

ALASKA LEGISLATURE COMMITTEE FILES 1987-1988 8672

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WATER ANALYSIS AND EVALUATION FOR
COMMUNITIES OF THE NORTH SLOPE BOROUGH

NOVEMBER 1983

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CONSERVATION
NRO

FOR
PACIFIC MANAGEMENT & ENGINEERING CORPORATION
ANCHORAGE, ALASKA

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EXECUTIVE SUMMARY

Lead was present above background levels in the water systems of all communities visited except ~~Atkasut and~~ Anaktuvuk Pass; selected samples in Point Lay, Nuiqsut, and Barrow indicated lead contamination in excess of permissible limits established by the EPA and ADEC. With the exception of water from a relatively deep well at Anaktuvuk Pass, all communities had water supplies that were moderately to highly aggressive (corrosive). Solder samples collected from the water systems in each community indicated lead contents in excess of 50 percent. Less than one-fifth of the solder samples collected indicated lead content of less than 10 percent. The use of copper piping with soldered joints was the standard material of construction for the water systems observed during the survey.

An acute health hazard requiring emergency corrective actions is not deemed to exist; however, recommendations are provided to minimize the potential for health impact until permanent control of water quality can be achieved. Health risks that might be suggested as potentially resulting from chronic consumption of water supplies, if corrections were not made, can be readily avoided. The corrosive tendency of the water has, or will, present significant impact on the maintenance requirements for the water systems of concern.

Immediate attention is warranted for developing a timely action plan for improving the water quality provided in the villages of the North Slope Borough.

NORTH SLOPE BOROUGH LEAD STUDY SUMMARY

Date	Sample Location	Flushed or Unflushed	Lead mg/l (limit .05 mg/l)
07/07/83	Barrow - High School Drinking Fountain	Unflushed	0.98
08/07/83	Point Hope - Womens Restroom	Unflushed	0.04
08/07/83	Point Hope - Womens Restroom	Flushed	0.53
08/09/83	Nuiqsut - School Sink	Unflushed	0.62
08/09/83	Nuiqsut - School Sink	Flushed	0.17
08/09/83	Kaktovik - School Sink	Unflushed	0.005
08/09/83	Kaktovik - School Sink	Flushed	<0.005
08/15/83	Wainwright - School Office Sink	Unflushed	0.056
08/15/83	Wainwright - School Kitchen Sink	Flushed	0.310
08/15/83	Barrow - Elem. School Kitchen Sink	Unflushed	0.145
08/15/83	Barrow - Elem. School Kitchen Sink	Flushed	<0.005
08/15/83	Barrow - High School Kitchen Sink	Unflushed	0.018
08/15/83	Barrow - High School Kitchen Sink	Flushed	0.080
08/16/83	Barrow - NSB Building Mens Room	Unflushed	0.006
08/16/83	Barrow - NSB Building Mens Room	Unflushed	0.005
08/16/83	Barrow - NSB Building Mens Room	Flushed	<0.005
09/28/83	Nuiqsut - Public Safety House	Unflushed	0.008
09/28/83	Nuiqsut - Public Safety House	Flushed	0.006
09/28/83	Nuiqsut - School Fountain	Unflushed	0.340
09/28/83	Nuiqsut - School Fountain	Flushed	0.028
09/28/83	Nuiqsut - Truck Fill Point	Unflushed	0.090
09/28/83	Nuiqsut - Truck Fill Point	Flushed	0.011
09/29/83	Point Hope - Gym Drinking Fountain	Flushed	0.012
09/29/83	Point Hope - Gym Drinking Fountain	Flushed	0.006

Page Two
NORTH SLOPE BOROUGH LEAD STUDY SUMMARY

Date	Sample Location	Flushed or Unflushed	Lead mg/l (Limit .05 mg/l)
09/29/83	Point Hope - NSB Housing - Kitchen	Unflushed	0.013
09/29/83	Point Hope - NSB Housing - Kitchen	Flushed	0.013
09/29/83	Point Hope - Water Plant - Kitchen Sink	Unflushed	0.026
09/29/83	Point Hope - Water Plant - Kitchen Sink	Flushed	<0.005
09/30/83	Wairwright - Jack Farik's place	Unflushed	0.077
09/30/83	Wairwright - Jack Farik's place	Flushed	0.005
09/30/83	Wairwright - High School Kitchen	Flushed	0.029
09/30/83	Wairwright - School Drinking Fountain	Unflushed	0.098
09/30/83	Wairwright - Sink Downstairs	Flushed	<0.005
09/30/83	Wairwright - Water Fountain upstairs	Unflushed	0.610
10/12/83	Anaktuvuk Pass - W. Side Kitchen	Flushed	0.005
10/12/83	Anaktuvuk Pass - E. Kitchen Sink - Cold	Unflushed	<0.005
10/12/83	Anaktuvuk Pass - Well House Sink	Unflushed	<0.005
10/12/83	Anaktuvuk Pass - Well House Sink	Flushed	<0.005
10/12/83	Anaktuvuk Pass - Paul Hugo Kitchen	Unflushed	0.010
10/12/83	Anaktuvuk Pass - Paul Hugo Kitchen Sink Via	Flushed	<0.006
10/13/83	Atquasuk - Tony Susooks - Water Truck	Unflushed	0.011
10/13/83	Atquasuk - Tony Susooks - Kitchen Tap	Unflushed	0.079
10/13/83	Atquasuk - Empty Storage Tank	Unflushed	<0.005
11/10/83	Barrow - NSB Housing J.H. Hittson	Unflushed	0.006
11/10/83	Barrow - NSB Housing J.H. Hittson	Flushed	<0.005
10/13/83	Barrow - New High School Fountain	Unflushed	0.070
10/13/83	Barrow - New High School Fountain	Flushed	0.010
10/13/83	Barrow - New High School Kitchen Tap	Unflushed	0.130
10/13/83	Barrow - New High School Kitchen Tap	Flushed	0.015

Implementing a Lead Solder Ban

Joe Glicker and Don Stewart

One of the most significant aspects of the 1986 Safe Drinking Water Act amendments is the ban on the use of lead solder and lead pipes, which is similar to a ban enacted by the state of Oregon in 1984. Implementing such a ban requires a close coordination among the water utility, plumbing inspectors, plumbing code authorities, and health officials. Education and enforcement programs are essential to ensure that the ban is effective. Understanding the experiences in establishing the ban in Oregon and enforcing it in Portland may be useful as the lead ban is extended nationwide.

One of the most far-reaching sections of the 1986 amendments to the Safe Drinking Water Act (SDWA) is section 1417—"Prohibition on Use of Lead Pipes, Solder, and Flux." This section of the act prohibits use of solder and flux with more than 0.2 percent lead and pipe and pipe fittings with more than 8 percent lead in all water systems and residential and nonresidential potable water plumbing. This section of the act also requires the water utility to provide notice to the public about possible lead contamination of tapwater in a manner to be prescribed by the US Environmental Protection Agency (USEPA).¹

These provisions are similar to a lead ban enacted by the state of Oregon in 1984.² This ban was an outgrowth of a corrosion study undertaken by the Portland Water Bureau from 1981 through 1983.³⁻⁵ Implementing such a ban requires the cooperative efforts of many agencies, organizations, and individuals. The experiences in establishing a ban in Oregon and in enforcing it in Portland may be useful as this ban is extended nationwide.

Establishing a lead ban

The biggest obstacle to establishing a lead solder ban in Oregon—and the biggest reason that the ban was imple-

Portland's corrosion study generated considerable coverage in the local press, as did the hearings and meetings that preceded issuance of the state rule.

mented statewide—was the fact that the plumbing code in Oregon is statewide. Local governments do not have the option under state law to adopt their own plumbing codes. Thus, when the primary conclusion of the Portland Corrosion

Study was the desirability of a lead-solder ban in the area served by Portland's water supply, more than a local ordinance change was needed. It was also realized that although a local ordinance could perhaps control lead solder use within the city limits of Portland, Portland supplies water to other cities and water districts over which a local ordinance would have no effect. Compliance with a citywide only ban would likely be difficult because plumbers working in the metropolitan region would continue to use lead solder outside the city limits, and, in some locations, it would be difficult for a plumber to know whether the work was in or outside the boundaries of the city.

