depicts a company which has successfully managed it's "infancy" increasing assets from \$32.4 million in 1985 to nearly \$100.0 million at year-end 1990.

The Corporation has invested nearly \$77 million into its plant, equipment fleet and administrative programs in the past five years and plans for \$9.1 million in 1991. With this investment the Corporation has been able to return over 10% to its "shareholders", the citizens of Alaska. Through effective management of its work force, replacement of critical components of its equipment fleet, and aggressive marketing of its services, the Alaska Railroad Corporation has built a solid foundation to continue towards an even more successful future. The Corporation has now become the seventh largest employer in the State (up from eighth last year), and is ranked number 11 (ninth last year) in total revenues. The Corporation has been and continues to be a force for economic stability in the railbelt region providing an average of 550 stable employment positions with the railroad alone.

The Corporation has successfully survived major derailments, floods and the worst economic decline since statehood. We continually strive to improve not only our freight service but also aggressively pursue our growing passenger market. We have introduced new services to local communities along the railbelt with the advent of our self-propelled rail diesel cars (RDC), annual discounted rail passes for Whittier residents, and encouraged local community comments and suggestions through quarterly meetings of the Community Briefing Council. These and other improvements have made the Alaska Railroad a more responsive, quality transportation system and still able to operate on its own resources.

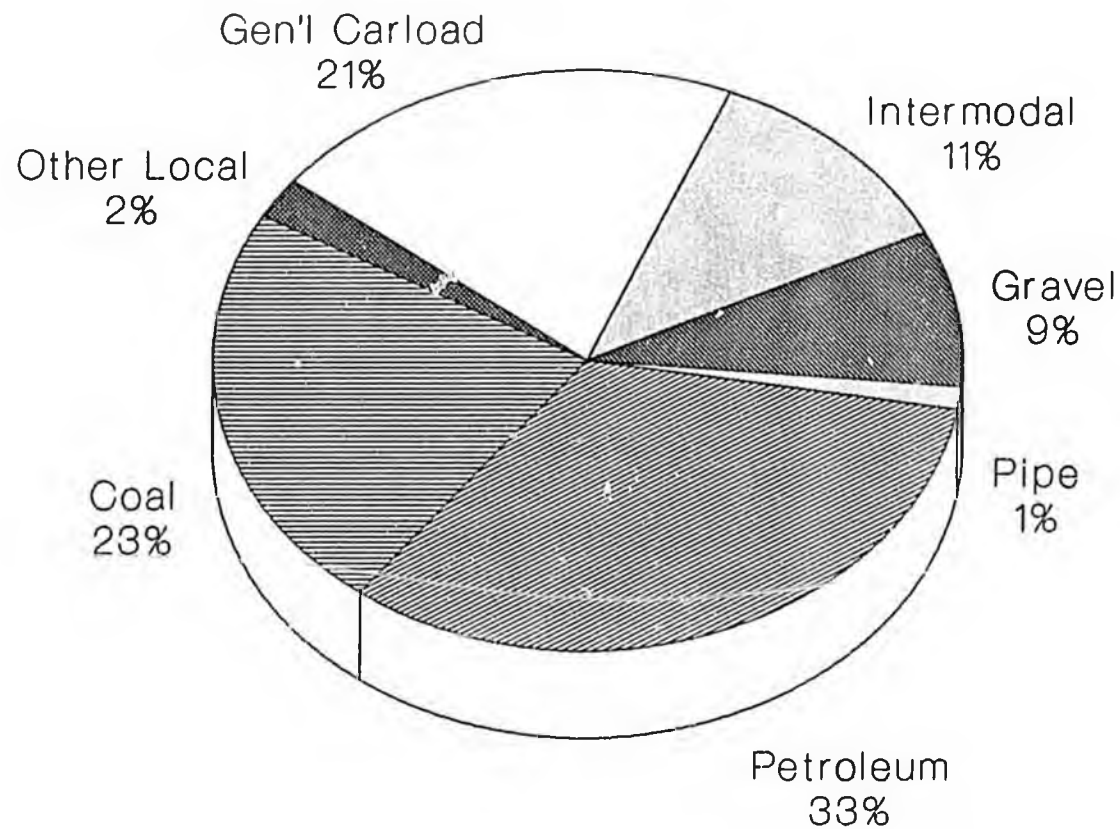
The Corporation plans an aggressive future with the advent of an additional 1.0 million tons of export coal when the Mental Health Trust Land issues are resolved and the expansion of its efforts to develop its most important asset, commercially developable land. Our presentation includes some very exciting real estate development opportunities and programs which the Corporation is actively pursuing.

As the Corporation continues to mature it becomes increasingly important for us to manage its entire portfolio wisely and aggressively. ARRC continues to pursue a goal of self-sufficiency as stated in our enabling legislation, as we feel this is the only path to ensuring a viable and quality transportation system providing another force for the economic development of the State of Alaska, also stated in our charter.

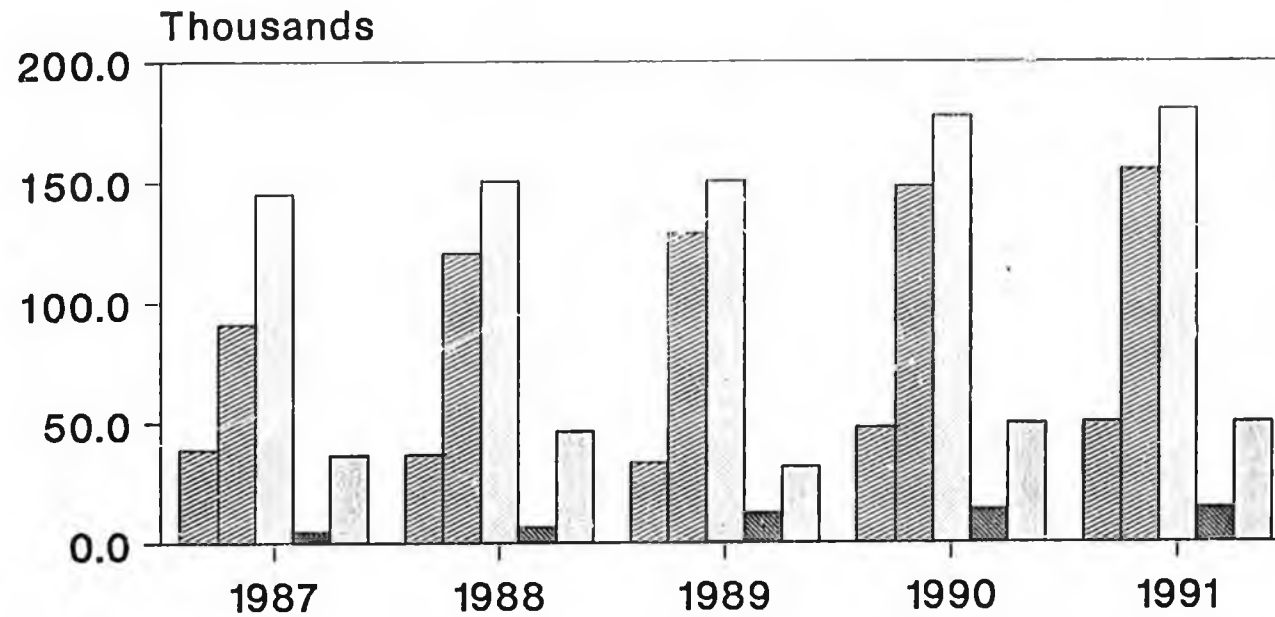
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# Overview of Freight Markets

## 1990 Revenues



# Alaska Railroad Corporation Passenger Ridership, 1987 to 1991\*



	1987	1988	1989	1990	1991
ARRC Exp	38.8	36.7	33.3	48.0	50.0
Pull	91.0	120.5	128.8	148.4	155.0
Whittier	145.3	150.3	150.5	177.3	180.0
Seward	4.7	6.5	12.4	13.7	14.3
Specials	36.7	46.6	31.6	49.7	50.0
<b>Total</b>	<b>316.5</b>	<b>360.7</b>	<b>356.6</b>	<b>437.1</b>	<b>449.3</b>

\* 1991 Estimated

C

## INTEGRATED VEGETATION MANAGEMENT PLAN

- ARRC has not applied herbicides for weed/brush control since 1983. Prevented from using herbicides by Federal Court injunction, the judge ruled the federally owned railroad had not complied with National Environmental Protection Act (NEPA) as it had not filed an Environmental Impact Statement (EIS). ARRC had been filing environmental assessments in lieu of EIS.
- After transfer to State of Alaska, the Railroad was not subject to NEPA because NEPA applies only to federal actions.
- Alaska Railroad Corporation now subject to Alaska Railroad Corporation Act which mandates compliance with State of Alaska requirements (Sec. 42.40.440).
- ARRC complied with requirements of ARR Corporation Act, and ADEC was about to approve a permit when Governor Cowper interceded on 05/28/88.
- ARRC contracted with the University of Alaska Fairbanks to conduct research project for vegetation management during 1989-1990; includes alternatives to herbicides.
- Herbicides applied at six test sites June through August 1989 (one application at each site).
- Sampling in 1989 and 1990 for migration and persistence.
- Data collection completed November 1990.
- Draft report received from UAF February 20, 1991.
- Met with ADEC Commissioner and Deputy Commissioner and Governor's office to discuss findings on February 21.
- Permit application filed with ADEC February 27.
- Final report received from UAF March 4.
- Citizens Advisory Committee meeting held in Anchorage March 7.
- Decision to reduce proposed scope of work based on input from Advisory Committee on March 8.
- Public workshops to be held at Seward, Anchorage, Birchwood, and Talkeetna.
- Outcome of public workshops will determine course of action.