This led Portland's water bureau to take two actions: first, the city's Bureau of Buildings was contacted and the results of the corrosion study were explained. Together, the two agencies developed a notice that was distributed to each person who applied for a city plumbing permit. This notice explained the risks of using lead solders and rec-

TABLE 1
Results of lead-solder testing

Period	Number of Solder Tests	Number of Locations Tested	Number of Samples With Lead Solder*	Number of Locations With Lead Solder*
Oct. 1984-Mar. 1985	10	10	5	5
Apr. 1985-Sept. 1985	19	8	11	3
Oct. 1985-Mar. 1986	5	4	2	2
Apr. 1986-Sept. 1986	4	4	3	3

*Lead solder is defined as having more than 0.2 percent lead.



The Portland, Ore., water quality laboratory analyzed 38 samples during the first two years of the statewide lead solder ban. Plumbing inspectors selected sampling sites from 26 locations on the basis of the solder's appearance—50:50 lead solder becomes dull, whereas 95:5 solder remains bright.

commended the use of 95:5 tin-antimony solder for potable water plumbing.

Second, the study was brought before the State Plumbing Code Advisory Board with a request to ban the use of lead solder in the area served by Portland's Bull Run water supply. The Plumbing Code Board was reluctant to take such a step for several reasons: they did not have the technical background to evaluate the health-based need for the action, and it would be difficult for plumbers working in the general area of the proposed ban to know whether it was or was not in force in a particular location. Furthermore, they did not know whether other areas that served other water supplies were also at risk from the solder. The advisory board noted that a section of the plumbing code gave the administrator of the State Health Division the authority to ban use of any material determined to have adverse health effects.⁶ The board suggested that this approach would be more appropriate. The State Health Division was contacted with a request to make this determination.

The health division held a number of fact-finding hearings around the state that eventually led to the final rule. This rule bans the use of solder with more than 0.2 percent lead in potable water systems and lines, requires labeling of any solder sold in Oregon with more than 0.2 percent lead to indicate that it shall not be used on potable waterlines, bans the use of new lead pipe in potable water systems, and requires removal of all lead services and lead service connectors from water systems on a schedule

approved by the health division. The rule does not specifically define lead pipe but allows the State Health Division to determine whether a water supplier is identifying and removing the appropriate material.

Implementing the ban in Portland

Portland's corrosion study generated considerable coverage in the local press during the two years it was being conducted, as did the hearings and meetings preceding issuance of the state rule. Despite this publicity, many plumbers, home remodelers, and plumbing engineers were unaware of the need for and requirements of the ban. An extensive educational campaign was undertaken to explain the new rule and the lead issue. All plumbing contractors working in Portland were sent notices explaining the rule. Speakers were provided to organizations of local plumbing contractors, plumbing inspectors, corrosion engineers, and interested civic groups. Articles describing the corrosion study were placed in a newsletter inserted with quarterly residential water bills. An informational flyer on lead prepared by the county health department was also mailed to each customer. One-on-one discussions with plumbers and the general public were held by the plumbing inspectors when applications for permits were made and when job sites were visited. Persons contacting the Water Bureau with water quality complaints or requests for information about the lead issue were told of the solder ban and the need to flush standing water prior to consumption.

Although this education campaign did much to inform the public about the solder ban and the reasons for it, there was still resistance to the idea. Cost increases for plumbing installations were feared by contractors and homeowners alike. Material costs for 95:5 tin-antimony solder, the primary alternative

solder, are usually higher than for lead-based solders. The higher melting point and narrower melting point range for this solder were thought to be more time-consuming and would therefore result in higher labor costs. Although everyone recognized the severe consequences of exposure to lead, not everyone was convinced that solder was a serious source of this exposure. Many wanted other solutions to the problem, such as adding water treatment chemicals. It would not affect or restrict the ability to use plumbing materials of their choosing.

This resistance led to the realization that in addition to education, an enforcement program was necessary if the lead solder ban was to become a reality. A cooperative program was established between the Water Bureau and the Plumbing Division of the Bureau of Buildings in Portland. If a field plumbing inspector found a solder being used that was suspected of containing lead in excess of the rule, the inspector took a sample of the solder for analysis in the Water Bureau's water quality laboratory. This provided the inspector with the certified data needed to force correction of the problem. The field inspector could then require removal of the portion of the piping system installed with the lead solder. If the whole system was found to be installed with lead solder, the whole system would have to be removed at the installer's expense. If the installer refuses to comply with the plumbing inspector's order, the installer is subject to a \$1,500 fine and loss of plumbing license. This enforcement program was communicated to the plumbing contractors along with other information about the ban.

Implementation of the ban on lead services and lead service connectors was considerably easier because this area was entirely under the control of the Water Bureau. No new lead piping has been installed for many years, and there

are no lead services in Portland, so compliance with those aspects of the ban required no effort. Portland has about 10,000 galvanized pipe services that are connected to the water main with a 2-ft (0.6-m) lead pipe connector or pigtail. Old records of services, mains, and foremen's reports were searched to identify all these installations. A compliance schedule to remove these pigtails and replace the services over a 10-year period was negotiated with the State Health Division. The cost of this program is estimated to be more than \$6.5 million although most of this cost would be incurred, even without the program, because the service lines being removed are old and often in need of replacement.

Results of two years of experience

During the first two years of the lead solder ban, 38 solder samples have been analyzed by the Portland water quality laboratory. Samples were collected at 26 locations in Portland where plumbing inspectors suspected use of lead-based solder. Inspectors use the difference in appearance between lead solder and tin-antimony solder to identify points at which testing is needed. The 50:50 lead solder is usually dull in appearance after application, whereas 95:5 solder remains bright. A slight indentation or gap often appears where the fitting meets the pipe with tin-antimony solder, whereas this gap is bridged with lead-based solder. Twenty-one of the samples analyzed in the laboratory proved positive for lead-based solder at 13 of the locations. In each case in which a positive solder sample was found, the plumbing installer was given verbal and written notification to remove all piping that was installed using lead-based solder. In no case has it been necessary to impose fines or revoke licenses of installers to gain compliance.

As the plumbing inspectors gained field experience in identifying lead-based and lead-free solders, and as the contractors became accustomed to the rule, the need for laboratory testing decreased. Table 1 shows the testing frequency by six-month intervals since the ban was instituted. Included in these results is one particular location where 12 solder samples were analyzed, 9 of which contained lead-based solder and 3 of which were lead-free.

In recent months, a field solder testing kit⁷ has been used to differentiate between solders. This test procedure is based on formation of an insoluble lead chromate precipitate when potassium chromate is added to a solubilized solution of the solder. This solder field test costs only a dollar or two per sample. Laboratory analyses of the solder samples have confirmed the results of the field test in all of the samples that have been compared.

The response to the results of the

solder-testing program is similar to the response received whenever code violations of any kind are found. The installer is reluctant to spend the money required to correct the violation, but ultimately does so because it is the law and because of the sanctions available if the installer does not comply.

The contractors' initial fears of increased job costs do not seem to have materialized. Cost increases in plumbing work seem to be negligible and the contractors have adjusted favorably to the rule. Although tin-antimony solder unit costs are slightly higher than lead solders, the more careful handling it requires results in use of less material and equivalent material costs on a per-job basis. Labor time on contracted work has not increased once the installer learned how to use the lead-free solders. Despite the initial reluctance to accept the solder changes, once implemented and in use for awhile, the new procedures have been generally accepted.

Perhaps the major problem with the rule is that the use of 95:5 solder and other lead-free solders has greatly decreased the ability of the nonprofessional to install copper water tubing. The professional installer has the ability to obtain the training needed to work with the new materials, whereas an individual usually does not. The greater skill required to use the approved solders has made copper less competitive with other pipe materials, particularly plastics, for the do-it-yourself plumber. This drawback may decrease over time as individuals become familiar with the other solders, but it may be a permanent side-effect of the ban because the amateur may never have sufficient experience to work with lead-free solders.

The other problem in implementing the rule has been the perception by some that health protection from plumbing materials is being examined from a narrow base. For example, the ban may increase the use of plastic pipe materials, and there is concern that the known carcinogen, vinyl chloride monomer, or that other pigments, lubricants, stabilizers, or plasticizers will leach from polyvinyl chloride (PVC) or other plastic pipe.⁸ Also, taste- and odor-causing compounds have been reported from polyethylene pipes.⁹ The health significance, if any, of such leaching has not been fully explored. Further documentation of the risks of plastic pipe, dissemination of the information on this topic, and control of the manufacture and use of plastic pipe, if necessary, are needed to address these concerns.

Conclusions

Establishing a lead-solder ban requires close coordination among the water utility, plumbing inspectors, plumbing code authorities, and health officials.

Obtaining compliance with a ban requires an extensive education program for both the general public and the groups most affected by a ban.

An enforcement program of solder testing is essential to ensure that the ban is effective. Fears of increased costs and increased difficulties in doing plumbing installations have not turned into realities for the professional installer. However, the nonprofessional is turning to other plumbing materials, particularly plastics, because of the higher level of skill required to work with lead-free solders.

A comprehensive look at plumbing materials and their health effects would provide a better basis for making decisions about selecting materials and explaining their use to the public than the current piecemeal approach.

References

1. Safe Drinking Water Act of 1986, Section 1417. Prohibition on Use of Lead Pipes, Solder, and Flux (June 1986).
2. Oregon Administrative Rules, Chapter 333-61-087. Product Acceptability Criteria. Oregon State Health Div. (Aug. 1984).
3. TREWEEK, G.P. ET AL. Pilot-Plant Simulation of Corrosion in Domestic Pipe Materials. *Jour. AWWA*, 77:10:74 (Oct. 1985).
4. Internal Corrosion Mitigation Study. Final Rept. J.M. Montgomery Consulting Engrs. Inc. for Bureau of Water Works, Portland, Ore. (Nov. 1980).
5. Internal Corrosion Mitigation Study. Addendum Rept. J.M. Montgomery Consulting Engrs. Inc. for Bureau of Water Works, Portland, Ore. (Oct. 1983).
6. Oregon State Plumbing Specialty Code and Administrative Rules.
7. Field Lead Solder Test Kit. Copper Development Association, Encino, Calif.
8. Drinking Water and Health. Vol. 4. Safe Drinking Water Committee. Natl. Res. Council (1982).
9. *Research News*. Impact of Polyethylene Pipes on Taste and Odor of Drinking Water. AWWARF, Denver, Colo. (May 1980).



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St. Michael: How long does it take to get the lead out?

Nome Nugget

12-23-82

AT STEPHENSON

The lead leaching into the St. Michael elementary school water system was discovered by accident. But it is no accident that those who could not see the situation by local officials to fix the problem is not an accident either. About 100 of the people interviewed would not be quoted on the issue. The reason they were not quoted was because they were unsure of the facts. But then the issue hasn't always been a mystery, even during research in this article. At stake here are two issues: public information and public health. We have been trying to tell you this for three years." Justice, environmental engineer for the Department

of Environmental Conservation (DEC) said over the phone at his Fairbanks office.

The lead content in the water running from St. Michael elementary school taps was discovered in July, 1979, during a project to assess water quality in rural Alaska. "This was a widespread project costing very little money and getting a lot done," Justice said. "It was a cooperative effort between this department (DEC) and Public Health sanitarians like Geoff Langer (sanitarian for Arden Sound Health Corporation) and the DEC lab down in Juneau." Concern over the unexpected discovery of lead comes from its adverse effect when accumulated in the human body.

To locate the source of the lead, Justice tested St. Michael's water source, a

lake located three-and-a-half miles from town. Water from this lake is pumped about twice a year into a Public Health Service (PHS) Government plant. The treated water is stored in two tanks: the 100,000 gallon PHS tank and a 150,000 gallon steel tank installed by the Bureau of Indian Affairs (BIA). The BIA tank provides water for the taps, drinking fountains, kitchen, and restrooms in the school. The water travels through copper pipes soldered together. Justice found no lead content in the lake, and a minimal amount in the holding tank. But the concentration of lead flowing from the taps was above the maximum level permitted: 0.05 milligrams of lead per liter of water. The content of lead in the water was re-

leased from taps that had been used often. Justice's theory was that the lead accumulated in the pipes. "I have reported this problem in the Northern Exposure," Justice said. "All the diagrams I have made concerning this problem in the water system... investigation taken that the pipe being used was soldered. The solder is not supposed to be in the water line." Justice said.

This standard technique is appropriate in parts of the country where water is hard, containing calcium carbonate. This hard water forms a scale on the inside of the pipe. This scale-like coating, as Justice described it, prevents corrosion of the solder. "But the problem with St. Michael water is so soft there's really no calcium to precipitate out

thing that would
to the kids' health.
to protect the

o years ago when
district drew plans
set a high school
hael, Justice found
se to a legal battle
A over lead solder-

was some con-
re in that they had
(construction)
Anchorage off-
DEC environmental
explained. "Our
e office looked at
and sent them an
to construct not
that this project was
airbanks region. I
ut the school going
re and I checked and
plans so I contacted
il district.

I kind of got into a
h them getting those
id convincing them
uld change the spec-
s on the solder.

In the end they fin-
reed to use tin all-
But I did consider
tion to change the
aterial."

occurred in the fall
Attitudes must have
I since then because
t telephone interview
n REAA official in
lect office proved the
district willing to
ic situation. Dur-
versation which occur-
weeks ago REAA has
manager Mike Dugan
When we had our water
returned from tests
of Environment
or suggestion
district ceased

using the elementary school's
water for drinking, cooking,
and dish washing. He said
they hauled cooking and
drinking water and carried
used dishes to the high school
for washing.

Replacement of the sold-
ered joints should be under-
way right now, according to
Dugan. Three school district
maintenance men are being
flown to the village to do the
repair work. Dugan estimat-
ed five to six weeks time and
about \$20,000 of school dis-
trict money will see the job
done.

"Of course we have a pro-
blem with it," the business
manager said. "That's less
dollars to spend elsewhere.
The hauling of water is an
inconvenience. And resold-
ering can create plumbing
problems by remedying the
problem that exists."

He added the although he
knew money had been avail-
able in the past for health,
life, and safety problems
prior to the transfer of any
BIA school, policy had
changed in Washington D.C.
"I guess the funds were not
available for the transfer,"
he concluded.

But BIA administrative
official in Nome, Paul Ster-
ling, said a budget proposal
to replace the water pipes
never crossed his desk for
BIA to either approve or
disapprove. He said the com-
mission at St. Michael never

got beyond plant manage-
ment.

"Our plant manager at
that time (Melvin Martin) is
not here for me to get state-
ments from as to the reason
why the pipes were not re-
placed," Sterling said Dec.
20. "But they were aware
of it and we never received an
administrative budget to cor-
rect the situation.

"But they did do water
tests and according to this,"
he said referring to Stan Jus-
tice's article in The Northern
Engineer, "we did do the
necessary treatments to bring
the level down to 0.05 mg. of
lead per liter. This was in
Feb. 2.

"And so then in Sept. '81
the report went in and the
lead sample was up to 0.09.
Solution was put into the
water in March '82 bringing
the lead sample down to
0.05.

"These water tests were
sent to the chemical and
geological lab of Alaska and

they were approved as
satisfactory. This is
we did for the safety of
kids," he said, adding,
nothing was ever done about
the replacement of the pipes.
Then REAA took over the
school before we had a
chance to replace them."

from my supervisor. We're
talking about lead and
there's a lot of implications."

The "implication" of lead
content in a public water
system is lead poisoning. Dr.
Tom Kosatsky who works at
the Bureau of Epidemiology
in Anchorage called medical
knowledge of lead poisoning
"flaky data." He said a short
period of lead consumption
even in high doses reveals no
symptoms. But long term ex-
posure will allow absorption
in the body. The results are
learning disorders, psycholog-
ical problems, anemia, and
problems in the skeletal and
digestive system. Children
are particularly susceptible

Continued on page 11

St. Michael

Continued from page 18

to the effects of lead poisoning and what is equally disturbing is that these symptoms are vague. They can originate from a number of sources. Assigning them to lead consumption after the fact could be difficult.

Stan Justice noted that when another doctor from the Bureau of Epidemiology, John Middaugh, traveled to Birch Creek to test blood taken from the villagers he came up with surprising results. The interior village located just south of Fort Yukon was also reported to have a high lead content in its PWS water system. But Middaugh's tests showed the lead content in the villager's blood was at an acceptable level. This was because they turned to the river for their water source when the lead was discovered. As it turned out, Middaugh's own blood, which he tested at that time, too, had the highest lead content of all. Justice laughed when he recounted the story and pointed out that gas fumes in Anchorage exude a higher lead content than some of the problem water systems in the state.