### 3 MAIN AREAS OF CONCERN ABOUT UAF STUDY

- Sampling below 3 foot level - RFP now for sampling, results back prior to any application of herbicides
- Vegetation survey - Although not formally written down, District Roadmasters know where the most critical areas are
- Needed more time to allow for public review and community involvement
  
- Original plan approximately 500 acres reduced to approximately 125
- 150 miles of trackage to less than 50, includes about 17 yard miles or about 33 miles on main line and sidings
- Won't go north of Curry (MP 248)

# ALASKA RAILROAD CORPORATION

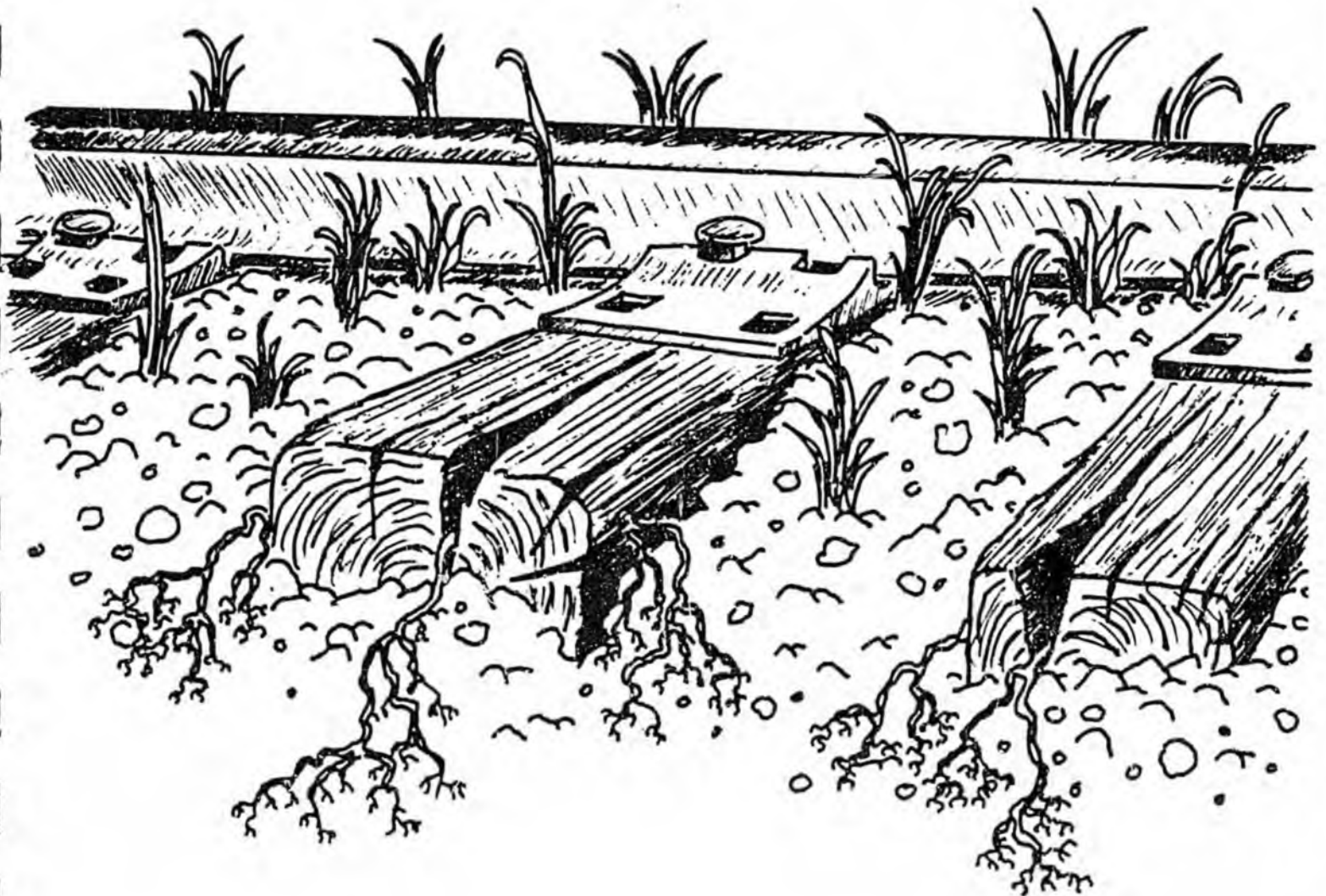
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APRIL 12, 1991

INFORMATION PACKET

INTEGRATED VEGETATION MANAGEMENT  
FOR THE  
ALASKA RAILROAD CORPORATION



# ALASKA RAILROAD CORPORATION



P.O. Box 107500 • Anchorage, Alaska 99510-7500

## More Powerful Than A Locomotive: Weeds!

Why are weeds a problem?

Weeds growing in the ballast restrict drainage, cause shifting in the roadbed and wear on track components.

What is Integrated Vegetation Management?

An Integrated Vegetation Management Plan combines several methods of vegetation control, such as herbicide application, reballasting, ballast regulating, undercutting, brushcutting and hand clearing.

What is the goal of the IVM plan?

The program is designed to:

- maintain visibility
- meet federal safety standards by providing safe walkways for employees and to permit inspection of track and rail cars
- prevent interference with signals, communications and power lines
- prevent fires
- reduce wheel slippage
- maintain drainage of the track roadbed
- maintain load carrying capacity of the track
- reduce frost action in the roadbed

What methods has the ARRC been using to control vegetation on our tracks?

Since 1983 the ARRC has been unable to use herbicides but has used reballasting, brushcutting and hand clearing in an attempt to control weeds.

Why are herbicides being considered to control weeds?

Herbicides are effective because they destroy the root structure of the plant instead of trimming off the top of the plant or covering it with ballast which allow it to return during the next growing season.

How do other railroads control weeds on their tracks?

In a recent study by the University of Alaska Fairbanks, 94 percent of 106 railroads surveyed used herbicides in their vegetation control programs.

(over)

<p>Why was the University of Alaska Fairbanks study conducted?</p>	<p>ARRC commissioned the UAF project to study the persistence and migration of the herbicides Velpar and Garlon 3A and to examine other vegetation control methods.</p>
<p>Who is on the Integrated Vegetation Management Citizens Advisory Committee?</p>	<p>ARRC appointed an Integrated Vegetation Management Citizens Advisory Committee to provide public input on the issue and to participate in the study.</p>
<p>What were the results of the UAF research?</p>	<p>According to the research, both herbicides were found to persist at the test sites in small quantities up to one year later and both had migrated to depths of three feet.</p>
<p>Will the ARRC continue to monitor the test sites?</p>	<p>ARRC plans to continue monitoring the sites this summer to determine if the products have persisted and if they have migrated below the three-foot level.</p>
<p>What is the status of our permit to use herbicides?</p>	<p>ARRC applied to the Department of Environmental Conservation for a permit to use herbicides this summer but has put that request on hold until a series of public information workshops is conducted in Railbelt communities.</p>
<p>Where were public meetings held?</p>	<p>Meetings were scheduled:</p> <ul style="list-style-type: none"> <li>• March 19--noon, Alaska Vocational Technical Center, Seward</li> <li>• March 19--6:30 p.m. Moose Pass Community Hall, Moose Pass</li> <li>• March 20--noon, Z.J. Loussac Public Library, Anchorage</li> <li>• March 20--6:30 p.m. Chugiak Senior Citizens Center, Chugiak</li> <li>• March 21--6:30 p.m. Talkeetna Elementary School, Talkeetna</li> <li>• March 22--6:30 p.m. Noel Wien Memorial Library, Fairbanks</li> <li>• March 28--3:10 p.m. Alaska Railroad employees, Anchorage Passenger Depot</li> <li>• March 28--7p.m. Birchwood Community Council, Birchwood Elementary, Chugiak</li> </ul>

(more)

- April 1—7:30 p.m. Girdwood Board of Supervisors, Girdwood Community Hall

- April 4—7 p.m. United Transportation Union Local #1610, Vahala Center, Anchorage

- April 5—5 p.m. Chase Community Council, Talkeetna Elementary

- April 8—5:30 p.m. Chugach State Park Advisory Committee, Federal Building, Anchorage

- April 9—noon, Wasilla Chamber of Commerce, Mat Su Resort

- April 10—7 p.m. Denali State parks Advisory Board, Willow Elementary School

- April 14—2 p.m. Denali Borough, Anderson School, Anderson

- April 18—noon, Seward Chamber of Commerce, Frontier Restaurant

- April 18—7:30 p.m., Government Hill Community Council, Government Hill Elementary, Anchorage

Where can I get more information?

Contact Obie Weeks, Chief Engineer, or Rick Leggett, Assistant General Roadmaster, at the Alaska Railroad Engineering Department at 265-2456.

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March 26, 1991

## INTEGRATED VEGETATION MANAGEMENT

### DEFINITION OF IVM

Integrated Vegetation Management (IVM) is the managing of unwanted vegetation utilizing various methods of eradication or control depending on environmental conditions and plant species.

### HISTORY OF VEGETATION CONTROL PROGRAM

- Alaska Railroad has not applied herbicides for weed/brush control since 1983. The railroad was prevented from using herbicides by a federal court injunction in which a judge ruled the federally owned railroad had not complied with the National Environmental Protection Act.
- After transfer to state of Alaska, the Railroad was not subject to NEPA because NEPA applies only to federal actions.
- Alaska Railroad Corporation is now subject to Alaska Railroad Corporation Act which mandates compliance with state requirements.
- In January 1988, Alaska Railroad Corporation applied for a permit through the Alaska Department of Environmental Conservation. ADEC was about to approve a permit when Gov. Steve Cowper interceded on May 28, 1988.
- Alaska Railroad Corporation contracted with the University of Alaska Fairbanks to conduct a research project on vegetation management, including alternatives to herbicides, during 1989-1990.
- Herbicides were applied at six test sites June through August 1989.
- Sampling was done in 1989 and 1990 for migration and persistence.
- Data collection was completed November 1990.
- Final draft report from UAF was received February 1991.
- Based on the report, Alaska Railroad applied for a permit from ADEC.
- ARRC IVM Citizens Advisory Committee met March 7, 1991.
- On March 13, 1991 ARRC requested ADEC put permit application in abeyance.
- Six public workshops held March 19, 1991 - March 22, 1991.
- Presentation to ARRC Board of Directors on March 21, 1991.
- Seven public workshops schedule March 28 to April 18.

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March 26, 1991

## INTEGRATED VEGETATION MANAGEMENT

### CITIZENS ADVISORY COMMITTEE

- Established in 1989
- Scope expanded to include IVM
- Added ARRC Employee Representative

### ALASKA RAILROAD CORPORATION INTEGRATED VEGETATION MANAGEMENT ADVISORY COMMITTEE MEMBERS

Ms. Sue Bishop  
2233 East 56th, Apt #7  
Anchorage, Alaska 99507  
Telephone Number: 563-6217

Mr. Randy McGovern  
1611 Carr  
Fairbanks, Alaska 99701  
Telephone Number: 451-0124

Mr. Paul Bratton  
Box 343  
Talkeetna, Alaska 99673

Ms. Dorothea Rupprecht  
14950 Terrace Lane  
Eagle River, Alaska 99577  
Telephone Number: 696-2028

Ms. Sue Libenson  
519 W. 8th Ave., Suite 201  
Anchorage, Alaska 99501  
Telephone Number: 274-3621

Ms. June Weinstock  
1339 Sixth Avenue  
Fairbanks, Alaska 99701  
Telephone Number: 452-1714

Ms. Becky Long  
Box 344  
Talkeetna, Alaska 99676  
Telephone Number: 733-2703

Mr. Bill Collins  
1805 McKinley  
Anchorage, Alaska 99517  
Telephone Number: 561-7916

# ALASKA RAILROAD CORPORATION

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March 26, 1991



## INTEGRATED VEGETATION MANAGEMENT

UNIVERSITY OF ALASKA, FAIRBANKS RESEARCH PROJECT

### SCOPE

- Two-year study
- Field testing to determine persistence and migration of herbicides
- Literature review and survey of vegetation control used by railroads in U. S. and Canada
- Cost analyses of vegetation control methods
- Evaluation of vegetation control methods of The Alaska Railroad

### ARRC HERBICIDES TESTS

#### Herbicides

- Velpar (active ingredient Hexazinone)
- Garlon 3A (active ingredient Triclopyr)

#### Test locations

- |                   |                           |
|-------------------|---------------------------|
| • Seward Yard     | Both herbicides applied   |
| • Fire Creek      | Both herbicides applied   |
| • Birchwood       | One test site Garlon only |
| One test site     | Velpar only               |
| One test site     | Both herbicides applied   |
| • Chulitna        | Both herbicides applied   |
| • Clear           | Both herbicides applied   |
| • Fort Wainwright | Both herbicides applied   |

#### Samples Taken

- |             |   |
|-------------|---|
| • Depth (4) | Surface, 1 ft, 2 ft and 3 ft inside of application zone     |
|             | Also samples outside of application zone                    |
| • Time (4)  | Day of application and 7, 49 and 365 days after application |

### LITERATURE REVIEW

- Railroad technical reports and journals
- Scientific journals, particularly relating to chemical control of vegetation

### RAILROAD SURVEYS

- 94% of railroads responding use herbicides in vegetation control

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March 26, 1991



## INTEGRATED VEGETATION MANAGEMENT

### UNIVERSITY OF ALASKA, FAIRBANKS RESEARCH PROJECT (CONTINUED)

#### COST ANALYSES

##### Vegetation control methods

- Railroads outside Alaska
- Alaska Railroad Corporation

##### Economic analyses

- Reballasting
- Ballast regulating
- Undercutting
- Herbicide application
- Brushcutting
- Hand clearing

##### Field tests on ARRC

- Fort Wainwright
- Clear
- Birchwood
- Seward

#### RESULTS

- Herbicide treatment among most effective
- Low toxicity of herbicides tested when properly applied  
Normal application dosage affect on fish and mammals would be minimal, if any
- Persistence  
Still in ground after 365 days but at low amounts
- Migration  
No horizontal movement from application zone  
Found at 3 foot depth after 365 days in relatively low concentrations
- A combination of weed-control measures - including in some cases the use of herbicides -- is the most effective and economical means of eliminating vegetation along the ARRC track

#### INERT INGREDIENTS

DuPont (Velpar) and Dow (Garlon 3A) confirmed that the inert ingredients do not contain:

- DDT, benzene, sodium fluoride, xylene, asbestos
- any inerts on the EPA list for "Inerts of toxicological concerns".
- any inerts on the EPA list for "Potentially toxic inerts with high priority for testing".

# ALASKA RAILROAD CORPORATION

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March 26, 1991



## Recommendations from UAF Research and Actions Planned by ARRC

### Recommendations

1. Adopt and implement an integrated vegetation management (IVM) philosophy.
2. Conduct a vegetation survey of the ARRC track bed to determine species, density and frequency. The IVM plan would draw upon this survey to assist in selection of vegetation control alternatives.
3. Continue monitoring at test sites, at a reduced level, herbicide persistence and migration, impact on off-site vegetation, and vegetation recover on treatments for a period of a at least two years to include the summer seasons of 1991 and 1992.
4. Continue the use of a Vegetation Advisory Committee.
5. Initiate and develop IVM that incorporates public participation.
6. Continue to evaluate new alternative control strategies for vegetation management, such as steam, new generation herbicides, and other methods.
7. Improve railroad record-keeping to more accurately determine vegetation control costs and to define vegetation recovery rates.

### Actions

1. After meetings with the Vegetation Advisory Committee, the ARRC in 1989 adopted IVM philosophy and included it in UAF research. An IVM program will be developed following completion of a vegetation survey.
2. District Roadmasters working with a plant specialist will complete the survey this summer.
3. ARRC will continue to monitor the test sites established by UAF in 1989, including drilling and sampling below the three-foot level.
4. The scope of the committee has been increased to include all phases of the IVM plan. The committee was expanded by adding an ARRC labor representative.
5. There has been 14 workshops and presentations scheduled for March and April. Additional public participation is being coordinated through the advisory committee.
6. ARRC will seek additional input through the advisory committee and will continue to monitor Canadian Pacific's research with steam. ARRC will continue to review industry publications that present alternative control methods.
7. More accurate methods of record keeping and cost tracking were implemented January 1991. Work this summer will be monitored for cost effectiveness data.

April 4, 1991

Robert S. Hatfield, C.E.O.  
The Alaska Railroad Corporation  
Box 107500  
Anchorage, AK 99510

Paul Bratton  
Box 343  
Talkeetna, AK 99676

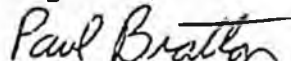
Dear Mr. Hatfield;

Attached is a report that I prepared summarizing the results of workshops held in March on ARRC vegetation control policies. Hopefully this information will be useful as you decide on a course of action for this coming summer and beyond. I do believe that these workshops were very productive and could serve as a good beginning towards establishing a new direction for ARRC in this arena.

Much work remains to be done, but the decade-long controversy over herbicide use has achieved some positive results. Railroad managers have begun to consider how track maintenance affects the wider environment and those of us who have been critics of railroad policy have had to recognize the real problems, both logistical and financial, that managers of a public utility face in doing their jobs.

I believe that the end result is going to be a better and healthier Alaska Railroad and railbelt environment.

Regards;



Paul Bratton  
ARRC Integrated Vegetation Management Citizen's Advisory  
Committee member

cc  
ARRC Board members  
Obie Weeks, Chief Engineer-ARRC  
Advisory Committee members  
UAF/ARRC research team  
Railbelt legislators  
Office of the Governor

## "To Herbicide or Not To Herbicide"

### A Report on ARRC/Advisory Committee Workshops

by Paul Bratton, Citizen's Advisory Committee Member

Nearly 100 Alaskans participated in six workshops held in railbelt communities from Seward to Fairbanks during the week of March 19th. Obie Weeks, Chief Engineer of the Alaska Railroad Corporation, along with Becky Long and myself from the citizen's advisory committee acted as co-chairs throughout the week. Other members of the advisory committee who participated included Dorothea Rupprecht who chaired the Birchwood meeting and Randy McGovern who acted as co-chair in Fairbanks. Doug Donegan along with various members of his staff represented DEC at all workshops.

#### HERBICIDES WERE THE CHIEF CONCERN OF NEARLY ALL PARTICIPANTS. Major issues included:

I. Groundwater-The UAF study found that both herbicides had leached to the 3-ft level on all but one test site. Given these results it is apparent that groundwater contamination is an inevitable consequence of applying herbicides on the ARRC roadbed. Participants noted that once the herbicides were carried below the first 6-12 inches- away from heat, light, and the zone of microbiological action- that any significant degradation of the chemicals is unlikely. Herbicides are designed to be stable under these conditions, otherwise they could not be kept in storage until use.

Soil surveys indicate that many areas along the 500-mile track have water tables ranging from a few inches to a few feet below the surface. Also permafrost, which apparently was never considered when EPA established regulations for herbicide use, occurs discontinuously along the entire route. According to the Nenana-Gold Stream Soil Survey, permafrost lies at a depth of 30 inches on the northern end of the line.

Monitoring for groundwater contamination is costly. Clean-up of contaminated pockets of groundwater may be impossible. Most workshop participants viewed the persistence and leaching results of the UAF study as convincing evidence of the folly of herbicide use in the Alaska environment.

II. Unknowns- Despite spending \$685,000 and two years in the UAF study, many significant questions remain unanswered. These include:

a) The identity of "inerts" which comprise 10% of Velpar and 56% of Garlon. These substances, which very likely include

industrial solvents of toxicological significance, are classed as "trade secrets". Neither EPA nor the manufacturers would reveal their identity to the UAF researchers despite numerous requests for this information. Nearly 1/2 ton of these hidden substances would have been applied to 500 acres of ARRC track this summer if the original spray plan had been implemented.

b) No low dose, chronic effects studies on salmon and trout has been done for either herbicide formulation. There is reason for concern since evidence does exist that salmon and trout fry are injured at rates of exposure consistent with that found after normal application of these herbicides which have been tested.

c) Of course, the effects of chronic, low dose exposure on humans is the primary public concern. Neither Garlon nor Velpar have been in widespread use long enough for epidemiological studies of exposed human populations to be conducted. What is known is that both herbicides belong to chemical families of herbicides which have been proven to produce cancer, birth defects, and other significant health effects in humans. It was widely asserted that ARRC and DEC would not be justified in exposing trackside residents to even the potential for this sort of risk. In various communities, including Seward, Moose Pass, and Talkeetna, residents believe that there may be a link between past use of herbicides by the railroad and several specific instances of illness and death among current and former residents.

III. Inadequate or Inappropriate Safeguards- EPA's regulatory attempts to ensure public safety were widely viewed as inadequate or inappropriate for Alaska. A prime example cited was EPA's prohibition on grazing livestock on Garlon treated areas within one year of application. (Note-The UAF study found that herbicides had "translocated" from the test sites to trees up to 70 feet off the tracks.)

Since neither ARRC nor DEC will be able to stop moose from grazing treated areas, one participant pointed out that it will be incumbent upon the state of Alaska to close hunting seasons in a wide circle (at least equal to the expected range of the animal in question) in the vicinity of any herbicide application. Such an action will further complicate the scheduling of sport and subsistence hunts in many game management units along the railbelt.

IV. Spill Contingency- Particularly in the Moose Pass workshop (which included participants from Crown Point), there were a great many questions about spill contingency plans. Wording in the permit application as well as DEC standards were viewed as inadequate.

The CP Rail Vegetation Management Policy includes some guidelines to be followed in the event of a spill. Of particular interest is CP Rail's complete prohibition on any CP Rail employee using any herbicide or storing any herbicide on CP Rail property. The rationale given is that "hazards associated with these activities are such that prudent management dictates they be conducted by contract....Highway accidents or storage mishaps can involve significant risks. An uncontrolled fire in a herbicide storage area could result in contamination of a wide area....This will relieve CP Rail of the responsibility associated with these activities." Of course the trackside resident would be just as much at risk from a contractor spill as an ARRC spill. It would be small comfort that liability might lie on some outside contractor.

V. Worker Safety- ARRC workers expressed concern and opposition to renewed herbicide spraying both in the workshops and privately to advisory committee members. This area of concern has never been adequately addressed. EPA has established no reentry times for workers following herbicide application, however the state of Vermont prohibits all track maintenance work for a period of 30 days after spraying. While the general public might not face significant exposure to spraying conducted in restricted access areas like railroad yards, the yard areas are where workers face frequent and repeated exposure to residual herbicides.

#### SUPPORT FOR ALTERNATIVES

In sharp contrast with the overwhelming public resistance to any herbicide use, the use of a variety of mechanical and thermal alternatives were viewed positively. Trackside residents tended to be relatively well informed about the need for some type of vegetation control and were eager to work with ARRC to achieve a healthy and toxic-free track environment.