To date, St. Michael, Birch Creek, Savoonga, and Gambell have been tested and revealed high lead content within their water systems.

Middaugh said in Anchorage, Dec. 20, that he is currently assessing past water tests from St. Michael to

determine if he should perform blood tests on school children.

What is the lead content in St. Michael at this time? Justice said Simon Mawson (assistant to the state sanitarian in Nome) took samples this fall and "water samples from pipelines that had just been flushed still showed levels exceeding 0.05."

He concluded: "I think we're finally arriving at a solution there, through the actions of Simon Mawson and the school district. They've become concerned and are taking rapid action to correct the problem. In the future what it says is when people build new systems in the Arctic they are going to consider the corrosive nature of the water there. And if the water is found to be corrosive, they will use tin instead of lead solder."

A sound philosophy for the future. But the fact remains that three years and five months passed before the proper and final solution to the problem at St. Michael faced correction.

The adverse effects of lead in the body results after a long and steady accumulation of the substance. The solution to any problem arrives after an accumulation of facts. In the case of lead poisoning, it is imperative that the accumulation of facts exceeds the accumulation of lead.

SCR

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May, 1988

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Mary Van Nimwegen

House Labor and Commerce:

March 19, 1987

HOUSE COMMITTEE REPORT

3/20

(7)

Date referred: 2/13/87

FURTHER REFERRALS:

Transportation
Finance

DATE: 3/19/87

The Labor & Commerce Committee has considered SCR 5

Relating to promotion and marketing of the state-operated international airports.

RECOMMENDS:

- replace with _____ the same title
- attached amendment(s) a new title
- do pass
- do not pass
- no recommendation
- individual recommendations
- additional referral to the _____ Committee

ADOPTS: _____ letter of intent

ATTACHES NEW FISCAL NOTE(S):

- fiscal impact same as previous fiscal note published _____
- zero fiscal note same as previous zero fiscal note published 2/3/87
- zero with analysis

SIGNING DO PASS:

Dave W. Douley

Hy Ellist

Cliff Davidson

Cont. [unclear]

W. Furnace

A/C [unclear]

[unclear]

SIGNING OTHER RECOMMENDATIONS:

Dave W. Douley
Chairman's signature

STATE OF ALASKA 1987 LEGISLATIVE SESSION

FISCAL NOTE SENATE

BILL VERSION: SCR 5

PUBLISH DATE: 2/3/87

REQUEST

Bill/Resolution No. : SCR 5
 Title: Re: promotion & marketing of state-operated international airports
 Sponsor: Sturgulewski
 Requestor: Senate Labor & Commerce
 Date of Request: _____

FISCAL DETAIL

Agency Affected: DOTPF
 BRU: International Airports
 Components: _____

EXPENDITURES/REVENUES : (Thousands of Dollars)

OPERATING	FY 87	FY 88	FY 89	FY 90	FY 91	FY 92
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-

CAPITAL						
---------	--	--	--	--	--	--

REVENUE						
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FUNDING : (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER IARF	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL						

POSITIONS :

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS : Attach a separate page if necessary

Prepared by: Mark K. Johnson, Counsel Phone: 465-3822
 Division: Senate Labor & Commerce Committee Date: 2-2-87

Approved by Commissioner: _____ Date: _____
 Agency: _____

Distribution (by Agency preparing fiscal note):

- Legislative Finance
- Legislative Sponsor
- Requestor
- Office of Management and Budget
- Impacted Agency(ies)

Protecting the future of Anchorage

Editor's note: this column is excerpted from remarks made by Sheffield Enterprises president Al Parrish to the Dec. 18 membership luncheon of the Anchorage Convention and Visitor's Bureau. Mr. Parrish is chairman of the Anchorage Business Council's airport subcommittee.

ANCHORAGE International Airport, as a state-owned facility, began in the early 60's as a principal transfer point for travelers making connections to points within and outside Alaska. In addition, the airport was a refueling and an entry and exit point for international flights, principally on routes between Europe and the Far East.

Today, 26 years later, Anchorage International still serves those primary functions. The plant, however, has grown to include two passenger terminals encompassing 295,000 square feet of total floor area, three runways, extending up to 10,900 feet, 36 aircraft gates, and six baggage claim areas. All of this is contained within approximately 2,600 acres. The airport is serviced by 16 major carriers, nine of which are international, five commuters and approximately 25 non-scheduled airlines.

According to a Department of Transportation study conducted in 1983, the airport contributes more than \$1.5 billion to the Anchorage economy. Over 13,000 residents counted on the airport's operation for their jobs, earning a total of \$375 million dollars.

HOW WOULD you like your business to have a financial statement like this: In FY '86, the airport took in \$45 million dollars, showing a profit of \$21 million. Let's take it one step further: imagine having a business that made a profit of \$21 million a year, and that it achieved this profit without any advertising, any public relations, or any marketing studies whatsoever!

Anchorage's strategic location could easily enable it to serve as a platform for business between Europe and Asia. The possibilities are limitless. For example, if Anchorage were to become a foreign trade zone, goods from around the world could be stored here, processed, used in manufacturing other items, exhibited, repackaged, sold or handled in numerous ways. Imports could be used with domestic parts to manufacture new items within the zones — all without paying any customs duties or excise taxes. It would be a tremendous catalyst for development within our business community.

In addition, by expanding the duty free zone at the airport to allow foreign shoppers a much wider range of retail exposure than just gifts and liquors, we could create, in essence, regional shopping centers for stop-over travelers. They could tour duty free trade complexes and showrooms without the necessity of having to go through customs.

More and more, we're seeing international airports taking an active role in marketing their facilities

Comments by Al Parrish



ties and services. For example, Seattle-Tacoma Airport, together with the Port of Seattle, which owns the airport, has developed an aggressive campaign to attract the expanding transpacific market, the international tourist market and the air cargo industry.

They've produced numerous brochures and an audio-visual presentation. They have a staff of marketing representatives which actively calls on transpacific clients, touting Sea-Tac's excellent international services on the airport premises, such as banks, customs brokers, freight forwarders, warehouses, foreign consultates, plentiful terminal space, excellent ground access, ample runway capacity and minimum environmental concerns.

Sea-Tac's programs and policies have helped to establish it as one of the top 20 airports in the United States for passenger-traffic volume. In 1982, over 9.2 million passengers and 148,000 metric tons of air freight were handled by Sea-Tac. By 1985, the number of passengers at Sea-Tac increased to 11.5 million passengers, up 25 percent. Freight went up to 210,000 metric tons, up 42 percent.

THE NEED, then, to is going to become inc years ahead. And not ju it. At this time, Ancho ver critical challenge me of aviation technol

I'm sure most of you Boeing 747-400 series a advanced version of the Anchorage Internation years. However, the new two-person flight crew, crew members requirec able to carry between e will be able to fly appr stop. This will allow th Tokyo and Frankfurt, Hong Kong and Londo chorage.

OUR WINDOW of op and we can't afford to w age International as a p on their route schedule sengers, cargo or simp direct way to go about t keting campaign, prom vices to the world.

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One good example c developed by the Port New Jersey for passeng three major airports: K ark International and L Your Way Over; Stopo one-night hotel at a ch VIP shopping service a with language assistar theatre tickets, a welc

insights

f. Anchorage's international airport

THE NEED, then, to make our presence known is going to become increasingly important in the years ahead. And not just because others are doing it. At this time, Anchorage International faces a very critical challenge, that being the advancement of aviation technology.

I'm sure most of you have heard about the new Boeing 747-400 series aircraft. This aircraft is an advanced version of the B-747's which have served Anchorage International Airport for the past 15 years. However, the new 400-series requires only a two-person flight crew, compared with the three crew members required on all other 747's. It will be able to carry between 400 and 600 passengers, and will be able to fly approximately 8,000 miles non-stop. This will allow the aircraft to fly between Tokyo and Frankfurt, Singapore and Paris, or Hong Kong and London without refueling in Anchorage.

OUR WINDOW of opportunity is slowly closing, and we can't afford to wait. We need to sell Anchorage International as a place the airlines will want on their route schedules — whether it be for passengers, cargo or simply refueling. And the most direct way to go about this task is to mount a marketing campaign, promoting our plant and its services to the world.

Funds for marketing the airport are already available. Revenues from the airport's operation go into a reserve account. The money is there.

Once a line item dedicated to marketing the airport is budgeted by the state, a cooperative effort can be developed, whereby funds from private and public sources would be combined to develop a generic campaign. We believe it will take approximately \$3-\$5 million to develop and implement a comprehensive marketing plan for the airport. This seems like a reasonable amount to launch a program to reach the world's markets.

Which revenue streams need to be protected and developed?

Obvious ones are, of course, those passengers who are stopping over in Anchorage, on their way to or from a primary destination. Our research shows that 84 percent of those on flights stopping over in Anchorage would be interested in a stay of four to seven days. One-half of those would have stopped on the trip they were on if they would have known they could.

One good example of a stopover program was developed by the Port Authority of New York and New Jersey for passengers transitting through the three major airports: Kennedy International, Newark International and LaGuardia. They call it, "On Your Way Over, Stopover." The package includes one-night hotel at a choice of hotels, sightseeing, VIP shopping service at Macy's or Bloomingdales with language assistance, a choice of Broadway theatre tickets, a welcome kit, etc., all at a low

package price. They've advertised this program in periodicals all over Europe.

Other international passengers of great interest to us are those on either end of the transpolar route who could be persuaded to use Alaska as a visitor destination. New research by the state of Alaska shows that the potential for Japanese and German visitors selecting Anchorage as a visitor destination nearly equals the potential for visitors coming from the U.S. If we do our job right in selling our destination, it is possible that we could attract an additional 200,000 visitors a year from Germany and Japan, or a 50 percent increase in vacation or pleasure travel.

WHILE PASSENGERS are important, air freight offers even greater potential for growth. By increasing freight handling at AIA, we would see an increase in landing revenues (which are based on the gross takeoff weight of the aircraft) and fuel revenues for the airport.

International air freight is a rapidly growing market. In recent years, international air cargo shipments have increased at twice the rate of passenger travel.

The most cost-effective freight for air transportation is low-volume, high-value, and relatively low-weight products, such as electronic components, mini-computers, and precision instruments. Other less obvious air freight products are those with time-sensitivity, such as high-fashion apparel, pharmaceuticals, animals, produce, seeds and flowers. These markets need to be actively developed.

I mentioned fuel fees, and I'd like to stress that fuel is an important revenue stream. The airport operates a fuel storage farm and many operators have underground storage tanks. On an average day, approximately 1.2 million gallons are pumped. This means approximately \$24,000 a day, or \$9 million annually in fuel flowage fees.

Who is backing the plan to market the International Airport? This idea was further advanced by the Anchorage Business Council's Airport Committee, which I happen to co-chair, and others. The council, by the way, was formed by Mayor Tony Knowles with the mission of spurring economic development in Anchorage. Both the municipality and the Anchorage Business Council have endorsed our committee's recommendation. The Greater Anchorage Chamber of Commerce has since given the idea its full support, along with the Anchorage Convention and Visitors Bureau.

We'd like to invite your support as well, because as residents of Alaska and users of the airport, you have a stake in its future operation. We presently have the lead time to plan for the decade ahead. But we can't afford to wait. We need to plan for the 21st Century now.



Seattle-Tacoma of Seattle, which and an aggressive marketing transcific market and the

brochures and an have a staff of actively calls on Tac's excellent in- premises, such light forwarders, plentiful terminal ample runway cal concerns.

es have helped to airports in the volume. In 1982, 3,000 metric tons Tac. By 1985, the increased to 11.5 Freight went up

Anchorage International Faces Uncertain Times Ahead

Concerns range from the present domestic traffic drop-off from the oil industry's slump, to the future effects of longer-range aircraft that won't need to refuel at Anchorage. An occasional moose on the runway is just part of the job.

By Bruce Johnson

Anchorage—International flight stopovers, Alaska's dependence on air transportation and the deregulation of the domestic airline industry all are making Anchorage International Airport a much busier place than the area's population of about 250,000 persons would suggest.

Among the nation's 36 medium-sized air traffic hubs, Anchorage ranks second in number of revenue passengers. Indeed, last year more than 4.6 million passengers were handled at the airport.

But unlike in many communities as large as or even much larger than that of the Anchorage vicinity, there is real meaning behind the "international" portion of the Anchorage airport's name. Of its 4.6 million passenger total last year, more than 1.6 million were classified as through passengers—largely visitors to the airport during refueling/reprovisioning of aircraft flying between the Orient and Europe. No less than ten international carriers have stopover operations at Anchorage International. The latest to join the list is Swissair, operating between Tokyo and Zurich.

Because of Anchorage's central position between Europe and Asia on the polar route, Anchorage International ranks seventh in the United States in terms of international operations. Flights take about nine hours between Anchorage and Europe and about seven hours between Anchorage and Tokyo. The longest nonstop flight between Anchorage and Asia is flown by China Airlines to Taiwan—almost 10 hours.

"We average 40 to 55 widebody aircraft per day here," said Guy Russo, airport director. "Most of those widebody visits involve international stopovers, including freighters."

In order to more effectively accommodate this heavy international side of the business, the airport authority recently added five remote fueling pits. The airport now has eight such parking positions—all dedicated to international



With prices so low, at least half of the oil industry's Alaska exploration activity has been halted, resulting in a reduction of personnel and freight moving through the Anchorage airport.

stopovers. In addition, three years ago the airport completed construction of an international terminal that serves passengers while their planes are being refueled and reprovisioned. The terminal contains a duty-free shop that Russo unabashedly claims is "one of the nicest in the world."

The airport's main terminal—dedicated to domestic traffic—accommodates intrastate commuter operations as well as the half-dozen airlines that link Anchorage with the "Lower 48," primarily through Seattle-Tacoma International Airport.

"We run around 6000 seats a day going south from here," Russo said. That capacity includes a daily United Airlines flight direct to Chicago and a Northwest Airlines flight to Minneapolis.

Extremely air-dependent

Deregulation, as well as this giant northern state's extreme dependence on air transportation, is responsible for a marked increase in the number of seats (and decrease in rates—see separate story) being experienced in the Seattle-Anchorage corridor, in particular.

In March, AirCal extended its regional operations to Anchorage and quickly expanded the schedule there to four flights daily. Another newcomer is TWA, with one domestic flight per day out of Seattle.

Anchorage International—state-owned and the largest airport in the state—serves as the main hub for persons flying to or from most places in Alaska, which has a total population of little more than twice that of the Anchorage area. In-state destinations include Fairbanks (which has the second largest airport, also state-owned) in the interior, the Prudhoe Bay oil field area on the North Slope, and remote fishing and other communities in the Kena Peninsula, Gulf of Alaska mainland, Kodiak Island, western Alaska and the Aleutian Islands areas.

The popular tourist region of Southeast Alaska, also containing the state capital of Juneau, is served directly out of Anchorage as well as from Seattle.

Tragic tied to oil

Although Lower 48 domestic and in-state commuter business remains strong this summer at Anchorage International, the airport is likely to see a

An airport economic impact study last year revealed that airlines paid for nearly 69,000 hotel rooms in Anchorage due to crew and unscheduled passenger layovers.



greater-than-normal drop in business this fall and winter following the summer peak season of tourists, fish processors and fishermen. This is due to the dramatic downturn earlier this year in world crude oil prices. With prices so low, at least half of the oil industry's Alaska exploration activity has been halted, resulting in a reduction of personnel and freight moving through the Anchorage airport.

Also beginning to adversely affect air travel, particularly of business people, is a downturn in North Slope oil revenues flowing into the state government coffers, and the adverse spinoff impact that this is starting to have on Alaska business and individuals in general.

The dominant carriers in the highest-volume portions of the intrastate markets are MarkAir, a relatively new carrier that is solely an in-state operator, and Alaska Airlines, which also is the highest-volume scheduled carrier between the Lower 48 and Anchorage. In addition, United, Northwest, AirCal and TWA compete, as does Western Airlines, a veteran, high-volume operator of the Lower 48-Anchorage trade.

Russo is a longtime Western hand. The airport's director, who has been working in Alaska since 1955, retired as Western's Alaska regional director in January 1983. A year later, he was appointed director of Anchorage International.

Weakening stopovers

During his many years at Anchorage, Russo has seen a dramatic increase in international stopover business. In 1973,

he recalled, the airport logged little more than 700,000 international passengers. "That segment of the airport's business surpassed the one-million-person mark for the first time in 1978," he noted.