CP Rail's self-imposed ban on all herbicide use in British Columbia and it's strides towards controlling weeds with steam were seen as pointing the best path for ARRC to follow.

Among the alternatives suggested by participants were: a) scheduling and/or increasing reballasting and other track maintenance to also control weeds; b) continuing to improve ballast standards; c) install concrete ties when upgrading sections of track; d) use ballast regulator and jordan spreader for weed control; and e) in yards, begin installing hot mix underlayment and experiment with black plastic mulch under gravel.

Catching up on 8 years of little, if any, active vegetation control during the ban on herbicide use and controlling new growth during the next year or two until a CP Rail-type steam machine may be commercially available were viewed as the major challenges facing ARRC's vegetation control program.

Luana Stovel, who's cabin is located adjacent to the tracks near Chase, offered a proposal in the Talkeetna meeting that local communities be allowed to adopt specific problem areas where herbicide spraying might otherwise be contemplated.

Volunteers, working under the direct supervision of ARRC personnel, could hand cut or pull weeds to help ARRC achieve vegetation control in such areas. A review of the UAF study shows that handcutting can be an effective control, but, as indicated in Table 5.63, the per mile cost is several times that of herbicides or the ballast regulator. Use of volunteer labor removes 3/4 of the cost making this alternative economically attractive.

#### SUMMARY

Efficient and economical vegetation control requires careful planning and a balancing of many factors, some of which are outside the normal realm of railroading expertise. Neither herbicides nor any other alternative can provide a simple fix. However virtually all of the public controversy surrounding railroad vegetation control is related to herbicide use. So long as herbicides are included as an option, public distrust and rancor will continue to plague ARRC weed control efforts.

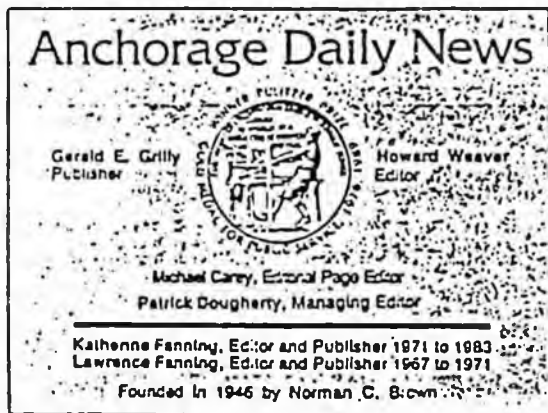
I urge ARRC to adopt a no herbicide policy similar to what CP Rail has done in British Columbia. With herbicides out of the picture, this summer can begin a new day for railroading in our state.

The first step to solving weed problems is determining exactly where and what they are. A mile by mile survey, as called for in the UAF study, of plant species, density, and frequency is necessary. At the same time a comprehensive evaluation of track conditions will be necessary to match vegetation problem areas with other roadbed problems. In many cases reballasting may kill two problems with one load of gravel. Other measures--including ballast regulating, hand cutting, and use of the Jordan spreader--will be appropriate in other circumstances.

Ultimately what is needed is a checklist type guide (like the trouble-shooting section of auto repair manuals), which will allow roadmasters and other ARRC personnel to adopt the most rational approach to weed control based on the specific vegetation, track conditions, and vegetation control methods available.

The "if it's green, spray it" approach to railroad vegetation control too often merely concealed the real, underlying problems in the roadbed. Weeds are often a symptom, not a cause, of roadbed deterioration. Developing a comprehensive, integrated approach to vegetation control will allow the Alaska Railroad to maintain a healthy and weed-free roadbed without the use of toxic chemicals.

E2 Anchorage Daily News Sunday, March 24, 1991



## Herbicides

### *The wrong answer to a real problem.*

Seven years ago, a court order forced the Alaska Railroad to quit spraying herbicides to control pesty vegetation along its tracks. Now the railroad has on hold a state permit application to again spray herbicides. It's on hold because one of the railroad's own advisory committees unanimously voted against spraying, and the railroad has decided to get public comment.

While the railroad is now on the right track, it nevertheless remains in a precarious position. When the snow melts and the ground warms, the weeds and brush will grow around the tracks, hampering visual inspections of the rail ties and the ballast they rest upon. Vegetation further draws and holds water, which can cause ballast instability and permafrost heaving.

The railroad's chief engineer Francis "Obie" Weeks thinks the best solution is herbicide spraying in key problem areas — mainly, railroad yards in Anchorage and Seward along side tracks. His concern, and rightly so, is "greening of the railroad" and the safety problem it poses to workers and the riding

public.

But the railroad board also should be sensitive to other issues, like public health, potential lawsuits, and negative public response. So says railroad board chairman Loren Lounsbury. He notes that the board has "an open mind" on whether to spray or not to spray.

Much of the latest debate centers around a railroad-requested University of Alaska Fairbanks study that created six field-testing sites under the most ideal conditions. The two-year study, costing \$685,000, demonstrated that the two test chemicals proposed by the railroad persisted longer and migrated faster than expected. Basically, this means that a very real threat is posed to ground and table water, particularly where permafrost underlies the rails. As the railroad has learned from its 1990 Interior fuel spill, cleanup and water monitoring can be costly indeed.

This same study has prompted the railroad's advisory committee and members of the public from Moose Pass to Talkeetna to speak out against renewed spraying. They prefer the railroad use proven alternatives — like reballasting the railbed — and study a Canadian rail's prototype steam-generated vegetation killer.

The railroad must balance a very real need to manage unruly vegetation along its tracks with the right of railroad workers and the public to a safe environment and good health. A good-neighbor policy is in order. In this case, the railroad should side with public health and safety and employ alternatives to herbicides.



Alaska Railroad Corporation  
Engineering Department

## Outline of ARRC Emergency Response Plan Presentation

What regulated materials does the ARRC carry?

All kinds, except some of the more exotic

Examples:

Fuels are over 95% of the regulated traffic:

Jet Fuel

Diesel Fuel

Gasoline

Fuel Oils

This traffic is chiefly between Anchorage and Fairbanks,  
but is moved throughout the rail system

Other materials include:

Drag Reduction Agent (for Alyeska Pipeline)

Methanol (for oil fields)

Antifreeze compounds

Acids (for oil fields)

Ammonium Nitrate (blasting agent for coal mines)

Industrial gases (oxygen, nitrogen, welding gas)

Liquefied Petroleum Gas

Regulated traffic is about 40% of our freight revenue

## Prevention of Train Incidents

Inspection of Track, Locomotives, Rolling Stock mandated by FRA in a manner similar to FAA. FRA inspects our track and equipment and records periodically, usually twice a year. Example: ARRC inspects all its mainline track twice a week.

Employee Training: Extensive training and experience required. Written exams on operating rules.

Operating Rules: Fail safe train dispatching system. Frequent train inspections in route, including air brake tests. Extensive drug and alcohol testing program. Thorough investigation of all incidents.

Recent Improvements: Automatic wayside train defect detectors have been increased from 2 in 1987 to 12 in 1990, with 7 more to be installed in 1991. These detectors inspect trains for dragging equipment, hot wheel bearings, and shifted loads.

Capital Program: The ARRC's capital program focuses on renewal and upgrade of the track and bridges. The program expends about \$5,000,000 annually in track improvements.

#### Current Status: ARRC Emergency Response Plan

##### Upgrading Old Plan

- Old plan in place for several years (since 1986)
- Functioned satisfactorily, but room for improvements

##### Improvements to plan itself

Hired consulting firm to review and upgrade plan

- \$150,000
- Final due in May, 1991
- Implementing sections of the plan as they are available.
- Once "final" plan is complete, will evaluate and improve through internal training, contacts with ADEC and other agencies, and by establishing contracts with response companies.

##### Internal ARRC Training

- "40 hour" hazardous response/waste operations, 25 employees to date, expected to double by end of 1991.
- "Awareness" level, recently trained 140 additional employees to this standard. Many ARRC employees, particularly train crews, already trained to this level.
- Other training on incident response after the ERP is complete.

##### Agency Coordination

Training with Fire Departments

- Ongoing program for several years
- ARRC bringing a rail tank car incident course to Anchorage and training 50 people, including ADEC, Fire, and ARRC employees

Participation on LEPC's (Local Emergency Planning Commission)

ARRC employees members of all LEPC's in railbelt, including:

Fairbanks

Kenai

Anchorage (forming)

#### Response Materials Inventory Upgrade

- Previous inventory under old plan filled two vans
- Added \$30,000 to inventory in 1990
- Also added equipment purchased for Dunbar spill, including booms, pumps, and other gear.
- Developed and deployed smaller spill kits throughout railroad to facilitate response to smaller incidents.

#### Response Drills

- Participated in response drill in Feb. 1991 simulating a haz mat release with casualties. Incident was staged in Anchorage yard. Other participants included the Air Force and the Anchorage Fire Department.
- The ARRC has Conducted other drills in the past.
- Additional drills are being planned.

#### Response To Past Incidents

The ARRC has a consistent record of response that is:

Timely  
Adequate  
Comprehensive  
Cooperative  
Responsible

For Example: The March 26 Jet Fuel Incident

- Upon discovery, the incident command system was activated.
- Reconnaissance crews were dispatched to determine the location and extent of the spill.
- Within 3 hours of activation, five crews were in the field cleaning up the spill. Each crew had at least one 40 hour trained person, and all crews were properly supplied with personal gear, cleanup supplies, and adequate transportation.
- The crews were accurately directed to the areas of heaviest impact.
- The proper agencies were notified.
- Recovered product and contaminated material is being disposed of properly.
- The ARRC is investigating the incident.
- Response materials that were used in the response have been resupplied.

#### Concerns About The Future

##### Mandated Plans or Plans Requiring "Approval"

- If required, should apply to all rolling transportation, i.e trucks too. Otherwise, the railroad's increased cost will tend to force shippers to use trucks, and put the regulated materials on the public highways. (See attached clipping).
- The standards for an adequate plan need careful consideration. It is possible to require a plan that is economically or physically impossible.
- The potential conflicts of such a law with federal statues should be examined. As a common carrier the ARRC is obligated to move shipper's materials, as governed by federal law. The shippers would likely challenge a law which limits the transportation of their materials.

Excessive or Unusual Requirements for Worker Training

- The ARRC is happy to see the Alaska Department of Labor reconsidering its mandatory extension of the Federal 40 hour standard to 80 hours. While extended training is an excellent idea, the ARRC believes it is best handled by the employer and applied to the specific workplace involved.

Summary

- The ARRC has a workable plan in place
- The plan is being improved.
- Other activities at the ARRC are ongoing to improve train and worker safety.
- Regulators must carefully consider the impacts of new regulation to avoid anticipated negative outcomes.

## Truck leaks acid on highway

By PAMELA DOTO  
Daily News reporter

A truck transporting sulfuric acid leaked some of the powerful chemical on the Seward Highway Wednesday afternoon before it was discovered by an inspector at the Potter Marsh vehicle weigh station.