International stopovers are good business for the Anchorage community. Besides refueling (32.5 million gallons last April, for example) and provisioning, fresh flight crews are accommodated for two to four days at a time at Anchorage, depending on flight and personnel schedules. Indeed, an airport economic impact study conducted last year by Applied Economics Associates (AEA), revealed that airlines paid for nearly 69,000 hotel rooms in Anchorage due to crew and unscheduled passenger layovers.

Unfortunately, this lucrative international stopover business is showing signs of weakening somewhat.

Because Asians appear to be traveling to Europe as well as other destinations

in increasing numbers, the slight slowdown in Anchorage's international business does not appear to be linked to the terrorism-caused falloff in American travel to Europe. Rather, the slight weakening of Anchorage's international activity could be related to a rise in increased competition from the Asia-Europe route via northern Siberia.

The AEA report noted that at least two international carriers—JAL and SAS—have exercised transit rights through Soviet airspace and that some other carriers are contemplating route changes via Russia.

Of longer term concern at Anchorage is the possible adverse effect on international stopovers that Boeing Co.'s development of the longer-range 747-400 will have.

"We're now in a unique position, I guess, similar to what Gander was during the prop aircraft days across the Atlantic; but I suppose we're going to be faced with some loss of business when the Boeing 747-400 comes on line," Russo reflected.

He observed that the 747-400 will be capable of flying 8000 statute miles—enough to fly the plane nonstop between Asia and Europe via the American and Canadian airspace polar route.

"Not all of the airlines of Europe are going to afford the luxury of having a 747-400," Russo reasoned, but he admits that "some" 747-400-caused deterioration of international stopover business is anticipated during the next decade after the new model enters service.

Reacting to the recent downturn in Alaska's economy caused by the collapse of crude oil prices, the state is intensifying its efforts to attract tourists—international as well as domestic visitors. As part of these efforts, it is focusing increased attention on marketing Alaska as a destination—not just a stopover—for Asian and European tourists. Presently, only about 25,000 international passengers disembark each year at Anchorage to spend some time in Alaska.

"We get quite a few (big-game) hunt-

In 1983 Anchorage International handled half of total tonnage flowing through all of the nation's medium-sized airports—an air freight volume only slightly less than that passing through LAX or JFK.



Alaska Airlines carries highest Alaska-Lower 48 volume.

ers from Austria, Germany and other European countries, and the Japanese like to fish," Russo observed. But he said there is considerable untapped potential for attracting international visitors on the basis of Alaska's spectacular scenery of mountains, glaciers and fjords as well as its cultural and other attractions.

"The long-haul seats are what the airlines are going to fill first," Russo acknowledged concerning the superior revenues generated by Asia-Europe traffic as opposed to Asia-Alaska or Europe-Alaska traffic. But because of the state's international promotion efforts, he is optimistic that more international passengers will disembark at Anchorage.

Heavy traffic, plus floats

Anchorage International, which had 36,738 jet aircraft landings last year, has three 11,400-foot runways—two of which are parallel east-west runways that are instrumented. The third, a north-south runway, is not instrumented. Simultaneous landings and takeoffs occur routinely at the airport. Because of prevailing winds, landings usually are from west to east and takeoffs are from south to north.

Air traffic is heavy in the Anchorage area. Not only do the northerly takeoffs encroach on military plane approaches at Elmendorf Air Force Base, but Anchorage International itself has a large general aviation facility for both wheeled and float planes.

The FAA-operated tower at the airport coordinates commercial and general aviation traffic, each of which has separate traffic patterns.

One of the more interesting aspects of the Anchorage International operation is its base for float planes. Two natural lakes—connected through dredging—are located adjacent to the airport and are ideal for float plane operations. In addition, next to one of the lakes is a general aviation dirt strip.

"We have at least a thousand, maybe 1200, general aviation airplanes around the airport here," Russo related. "People jump into their airplanes here on weekends like people in the Lower 48 jump into their cars."

As far as airliner operations are concerned, the only congestion occurs when, as the airport director puts it, the planes are scheduled to "fly out of here in formation."

Anchorage International has the usual morning (7:30 to 9) and late afternoon (4 to 6:30) peaks in traffic. But in a departure from the norm, the airport also has a peak period between midnight and 2 a.m. This is due to the desire of many passengers wanting red eye flights to Seattle for catching early morning Lower 48 flights there.

Because the airport is getting close to

"We're w in a unique position, I guess, similar to what Gander was during the prop aircraft days, but I suppose we're going to be faced with some loss of business when the Boeing 747-400 comes on line."

gate capacity during those three periods, continued redevelopment and expansion of terminal facilities is being planned.

Extensive changes coming

The airport, which went on line in 1953 in part to accommodate international refueling stopovers between Europe and Asia, has been undergoing extensive facility changes in recent years.

Last September, a commuter carrier wing was added at Concourse C, and domestic carrier gates were added and renovations were accomplished at Concourse B—at a total cost of about \$25 million. Anchorage International now has eight widebody gates at the international terminal and 20 domestic and five commuter gates at the main terminal. Concourse A has eight gates, but only three are equipped with jetways because of extensive use of combi planes (with freight forward) into Anchorage. Newly renovated Concourse B has 12 gates, all with jetways. Seven of the airport's domestic gates handle widebody aircraft.

In order to keep up with market demand, construction is underway on a \$25 million, 1200-vehicle parking garage with an underground connection to the terminal building lobby. In addition, plans are being made for demolishing the original, 1953-vintage section of the terminal and building another concourse that will be designed for eventual development of a wing stretching between the domestic and international terminals.

When this new building—Concourse

"We have at least a thousand, maybe 1200, general aviation airplanes around the airport. People jump into their airplanes here on weekends like people in the Lower 48 jump into their cars."

C—comes on stream several years from now, there will be a major reassignment of gates at the airport. Said Russo, "Operating efficiency will be enhanced significantly. All commuter flights will be consolidated in one area, narrow-body planes are moved into their own area, and widebody domestic flights will be accommodated out of the new and enlarged Concourse C."

Although state owned and operated, Anchorage International has not shared in the spending spree for capital improvements and other projects undertaken by the state government, whose coffers became swelled with oil revenues. All of Anchorage International's expenditures have been supported by operational revenues, Russo reported.

"We didn't benefit from (the state government financial) upturn, and we're not getting hurt by the downturn," he observed.

Freight—the airport's ace

Besides being an important hub for passengers, Anchorage International is a major factor in the movement of air freight.

In fact, the facility ranks first (among the nation's 36 medium-sized air traffic hubs) in the amount of revenue freight handled. Last year alone the airport logged nearly 316.8 million pounds of freight. In 1983, the AEA economic impact study noted, Anchorage International handled a half of total tonnage flowing through all of the nation's medium-sized airports and that the air freight volume at Anchorage was only slightly less than that passing through LAX or JFK that year.

Lots of time-sensitive general freight flows into or through Anchorage airport as belly and freighter traffic from the Lower 48. Most of the freight flow is one way, although fresh fish is a strong backhaul during summers.

Interestingly, the Anchorage airport traditionally has more departing air freight than arriving air freight. This is mainly due to certain freight arriving on express steamship services operating between Washington state and the Port of Anchorage, from where the freight is trucked to the airport for fast distribution by air to in-state destinations.

Milder than Minneapolis

To someone on the "outside"—a term commonly used is Alaska to denote the Lower 48—Alaska is seen as a state plagued with heavy snow and intense cold. But Anchorage, adjacent to saltwater at the head of Cook Inlet, usually has milder winter weather than is often experienced by cities in the northern tier of the Midwest and the Northeast, Russo observed.

Two feet of snowfall is about average during the winter at Anchorage. Usually, the snow comes only a few inches

at a time, although snowstorms—including an 18-inch snowfall last March—are not uncommon. Twenty degrees below zero is about the coldest the temperature gets at Anchorage, with zero being the usual low temperature during the winter, according to Russo. Average low temperatures in the winter are 15 to 20 degrees.

With winter weather usually being milder than at Minneapolis, for example, Anchorage International does not experience abnormal snow removal problems. The airport authority has about 100 pieces of equipment that can be used for snow removal, including graders, grader-towed sweepers, blowers and trucks, plus front-end loaders for hauling snow to remote areas of the airport.

Even during heavy snowfalls, "we're able to keep at least one runway open at all times," Russo said. "It takes us 45 minutes to an hour to get a runway totally clean and back in operation."

Visitors: VIPs and moose

Actually, moose—not snowfalls—create the biggest runway operation problem at Anchorage International.

"A big concern is keeping moose off the runways in the fall and spring,"

"A big concern is keeping moose off the runways in the fall and spring; they're capable of going through the fence or they can jump over the fence."

Russo said. "They're capable of going through the fence or they can jump over the fence."

The airport perimeter has an eight-foot-high chain link fence topped with barbed wire, but each year eight to 10 moose—which Russo terms "very stubborn animals"—either are detected near the fence or have broken through or jumped over the fence.

"If we can't herd them out, we have permission from (state) Fish and Game to destroy the moose," Russo said. "We give the meat to a charitable organization."

Besides patrolling for moose, airport security personnel occasionally have extra work to do because of stopovers by international dignitaries, whose planes are being refueled. Japan's Prime Minister Nakasone is a frequent visitor.

Also a familiar personality is Great Britain's Margaret Thatcher.


The international terminal has a VIP lounge to accommodate those and certain other international visitors, but frequently international dignitaries desire a trip to and from downtown Anchorage—little more than four miles from the airport.

Russo noted that the U.S. Secret Service has personnel based at Anchorage and that Secret Service people from West Coast states are flown north when necessary to augment the Alaska contingent.

The eruption last Easter weekend of Mt. St. Augustine, a volcano about 150 miles from Anchorage, also has made life interesting lately for Russo.

"We never closed the airport, but some of the carriers chose not to come in," he said. "They were concerned about volcanic ash in the air and the effect it would have on jet engines."

So, for several days while the wind blew some ash into Anchorage, flight schedules were seriously disrupted. During that time, the airport lost about 75 percent of its overall traffic load. Ironically, that disruption was far greater than the airport has ever experienced from winter weather. ■



STATE OF ALASKA
INTERNATIONAL AIRPORTS
(An Enterprise Fund
of the State of Alaska)
FINANCIAL STATEMENTS
JUNE 30, 1986 AND 1985

EXHIBIT I
ADDITIONAL INFORMATION

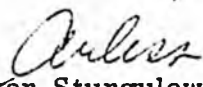
STATE OF ALASKA INTERNATIONAL AIRPORTS
(An Enterprise Fund of the State of Alaska)
STATEMENT OF INCOME
YEAR ENDED JUNE 30, 1986

	<u>Anchorage</u>	<u>Fairbanks</u>	<u>Total</u>
Operating Revenues:			
Landing fees	\$ 6,456,781	\$ 487,510	\$ 6,944,291
Parking fees	348,139	169,340	517,479
Gas and oil fees	9,699,120	562,193	10,261,313
Vehicle parking fees	1,866,960	168,350	2,035,310
Terminal building rental	5,344,614	1,263,509	6,608,123
Aircraft docking fees	697,800	7,058	704,858
Federal inspection fees	169,627		169,627
Concession fees	18,985,697	264,973	19,250,670
Land rental	734,249	420,912	1,155,161
Electric energy fees	37,408	36,416	73,824
Flight service station rental		31,140	31,140
Other airport charges	45,479	49,711	95,190
Lease of state property		12,000	12,000
Interest	12,928	3,095	16,023
Other	11,567	14,234	25,801
Total operating revenues	<u>44,410,369</u>	<u>3,490,441</u>	<u>47,900,810</u>
Operating Expenses:			
Security	3,626,172	2,612,524	6,238,696
Field maintenance	2,604,442	1,190,360	3,794,802
Administrative	4,916,287	1,588,645	6,504,932
Building and equipment maintenance	4,442,026	1,203,009	5,645,035
Custodial	2,729,622	591,456	3,321,078
Total operating expenses	<u>18,318,549</u>	<u>7,185,994</u>	<u>25,504,543</u>
Operating income (loss) before depreciation	26,091,820	(3,695,553)	22,396,267
Depreciation expense	<u>6,270,761</u>	<u>2,883,512</u>	<u>9,154,273</u>
Income (loss) from operations	<u>19,821,059</u>	<u>(6,579,065)</u>	<u>13,241,994</u>
Non-Operating Income (Expense):			
Interest income	3,438,698	270,793	3,709,491
Interest expense	<u>(2,625,603)</u>	<u>(206,763)</u>	<u>(2,832,366)</u>
	<u>813,095</u>	<u>64,030</u>	<u>877,125</u>
Net income (loss)	<u>\$20,634,154</u>	<u>\$(6,515,035)</u>	<u>\$14,119,119</u>

BASIS OF ALLOCATION

All items above are charged directly to the individual airports except for interest income, interest expense, and administrative expenses as discussed in Note 5. These items are allocated on the basis of gross revenues generated by each airport.

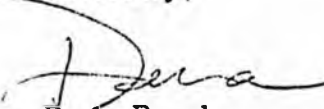
February 6, 1987


Dear Senator Sturgulewski,

Recently, I had an opportunity to talk with you regarding proposals to establish a national and international marketing program for Anchorage International Airport. I am forwarding this packet to provide you with some background information on the issue. While is is incomplete, I hope that you will find it useful.

In it you will find excerpts of several reports that detail the economic impact of airport activity on Anchorage's economy, problems that could erode the airports revenue base, opportunities that exist for market expansion, a proposed solution and copies of some of the articles and resolutions supporting the proposal. The concept of developing a strategic airport marketing program is not a new one, but it surely is an idea whose time has come. The importance of our need to intensify our efforts has never been greater. I hope that following review and discussion you will be able to support it. If I can be of any help or provide any additional information on this important issue, please call me.

Sincerely,


Dana Brockway
President

1987

ACVB LEGISLATIVE & COMMUNITY RELATIONS ~~PRIORITIES~~

Governmental

1. Cargo and passenger marketing program to protect the future revenue streams of the Anchorage International Airport.
1. \$8.2 Million Alaska Division of Tourism Budget.
 2. Creation of a Legislative Committee on Tourism.
 3. Year-round operation of the Begich Boggs Center At Portage Glacier.
 4. Visitor related improvements and enhancements on state highway projects to include but not be limited to pull outs, interpretive displays and signage.
 5. Whittier access toll road.

Community

1. Continue joint meetings between the ACVB and AVA Board of Directors at least twice each year to communicate and understand respective legislative goals.
2. Encourage combined monthly membership meetings by the ACVB and the local AVA Chapter.

ANCHORAGE BUSINESS COUNCIL
AIRPORT COMMITTEE
MARKETING PROPOSAL
January 14, 1987

Problem

Alaska's International Airports presently generate enough revenues to be self-supporting. Last year, even after accounting for the deficit at FIA, the airports had an income of \$14 Million. However, competitive and technological changes threaten to undermine Alaska's traditional airport revenue streams within five years.

There is clear evidence Alaska is losing its position as a re-fueling stop for Transpolar and Trans Pacific flights. This raises at least two concerns. If the trend continues, eventually domestic carriers and passengers will be required to pick up the slack which will dramatically impact domestic tourism, the cost of shipping and "lower 48" travel. Even more significantly, Alaska will begin to lose undeveloped opportunities for International Trade.

Solution

Since the late 1970s, de-regulation and other developments have increasingly required airports to proactively market themselves in order to remain competitive and hold market position. Newark, Kennedy, LaGuardia, Baltimore/Washington, Atlanta/Hartsfield, Miami, and Seattle/Tacoma are good examples.

Following the successful example of these airports, Alaska's International Airports should establish a marketing function as a standard part of their mission and operation. The marketing funds should come from airport operating reserves. The airport marketing effort should protect existing revenue streams and seek to attract and facilitate new ones working in cooperation with economic development partners in each airport location.

Marketing Partners

Airport marketing efforts aimed at passenger development are customarily mounted in conjunction with community convention and visitor bureaus and those aimed at cargo and land development are mounted in conjunction with local economic development coalitions involving communities, utilities, transportation companies, resource development corporations, foreign trade zones, chambers of commerce etc. Partnerships such as these permit airport marketing efforts to stretch and avoid duplication.

Programs

Marketing the airport will involve research and target identification, direct sales, advertising, publicity, trade shows, promotions, and tools including brochures, audio visuals etc. Quantitative measurement in the short term will be carrier, passenger, cargo retention and growth and airport land and new businesses development. In the long term, measurement will include self supporting income and overall position in the world market.