Doug Mallette, the driver of the truck carrying 6,200 gallons of the acid from Kenai, was cited for not properly securing the load. He was also cited for not posting hazardous-material signs on the outside of the tractor-trailer.

A 55-gallon drum was punctured during Mallette's trip to Anchorage, but officials weren't sure how much of the acid spilled from the truck.

Bill Hogg, a commercial-vehicle inspector for the Alaska State Troopers, noticed the leak shortly after 1 p.m. when the truck drove up to the weigh station at Mile 115.8 of the highway.

"It was a steady stream coming out of the back of the truck," Hogg said.

Anchorage firefighters in protective gear were called to secure the area. The acid can burn the skin and damage lungs if it is inhaled. It can also start a fire if it reacts with wood, fire officials said.

It is sometimes used to clean steel and concrete.

A soda-based absorbent was brought to the weigh station to neutralize the 95-percent concentrated acid.

"It could have been leaking out for miles down the road. However, it's minor droplets," said Cpl. Bradley Brown, who supervises the troopers' commercial-vehicle enforcement division.

Mike Hakenson, a warehouse foreman for Great Western Chemical Company, where Mallette got the chemical, donned a protective suit to examine the leakage. Hakenson said only 5 to 10 gallons of the chemical spilled at the station. But authorities said they were not sure how much leaked from the container.

"We have to evaluate first what the situation is," said Bob Flint, response coordinator for the Department of Environmental Conservation. "We just want to make sure it's contained and cleaned up."

Mallette thought authorities were overreacting.

"We would have had it contained," Mallette said. "They didn't call the fire department every time someone has a battery that explodes."

## Wayward bullet wounds woman

A 37-year-old Kenai woman was wounded Tuesday when an errant bullet fired by a 15-year-old boy came through her living room wall.

Robert Nyce was lying on the floor talking to her husband on the phone when the shooting occurred about 7 p.m. She was hit in the shoulder.

The boy was shooting a .22-caliber rifle at a target a half mile from the Nyce home.

Nyce was taken to Central Peninsula Hospital, where she was treated and later released.

About two hours later, Patrick Dixon reported to troopers that someone had shot a hole into a wall of his home, not far from Nyce's. Alaska State Troopers said the bullet came from the same gun.

The boy, whose name troopers would not release because of his age, was taken into custody and charged with assault, criminal mischief and reckless endangerment.

"He was carelessly shooting toward, but not intentionally, at the residence," Trooper Lt. Glenn Flothe said.

The youth was released to the custody of his parents.

## TANNER: State set to bypass low bid for Tanner building

Continued from Page D-1

legal authority to represent the partnership.

The space is to be used by the Department of...

by an elevator. At the same time, the bid package provided specifications for using wheelchair lifts to reach...

contract,...

On March 18, Amundson protested, and in an interview questioned whether political favoritism was involved.

Tanner was Hickel's campaign coordinator in the Su Valley and was one of the appointed...

it and why — the ins and outs," Tanner said.

Hodel didn't return phone calls from the Daily News. The controversy has drawn attention from two of the area's legislators — Ron Larson and Sr. Menard, both...

Hodel didn't return phone calls from the Daily News.

The controversy has drawn attention from two of the area's legislators — Ron Larson and Sr. Menard, both...

# STATE OF ALASKA

WALTER J. HICKEL, GOVERNOR

## DEPT. OF ENVIRONMENTAL CONSERVATION

OFFICE OF THE COMMISSIONER  
P.O. BOX O, JUNEAU, AK 99811-1800

Phone: (907) 465-2600  
Fax: (907) 465-2617

April 4, 1991

Mr. Robert S. Hatfield, Jr.  
President and Chief Executive Officer  
Alaska Railroad Corporation  
P.O. Box 107500  
Anchorage, AK 99510-7500

Dear Mr. Hatfield:

Thank you for your March 8 letter providing an outline for proposed modification to your hazardous materials spill contingency plan. Your interest in being prepared for this type of incident clearly demonstrates the Alaska Railroad Corporation's (ARRC) concern for the environment. The Department appreciates this opportunity to work with the ARRC.

The outline submitted by ENSR should result in a plan with an easy to use format. It appears that you have selected an Incident Command System that will be compatible with the system currently in use by the State. These features will enhance spill response activities taken by the ARRC.

Once your plan is completed the Department would be glad to review and comment on the result. I will provide our regional offices in Fairbanks and Anchorage with copies of the proposed outline and inform them that they may be contacted shortly for assistance in completing your plan.

I greatly appreciate your cooperation with the Department in developing a new updated contingency plan. Thank you again for your concern and efforts toward protecting the environment.

Sincerely,

  
John A. Sandor  
Commissioner

Mr. Robert S. Hatfield, Jr.

-2-

April 4, 1991

cc: Svend Brandt-Erichsen, SCRO  
Pete McGee, NRO

E

Moose/Train Statistics  
1990-91 vs. 1989-90  
(October 1 through March 31)

	<u>1990-91</u>	<u>1989-90</u>
Total Number Killed	205	693
Total Houston to Talkeetna	24	393
Number Salvaged	100	460
Cost of Moose Protection	\$175,000 (est.)	\$397,131

Moose Protection Programs:

- Pilot car (Dec. 28-Mar. 7 scared off 537 moose)
- Wing plowing track to provide paths
- Plowing moose trails parallel to track using rented snow cat
- Salvage crews to pick up and distribute meat
- Clearing brush from right-of-way
- Decking bridges to prevent moose from falling through ties

# COOPERATIVE AGREEMENT

between

ALASKA RAILROAD CORPORATION

and

STATE OF ALASKA, DEPARTMENT OF FISH AND GAME,

DIVISION OF WILDLIFE CONSERVATION

## PURPOSE

This agreement provides a plan of action to be taken by Alaska Railroad Corporation, hereafter referred to as "ARRC", and State of Alaska, Department of Fish and Game, Division of Wildlife Conservation, hereafter referred to as "DWC" to minimize the number of moose killed by trains in Alaska. The goal of this plan is to limit the number of moose killed annually by trains to a maximum of 75.

## BACKGROUND

The ARRC is responsible for the management and operation of railroad traffic and maintenance of the tracks, crossings, structures and track right-of-way, hereafter referred to as "ROW". The safety of the crews, passengers and public is the paramount concern of the ARRC in the process of providing transportation of goods and passengers.

## Cooperative Agreement

Page 2

The DWC is responsible for the management of certain wildlife species, which includes moose. The DWC is charged with assuring sustainable populations statewide. In order to attain sustainable moose populations the DWC monitors, among other things, population size, annual population growth, mortality caused by humans and habitat conditions. The DWC identifies to the Alaska Board of Game the number or segment of the population that may be harvested by humans through controlled hunting seasons.

The goal is to reduce the moose kills by rail operations to 75 or fewer per year. This figure represents a 54% reduction in the most recent 9-year reported moose kill average or slightly below the 36-year norm. ARRC and DWC files provide records of moose killed by the ARRC since 1963. However, diligence in collecting accurate train killed moose data varied in the past, and a higher level of confidence is given to data collected since 1980. During 1989-90, a particularly severe winter, a record high 731 moose were reported killed by the ARRC. Prior to 1989-90, the 26-year average was 90 moose. The most recent 9-year average (excluding 1989-90) was 162 moose killed.

Moose are occasionally hit by the train as it travels the 470 miles of track. During the past decade, 52% of the ARRC moose kill has occurred along a 52 mile stretch of track between Houston and Talkeetna. Train-moose contacts during summer months are generally few, as moose are widely dispersed. Fatal moose strikes become significant when and where moose concentrate on winter range near the ARRC ROW. Lethal contacts reach highest levels when snow depths adjacent to the tracks reach levels that impede moose movements, causing them to prefer travel between or near the plowed tracks.

## Cooperative Agreement

Page 3

The ARRC moose kill is nondiscriminatory. Moose of all sexes and ages are killed, usually in proportion to their occurrence on the wintering range. Train kills are mostly additive to both natural mortality and hunter harvest allocated by the Board of Game. This additive mortality has been high in recent years, causing the Board to restrict or limit hunter allocation in succeeding years.

### WHEREAS:

The ARRC is responsible for the maintenance of tracks, structures, and track ROW and operation and scheduling of train traffic; and,

The DWC is responsible for managing wildlife, including moose, in Alaska; and,

The ARRC and DWC mutually agree that actions are necessary to minimize the number of moose killed by the ARRC. This is justification to take positive steps to prevent high fatal moose/train contacts; now therefore,

### THE ARRC AGREES:

- 1) To clear woody vegetation, that provides moose browse, from the maintained ROW where practical to do so and to prevent regrowth of the vegetation in order to not attract moose, with a priority

## Cooperative Agreement

Page 4

being directed to (in order) MP 187 - 226, and MP 175 - 187. The ROW between MP 226 and 270 will be examined by a ARRC and DWC team early in the summer of 1991 and a joint decision will be made on which sections can and should be cleared.

- 2) To pack and maintain winter trails parallel to the tracks, with a priority directed to (in order) MP 187-226 and MP 175-187 with packing to begin when 24 inches of snow have accumulated.
- 3) To wing-plow snow between Houston and Talkeetna, with priorities as in No. 2 above.
- 4) To salvage moose fatally hit and recoverable.
- 5) To operate pilot cars (moose patrols) during periods and in areas determined by either the ARRC or DWC to be susceptible to high kill rates, primarily MP 175 - 226.
- 6) To participate in a Research and Development Committee consisting of DWC, ARRC and other invited parties which will evaluate and encourage research and development of devices, procedures, or substances that might reduce moose/train contacts.
- 7) To implement recommendations from the Research and Development Committee when feasible.

Cooperative Agreement

Page 5

- 8) To provide complete and timely reports of moose/train kill data and pilot car/moose contacts directly to DWC. This data will be furnished by ARRC's Corporate Communications Director (Vivian Hamilton) to DWC's Palmer Area Management Biologist (Herman Griese).
- 9) To allow DWC staff to ride trains and pilot cars when feasible to monitor moose/train or moose/pilot car contacts.

THE DWC AGREES:

- 1) To promote habitat improvement projects in locations that would attract winter moose concentrations to areas away from the ARRC ROW.
- 2) To participate in the Research and Development Committee.
- 3) To participate in funding for vegetation removal and packing and maintaining winter trails when earmarked appropriations are available for that purpose.

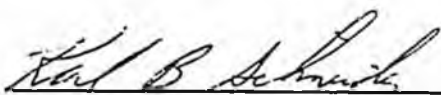
THE ARRC AND DWC MUTUALLY AGREE:

- 1) To promote and maintain free and open communications and exchange information regarding moose/train contacts.

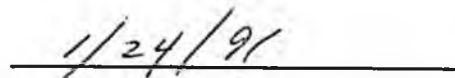
Cooperative Agreement

Page 1

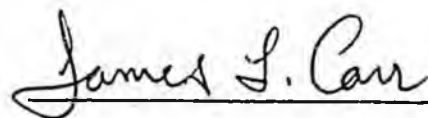
- 2) To meet jointly at least once annually prior to the onset of winter to discuss efforts to reduce moose/train conflicts for the immediate winter and to discuss conditions, dates, and locations for establishing winter trails and for running pilot cars.
- 3) That amendments to this agreement may be proposed by either party and shall become effective upon approval of both parties.
- 4) If and when disputes arise between ARRC and DWC on the implementation of this plan the ARRC president and the DWC director will meet and resolve the disagreement.



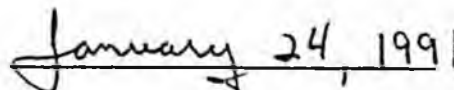
*Division of Wildlife Conservation  
Acting Regional Supervisor*



Date



*Alaska Railroad Corporation  
General Roadmaster*



Date

F

**Alaska Railroad Corporation  
Balance Sheet Management 1990 to 1986**

(Thousands of Dollars) \*

<u>Selected Category</u>	<u>12/31/90</u>	<u>12/31/89</u>	<u>12/31/88</u>	<u>12/31/87</u>	<u>12/31/86</u>
Cash & Temporary Inves	2,346	814	1,862	1,915	3,133
Accounts Receivable (net)	9,964	6,828	7,598	7,090	10,529
Materials & Supplies	5,619	4,825	4,279	3,641	4,170
Property (net)	37,548	37,548	42,623	41,152	38,602
Total Assets	99,524	83,602	72,919	69,044	72,640
Current Liabilities	13,529	12,613	10,207	11,796	19,615
Short Term Debt	3,000	3,400	0	1,665	6,426
Long Term Debt	17,333	15,467	13,567	15,805	14,830
Total Liabilities	42,862	31,480	23,774	25,705	32,318
Equity	56,662	52,122	49,145	43,339	40,322
<u>Significant Ratios</u>					
Current Ratio	.94	.65	1.21	1.16	.96
Debt Equity	31%	30%	28%	36%	37%
Equity Capitalization	57%	62%	67%	63%	56%
Return on Investment	13.0%	8.7%	8.9%	17.0%	(2.9%)
Average Return on Inves	10.9%	10.5%	11%	8.9%	9%

**Alaska Railroad Corporation  
1990 through 1986 Comparison  
Corporate Summary**

	1990	1989	1988	1987	1986	Average
<b>Revenue</b>						
Railroad	\$ 54,940	\$ 48,342	\$ 44,871	\$ 39,369	\$ 41,676	\$ 45,840
Passenger	6,973	6,026	5,601	5,434	4,574	5,722
Real Estate	4,035	4,217	4,753	5,205	5,274	4,697
All Other	3,932	3,289	3,828	3,693	6,609	4,270
<b>Total Revenue</b>	<b>69,880</b>	<b>61,874</b>	<b>59,053</b>	<b>53,701</b>	<b>\$ 58,133</b>	<b>\$ 60,528</b>
<b>Expenses</b>						
Railroad	\$ 42,473	\$ 38,937	\$ 36,554	33,916	40,325	\$ 38,441
General & Admin	9,478	10,062	9,225	9,094	12,381	10,048
Risk Management	6,241	3,888	2,013	1,907	2,880	3,386
Interest Expense	2,066	1,204	1,526	1,661	613	1,414
Miscellaneous	592	315	51	686	482	425
Depreciation	4,490	4,495	3,878	3,421	2,437	3,744
<b>Total Expenses</b>	<b>\$ 65,340</b>	<b>\$ 58,901</b>	<b>\$ 53,247</b>	<b>\$ 50,685</b>	<b>\$ 59,118</b>	<b>\$ (57,458)</b>
<b>Net Income (Loss)</b>	<b>\$ 4,540</b>	<b>\$ 2,973</b>	<b>\$ 5,806</b>	<b>\$ 3,016</b>	<b>\$ (985)</b>	<b>\$ 3,070</b>

**Alaska Railroad Corporation  
1990 through 1986 Comparison  
Corporate Revenue**

	1990	1989	1988	1987	1986	Average
<b><u>Railroad</u></b>						
Pipe	\$ 681	\$ 1,592	\$ 1,440	\$ 718	\$ 2,190	\$ 1,324
Coal: Domestic	5,487	5,484	5,553	4,967	4,350	5,168
Export	6,804	5,934	6,645	6,271	5,748	6,280
Petroleum	17,368	14,900	13,184	11,582	10,224	13,452
Gravel	4,674	3,176	2,649	2,738	4,054	3,458
TOFC/COFC	6,103	6,766	6,327	5,787	7,601	6,517
Interline	10,974	8,982	8,039	6,148	6,677	8,164
Miscellaneous Local	1,222	1,508	1,034	1,158	832	1,151
<b>Total Railroad</b>	<b>\$ 53,313</b>	<b>\$ 48,342</b>	<b>\$ 44,871</b>	<b>\$ 39,369</b>	<b>\$ 41,676</b>	<b>\$ 45,514</b>
<b><u>Passenger</u></b>						
Northbound	\$ 3,997	\$ 3,458	\$ 2,950	\$ 3,068	\$ 2,763	\$ 3,247
Southbound	2,226	1,994	2,043	1,920	1,668	1,970
Charters, Specials	750	574	608	446	143	504
<b>Total Passenger</b>	<b>\$ 6,973</b>	<b>\$ 6,026</b>	<b>\$ 5,601</b>	<b>\$ 5,434</b>	<b>\$ 4,574</b>	<b>\$ 5,722</b>
<b><u>Other</u></b>						
Real Estate	\$ 4,035	\$ 4,217	\$ 4,753	\$ 5,205	\$ 5,274	\$ 4,697
All Other	5,559	3,289	3,828	3,693	6,609	4,596
<b>Total Other</b>	<b>\$ 9,594</b>	<b>\$ 7,506</b>	<b>\$ 8,581</b>	<b>\$ 8,898</b>	<b>\$ 11,883</b>	<b>\$ 9,292</b>
<b>Total Revenue</b>	<b>\$ 69,880</b>	<b>\$ 61,874</b>	<b>\$ 59,053</b>	<b>\$ 53,701</b>	<b>\$ 58,133</b>	<b>\$ 60,528</b>

**Alaska Railroad Corporation  
1990 through 1986 Comparison  
Corporate Expenses**

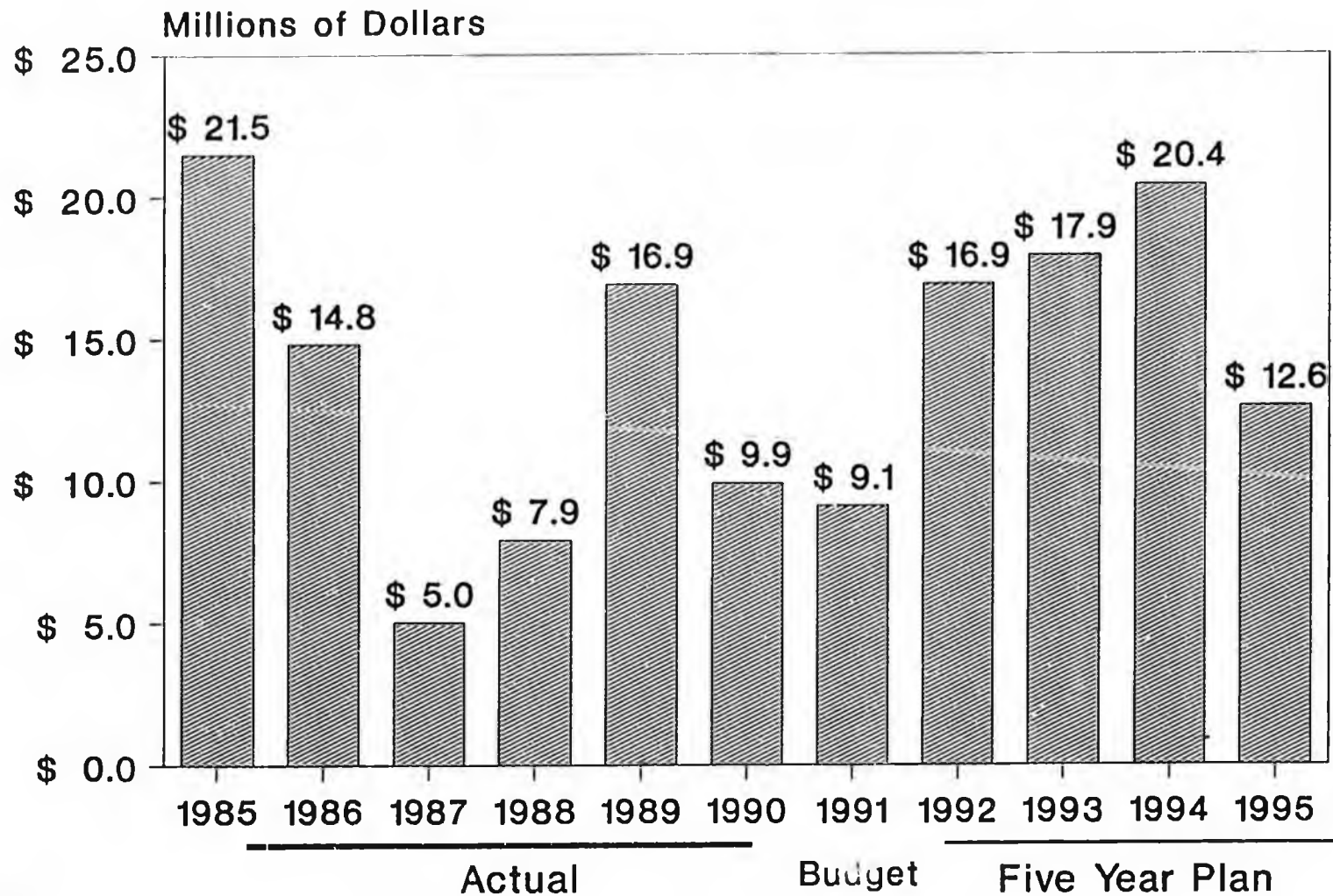
	1990	1989	1988	1987	1986	Average
<b><u>Railroad</u></b>						
Operations Staff	\$ 639	\$ 857	\$ 558	\$ 637	\$ 694	\$ 677
Transportation	15,548	14,788	13,656	12,568	15,532	14,418
Motive Power	13,929	12,044	11,077	10,592	12,329	11,994
Engineering	12,357	11,248	11,263	10,119	11,795	11,356
<b>Total Operations</b>	<b>\$ 42,473</b>	<b>\$ 38,937</b>	<b>\$ 36,554</b>	<b>\$ 33,916</b>	<b>\$ 40,350</b>	<b>\$ 38,446</b>
<b><u>General &amp; Admin</u></b>						
Corporate Office	\$ 1,963	\$ 1,929	\$ 1,991	\$ 437	\$ 670	\$ 1,398
Finance	3,159	3,168	3,058	3,768	5,464	3,723
Marketing	2,410	2,506	2,278	2,171	3,044	2,482
Administration	638	505	486	573	752	591
Personnel	1,075	1,138	1,075	1,232	1,469	1,198
General Counsel	233	816	337	914	957	651
<b>Total Gen &amp; Admin</b>	<b>\$ 9,478</b>	<b>\$ 10,062</b>	<b>\$ 9,225</b>	<b>\$ 9,095</b>	<b>\$ 12,356</b>	<b>\$ 10,043</b>
<b><u>Other</u></b>						
Risk Management	\$ 6,241	\$ 3,888	\$ 2,013	\$ 1,906	\$ 2,880	\$ 3,386
Interest Expense	2,066	1,204	1,526	1,661	613	1,414
Corporate Contingency	592	315	51	686	482	425
Depreciation	4,490	4,495	3,878	3,421	2,437	3,744
<b>Total Other</b>	<b>\$ 13,389</b>	<b>\$ 9,902</b>	<b>\$ 7,468</b>	<b>\$ 7,674</b>	<b>\$ 6,412</b>	<b>\$ 8,969</b>
<b>Total Expense</b>	<b>\$ 65,340</b>	<b>\$ 58,901</b>	<b>\$ 53,247</b>	<b>\$ 50,685</b>	<b>\$ 59,118</b>	<b>\$ 57,458</b>

**Alaska Railroad Corporation**  
**1990 to 1986 Operating vs Overhead Ratios**  
(Thousands of Dollars) \*

<u>Expense Category</u>		<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1987</u>	<u>1986</u>
Operations	- Dollars	42,473	38,937	36,554	33,916	40,350
	- Percent	65%	66%	69%	67%	68%
Gen & Admin	- Dollars	10,070	10,377	9,276	9,781	12,671
	- Percent	15%	17%	17%	19%	22%
Risk Mgmt	- Dollars	6,241	3,888	2,013	1,906	2,880
	- Percent	10%	7%	4%	4%	5%
Interest	- Dollars	2,066	1,204	1,526	1,661	613
	- Percent	3%	2%	3%	3%	1%
Depreciation	- Dollars	4,490	4,495	3,878	3,421	2,437
	- Percent	7%	8%	7%	7%	4%
<b>Total Expense</b>		<b><u>65.340</u></b>	<b><u>58.901</u></b>	<b><u>53.247</u></b>	<b><u>50.685</u></b>	<b><u>59.118</u></b>
<b>Personnel Costs:</b>						
% of Expense		52%	56%	60%	63%	61%
% of Revenue		49%	53%	54%	59%	62%

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# Alaska Railroad Corporation Capital Program, 1985 to 1995



**Significant  
Capital Improvements  
1985 to 1990**

**Equipment:**

o 45 articulated, state-of-the-art flat cars,	\$3.7 million
o 5 new GP-49 series EMD locomotives,	\$4.8 million
o 8 rebuilt GP-38-2 series EMD locomotives,	\$3.5 million
o 5 rebuilt rail diesel cars,	\$2.0 million
o 3 model 840 DEH locomotive cranes,	\$1.8 million
o Passenger coaches and food service cars	\$4.5 million
o Miscellaneous on-track equipment,	\$3.3 million

**Facilities/Track Structure:**

o Denali Park Depot	\$0.3 million
o Rehabilitation, south end tunnels	\$5.0 million
o Rail, ties, ballast programs	\$15.0 million
o Miscellaneous shop improvements	\$2.5 million
o Buildings, Bridges	\$6.5 million

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## Ship Creek Revitalization

### Original Townsite Redevelopment

Anchorage has long recognized the importance of the Ship Creek basin. Since the city's beginnings on the banks of the creek as a railroad construction camp, Ship Creek has played a key role in Anchorage's development. The center of the city's industry and shipping, Ship Creek is now being examined for its potential contribution to Anchorage's premier growth industries: tourism and recreation. Recent studies by local government have focused on the recreation and tourism potential of lower Ship Creek. With its proximity to the cruise ship dock, the Alaska Railroad Passenger Depot, downtown Anchorage, and the trail network, Ship Creek is uniquely located to support the growth of tourism. Much of Ship Creek is currently under-utilized and is ready for transition. The initial project planned for the area is an ambitious program aimed at multiple users providing both for a tourist attraction and a light industrial use of the land. The program is summarized as follows:

Glacier Brewery: This project will be the initial construction of the redevelopment program. The site will serve as an actual producing micro-brewery and a public tavern/restaurant co-located. With the additional upgrades to road systems and pedestrian walkways, the "brew-pub" will be the western anchor of the redevelopment.

Chugach Electric Dam Bridge: A bicycle and pedestrian bridge crossing Ship Creek is proposed at the presently unused Chugach Electric Association dam.

Fisherman's Trail: Due to the popularity of Ship Creek for both viewing salmon and fishing, a "fisherman's trail" is incorporated in the project.

Coastal Trail: The long range plan for the Anchorage Coastal Trail system envisioned a connection with the proposed Ship Creek Greenbelt Trail.

ARRC Headquarters Building: ARRC management is presently reviewing proposals for the possible lease of new office space for ARRC. Currently housed in three separate buildings, the consolidated building space would be located on the shores of Ship Creek and provide tangible evidence of ARRC's intention to develop its land. The old headquarters building would remain the ARRC Passenger Depot as well as be available for lease to small tourist related shops or even restaurants.

Historic Building: Several Alaska Railroad buildings of historical interest may be moved to the Original Townsite Development from other locations in the Ship Creek Basin. The first project would renovate a freight depot to use as a public market building for activities such as a Farmer's Market.

Passenger Train Yard: The re-alignment of Warehouse Avenue extension permits retention of the yards developed for use by excursion passenger trains.

Bus and Bicycle Lanes: A doubledecker bus or rubber-tired street car is proposed to carry tourists between the brewery, the Ship Creek Waterfront, and downtown.

### Alaska Petroleum Visitor Center

Anchorage is the headquarters for the petroleum industry in Alaska. Currently, there is little or no available tourism related information on the impact of oil either in Alaska or the "lower 48". The Petroleum Visitor Center would be a tourist attraction and education facility explaining the development of Alaska as the premier source of domestic oil for the United States, the construction of the Trans Alaska Pipeline, the development of Prudhoe Bay, and other potential oil reservoirs, wildlife impact, and environmental impact. Plans even include a "cold room" where visitors could experience (for a brief time only !!!) the biting, arctic conditions experienced by oil-field workers on the North Slope. This project is currently being planned for possible construction in 1992.

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# EXPORT COAL

CURRENT MARKET: 700,000 METRIC TONS ANNUALLY TO KOREA

POTENTIAL MARKET: 1.7 TO 2 MILLION METRIC TONS TO KOREA  
AND JAPAN

COMPETITION:

- AUSTRALIAN PRODUCT
- CANADIAN PRODUCT
- WESTERN U.S. PRODUCT

MARKET ADVANTAGES:

- LOW SULPHUR CONTENT (CLEAN BURNING)
- READY AND DEPENDABLE SUPPLY
- TRANSPORTATION INFRASTRUCTURE IN PLACE
- ICE-FREE PORT FACILITY IN USE
- STABILITY OF ECONOMIC AND LABOR CONDITIONS

DISADVANTAGES:

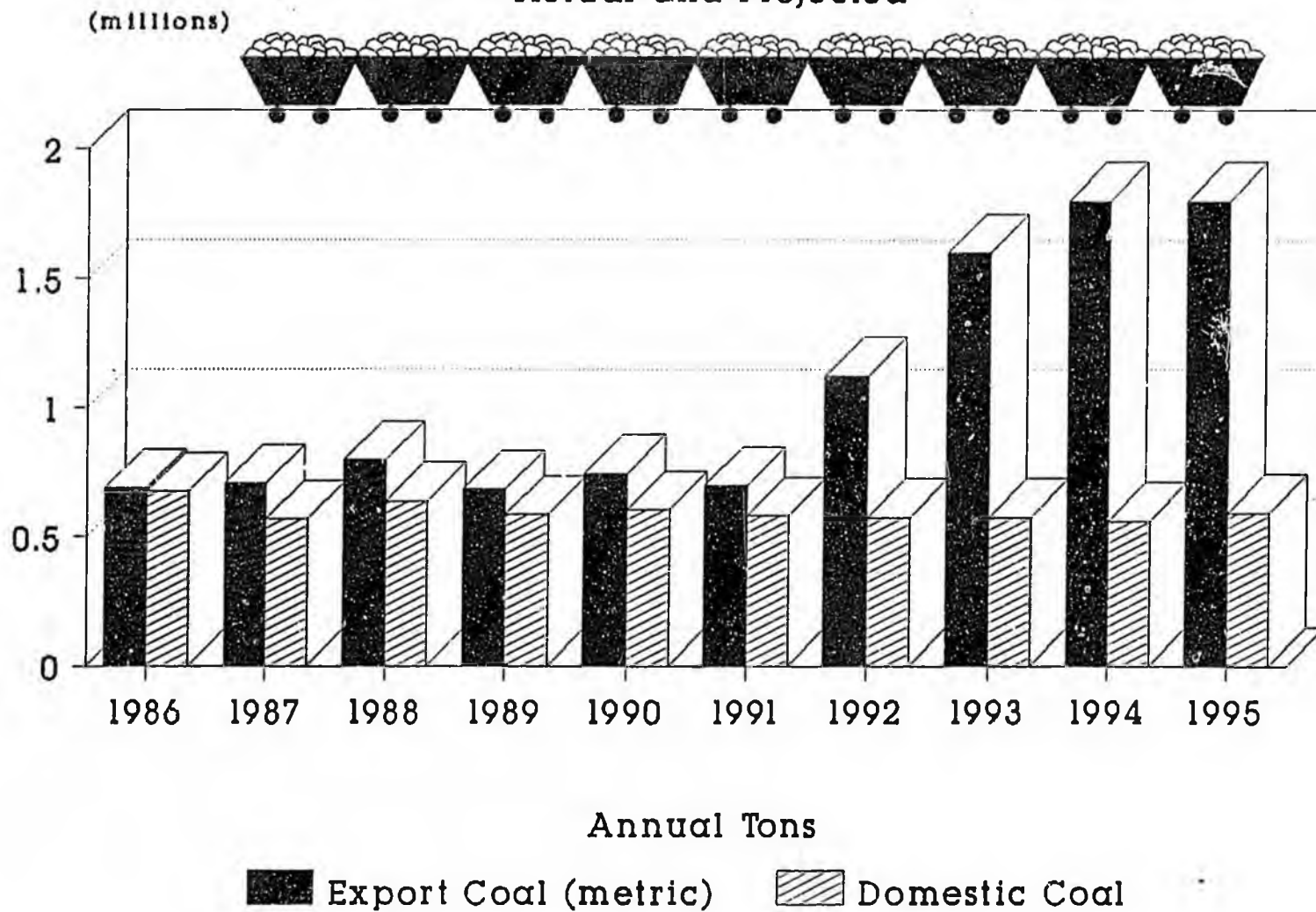
- DISTANCE FROM POTENTIAL MARKET
- LOW BTU RATING OF SUB-BITUMINOUS PRODUCT

UNRESOLVED ISSUES:

- MENTAL HEALTH LANDS

# COAL TONNAGE STATISTICS

Actual and Projected



Includes IK Export (Wishbone Hill)  
April 11, 1991

# LOCAL COAL

## CURRENT MARKET:

- 600,000 TONS ANNUALLY TO INTERIOR ALASKA

## MARKET ADVANTAGES:

- STABLE SUPPLY AND DEMAND
- FAVORABLE PROXIMITY OF SUPPLY TO DEMAND CENTERS
- WELL DEVELOPED SUPPLY, TRANSPORTATION AND CONSUMER INFRASTRUCTURES

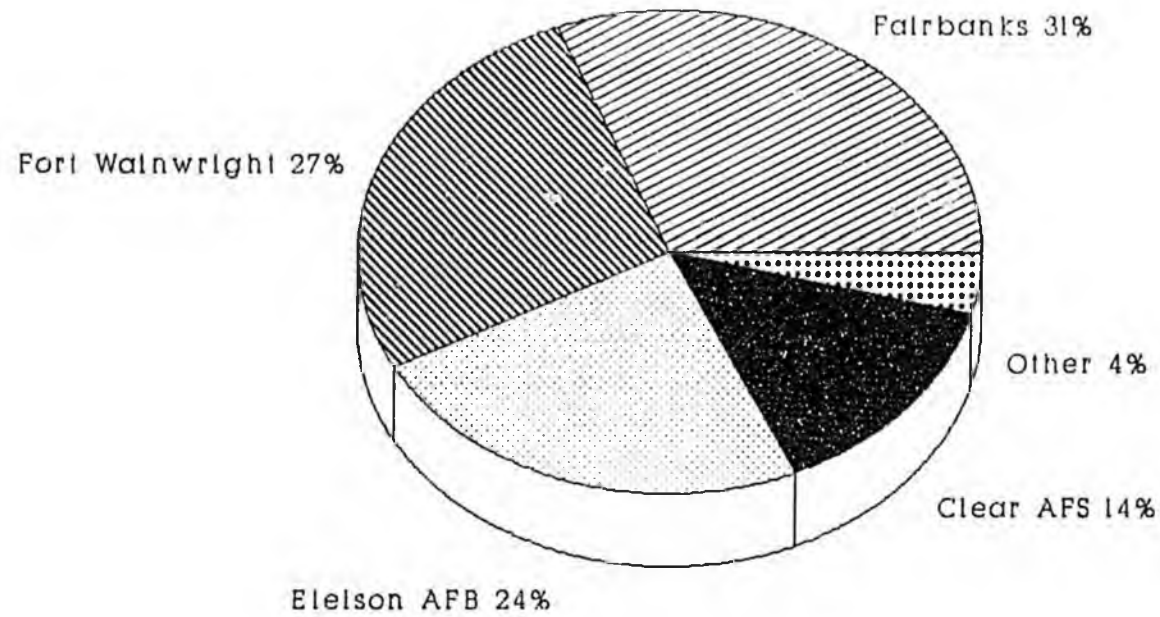
## CONSTRAINTS:

- WEATHER RELATED SERVICE PROBLEMS
- EQUIPMENT AVAILABILITY

## UNRESOLVED ISSUES:

- UTILIZATION OF EQUIPMENT

## Local Coal Tonnage Shipped by Destination



1988 & 1989 Average  
Short Tons  
April 11, 1991

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## MUNICIPAL RAILROAD/HIGHWAY CROSSING NEGOTIATIONS

We believe that the relationship between the Alaska Railroad Corporation ("ARRC") and the Railbelt municipalities has improved considerably since the state acquired the railroad in 1985. However, the most difficult aspect of the relationship continues to concern railroad/highway crossing agreements. ARRC and the municipalities have yet to agree on all of the terms of a proposed form permit to ultimately govern these crossings.

The catalyst for these ongoing negotiations was the City of North Pole. In late 1988, North Pole attempted to repudiate a crossing permit executed in 1985. North Pole's crossing was being signalized at the time, and in such cases the Federal Highway Administration (which funds 90% of the costs) requires some entity to undertake ongoing crossing responsibilities, including maintenance. In light of North Pole's refusal to acknowledge responsibility, the signals were not installed. Several other municipalities also complained about crossing permit terms, and the ARRC Board of Directors invited the state ombudsman to review their allegations.

In November, 1989, the ombudsman issued a report which found some of the complaints justified and some unsupported. Since that time, ARRC and the municipalities have attempted to reach a compromise. ARRC expanded membership on its Community Briefing Council ("CBC") to include all Railbelt municipalities (an ombudsman recommendation), and used this forum to propose crossing permit changes. The City of Wasilla took the lead in negotiations. ARRC and Wasilla exchanged several letters in the fall and winter of 1990-91. In addition, a presentation was made to the CBC in late November 1990 outlining current proposals. A copy of the comparison chart used at that meeting is attached.

Numerous productive comments were made by municipal representatives, and ARRC attempted to incorporate most of these into a draft permit. The railroad also addressed concerns expressed separately by Wasilla's city attorney. For example, the most significant change made at the City's request was an offer by ARRC to bear half the cost of major repairs or renovations of existing crossings if all other sources of funding (for example, federal or state highway funds) failed.

Still unresolved is Wasilla's objection to insurance and indemnity requirements. ARRC has consistently maintained that municipalities should bear those liabilities related to crossings which exist to serve the motoring public in their respective communities. But ARRC has agreed to accept liability if faulty track or signal maintenance causes third party injury or property damage. The ombudsman's report supported ARRC's position on indemnification.

Regarding liability insurance, Wasilla objects to the amount requested (\$2 million) and ARRC's refusal to automatically waive or reduce coverage requirements should premiums increase or city revenues decrease. In a March 19 proposal, ARRC offered alternative insurance provisions including a commitment to renegotiate coverage in good faith at the request of either party during the permit term.

The latest draft permit is apparently not acceptable to the City of Wasilla. Mayor John Stein has recently written Senator Menard describing an "absence of consensus on fundamental concepts." He has requested a meeting between ARRC, municipalities and the Department of Transportation & Public Facilities "with a viewpoint of seeking a resolution that would best husband public funds and interests . . . ." ARRC will attend this and other meetings with Railbelt communities until issues related to grade crossings are resolved.

COMPARISON OF OLD VS. NEW CROSSING PERMIT

<u>Item</u>	<u>Old Approach</u>	<u>New Proposal</u>
Annual Fee	\$12-\$200	None
Termination	90-180 days notice, at RR's sole discretion	180 days advance notice, ltd to statutory reasons
Renewals	None	Automatic if not in default and no RR purpose for area
RR Satisfaction	No limits	RR must be reasonable
Signal Installation	Installed at RR or industry discretion, at munic expense	Diagnostic team recommendation necessary Munic represented on 3-member diagnostic team Appeal procedure in place
Routine Signal Maintenance	Munic responsibility (ranged up to \$3200/yr)	Munic pays \$1500/yr; RR pays other routine signal costs Munic pays for vandalism, accidents & snow removal costs
Unusual Signal Maintenance	Rates at full DOT/PF and FHWA overhead rate (194% in 1990)	Bill at direct RR wage rate plus benefits and dept overhead Rate set for 3 years Accidents still at full rate
Site Triangles	Munic responsibility	Remains with munic but RR to provide flag protection
Major Repairs/Changes	Munic responsibility	3 yrs advance notice Only with diagnostic team recommendation RR to pay for rail leveling and rail or tie replacements Munic to pay for road improvements

Insurance	Standard insurance level at time required (\$500,000-\$2,000,000)	Self-insurance now possible RR protective required only during construction phase
Indemnity	Munic responsible for any liability arising from or at the crossing	RR responsible for liability from faulty track or signal maintenance (if RR performs it)
Dispute Resolution	None	Per Ombudsman, "appeal" to RR Board of Directors; independent hearing officer available
Notice of Munic Entry on RR ROW	10 days notice required in all cases	No notice required for snow removal Also exempts manual brush cutting or sign work >12½' from track
Remedies for Default	RR could terminate and pursue other remedies	Termination possible only after Board "appeal"
RR Review of Munic Plans	RR approval required with no limits or controls	RR must respond in 10 days Reasonable standard Limited to safety/operational issues
Standard Specs	Binding on munic as soon as it was given notice of the change	Opportunity to comment before change, and appeal to Board
3d Party Use of Crossing Area	At RR discretion	Concurrence of munic required

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ARRC EMPLOYEE INJURY SUMMARY  
1988-90 INJURY HISTORY

<u>DEPARTMENT</u>	<u>Cumulative Jan-Dec. Total Incidents</u>			<u>Cumulative Jan-Dec. Total FRA Reportable</u>		
	<u>1990</u>	<u>1989</u>	<u>1988</u>	<u>1990</u>	<u>1989</u>	<u>1988</u>
Engineering	39	53	64	16	28	25
Transportation	49	32	26	24	11	12
Mechanical	26	18	28	10	8	9
Others	<u>04</u>	<u>2</u>	<u>9</u>	<u>01</u>	<u>1</u>	<u>5</u>
ARR Total	118	105	127	51	48	51

FIRST QUARTER 1991 INJURY REVIEW (JANUARY-MARCH)

<u>DEPARTMENT</u>	<u>TOTAL INJURIES</u>			
	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Engineering	12	10	6	7
Transportation	8	9	22	11
Mechanical	7	3	13	3
Others	<u>1</u>	<u>0</u>	<u>0</u>	<u>1</u>
Total	28	22	41	22

<u>DEPARTMENT</u>	<u>Reportable To FRA Medical Treatment Injuries</u>			
	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>
Engineering	6	4	0	2
Transportation	8	3	12	3
Mechanical	2	1	5	3
Others	<u>1</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	17	8	17	8

The ARRC has continued to see a significant improvement in its accident prevention program through the first quarter of 1991. This trend is a continuation of improvement over previous years statistics that started in October 1990. The last six months has been an encouraging indication that the increased number of training programs offered to ARRC employees and renewed determination by ARRC management to eliminate unsafe conditions and work practices is beginning to show results.

Six months or 500,000 manhours are not large enough time or exposure frames to draw final conclusions, although they certainly indicate we're moving in the right direction. During 1991, we have strengthened housekeeping programs in all our facilities. Remarks from many of our shop employees indicate that these work areas have never looked better during their time at the ARRC. Also this year, rejuvenated emphasis on responsibility for accidents or unsafe work practices has been enforced throughout all levels of management. Along with this responsibility, we are insisting on measurable activities by all supervisors to promote an accident free work place.

The ARRC has set ambitious goals in accident prevention for 1991. Through the first quarter we appear to be on track to meet or exceed these goals. With continued managerial dedication and emphasis on the remaining training programs scheduled throughout the year, these goals will be met.