Funding

Based on formulas used in private sector marketing, the airports should initially devote a greater percentage of gross sales or margin to marketing and then lower the rate when marketing effort and positioning are well established. Based on the size of the airports and the urgency of the problem, it makes sense to transfer at least \$5 Million from "International Airport Fund" reserves to establish an annual marketing line item for the two International Airports.

PROTECTING THE AIRPORT'S FUTURE

Al Parrish, Speaker
President, Sheffield Enterprises, Inc.
Anchorage, Alaska

Speech Prepared for the ACVB Membership Luncheon
December 18, 1986

Thank you. It's good to see so many friends in the audience today and to see such a good turn-out of those in our community who share a growing concern over the future of the Anchorage International Airport.

Before I begin, I'd like to tell you an aviation story: Some time ago, I was on a flight into Kennedy Airport, one of a plane's engines died while flying over Pennsylvania. In a reassuring voice, the captain spoke to the passengers, "I'm sorry to say that our outside port engine has stopped functioning. There is no cause for alarm. However, we'll be about twenty minutes late reaching Kennedy Airport."

A little later, the captain spoke over the intercom again, announcing that a second engine had failed, and again he said there was no cause for alarm -- the other two engines were more than sufficient. "However," he said, "we'll now be about an hour late in landing."

A few minutes later, the captain reported a third engine had conked out, but that the remaining engine would get us down safely. "Now,

however," he said, "our estimated arrival time will be about two hours later than scheduled."

"Ye gods!" cried a lady sitting next to me, who happened to be on her first flight, "if that fourth engine goes, we may be up here all night!"

As the story points out, it is one thing to recognize that a challenge exists, but making a correct interpretation of that challenge is another matter.

Today, I will focus on the challenges facing Anchorage International Airport. First, I'll discuss the growth of the airport since it began operating; next, I'll point to opportunities that await international airports willing to market their facilities and services; third, I'll talk about the advance of aviation technology and how it may effect Anchorage's airport; fourth, I will provide recommendations as to how we may market our airport, to which likely targets, and finally, who supports the marketing of Anchorage International.

But first, I'd like to digress for a moment and tell you about a concept some of you may already be familiar with. Back in 1979, the late R. Buckminster Fuller visited Anchorage to speak at the Future Frontiers conference. It was at this three-day symposium, sponsored by the State Legislative Council, that Mr. Fuller spoke of Alaska's prime location in relation to the world.

During his address, Mr. Fuller presented a map he had developed back in 1930, called the "Dymaxion Sky Ocean World Map". This map was first printed in Life Magazine in 1943 and also published in his book, Critical Path. If you look at this map, you'll see that Alaska is positioned in the center of the map, and that it does absolutely link Asia and America. Alaska anchors the Pacific Rim, around whose circumference clusters 2/3 of the population of the world.

In Anchorage, we have always seen ourselves as the "Air Crossroads of the World". That expression was used for many years as the slogan for the Anchorage Chamber of Commerce. But Mr. Fuller (and several others) have advanced the theory to say that Anchorage and Alaska are not only the crossroads, but the veritable center of the world for trade, commerce and travel. Our markets are not just transpacific, but are, in essence, global.

Bearing that perspective in mind, let's return to our topic today. Anchorage International Airport, as a state-owned facility, began in the early 60's as a principal transfer point for travelers making connections to points within and outside Alaska. In addition, the airport was a refueling and an entry and exit point for international flights, principally on routes between Europe and the Far East.

Today, twenty-six years later, Anchorage International still serves those primary functions. The plant, however, has grown to include two passenger terminals encompassing 295,000 square feet of total floor area, three runways, extending up to 10,900 feet, 36 aircraft gates, and 6 baggage claim areas. All of this is contained within approximately 2,600 acres. The

airport is serviced by 16 major carriers, 9 of which are international, 5 commuters and approximately 25 non-scheduled airlines.

According to a DOT/PF study conducted in 1983, the airport contributes more than \$1.5 billion to the Anchorage economy. Over 13,000 residents counted on the airport's operation for their jobs, earning a total of \$375 million dollars.

How would you like your business to have a financial statement like this: In FY '86, the airport took in \$45 million dollars, showing a profit of \$21 million. Let's take it one step further: image having a business that made a profit of \$21 million a year, and that it achieved this profit without any advertising, any public relations, or any marketing studies whatsoever! In today's competitive marketplace, it's nearly impossible to believe, but that is precisely the situation at Anchorage International.

The times, they are a 'changin', and more and more, international airports are beginning to be seen by the private sector as trade centers, offering enormous potential for economic development within the communities they serve.

As I pointed out earlier, Anchorage's strategic location could easily enable it to serve as a platform for business between Europe and Asia. The possibilities are limitless. For example, if Anchorage were to become a foreign trade zone, goods from around the world could be stored here, processed, used in manufacturing other items, exhibited, repackaged, sold or handled in numerous ways. Imports could be used with domestic parts to

manufacture new items within the zones -- all without paying any customs duties or excise taxes. It would be a tremendous catalyst for development within our business community.

In addition, by expanding the duty free zone at the airport to allow foreign shoppers a much wider range of retail exposure than just gifts and liquors, we could create, in essence, regional shopping centers for stop-over travelers. They could tour duty free trade complexes and show rooms without the necessity of having to go through customs.

More and more, we're seeing international airports taking an active role in marketing their facilities and services. For example, Seattle Tacoma Airport, together with the Port of Seattle, which owns the airport, has developed an aggressive campaign to attract the expanding transpacific market, the international tourist market and the air cargo industry.

They've produced numerous brochures and an audio-visual presentation. They have a staff of marketing representatives which actively call on transpacific clients, touting Sea-Tac's excellent international services on the airport premises, such as banks, customs brokers, freight forwarders, warehouses, foreign consultates, plentiful terminal space, excellent ground access, ample runway capacity and minimum environmental concerns. Sea-Tac representatives are even stationed in Tokyo.

By working closely with planning officials of Boeing's aviation market research company, Sea-Tac is able to track aviation trends and target markets for air travel services. The results of their research indicate that

their marketing approach should include such selling points as, lower landing fees than other airports; lower fuel prices; fewer airport delays; improved custom clearance; and greater amenities. These would include duty free shops, foreign language signs, interpreters, exchange facilities, ground transport access and egress.

Sea-Tac's programs and policies have helped to establish it as one of the top twenty airports in the United States for passenger-traffic volume. In 1982, over 9.2 million passengers and 148,000 metric tons of air freight were handled by Sea-Tac. By 1985, the number of passengers at Sea-Tac increased to 11.5 million passengers, up 25%. Freight went up to 210,000 metric tons, up 42%.

Other airports are following suit. Hartsfield International in Atlanta employs a marketing staff, using funds from both public and private sources, to produce brochures, audiovisuals, and advertisements. Trade shows and trade missions are also a part of the airport's marketing strategy.

We see similar efforts at Baltimore/Washington International Airport, and Miami International. We're seeing more and more examples of international airports using ad agencies, public relations firms, and outside sales representatives to establish and position themselves in the international market.

The need, then, to make our presence known is going to become increasingly important in the years ahead. And not just because others are

doing it. At this time, Anchorage International faces a very critical challenge, that being the advancement of aviation technology.

I'm sure most of you have heard about the new Boeing 747-400 series aircraft. This aircraft is an advanced version of the B-747's which have served Anchorage International Airport for the past fifteen years. However, the new 400-series includes some remarkable advancements in engine performance and aerodynamics.

The 400-series requires only a two-person flight crew, compared with the three crew members required on all other 747's. It will be able to carry between 400 and 600 passengers, depending on configuration, and will be able to fly approximately 8,000 miles non-stop. This will allow the aircraft to fly between Tokyo and Frankfurt, Singapore and Paris, or Hong Kong and London without refueling in Anchorage. Boeing received its first order in late 1985 from Northwest Orient Airlines. The first production model of the aircraft is expected in late 1988.

If foreign carriers depart Anchorage International Airport, the operating expenses at the airport will not decline in proportion. The difference between the shortfall in revenue and the continuing expense of operating the buildings, the facilities and the runways will have to be borne by higher landing fees from airlines such as Western, United, Alaska, MarkAir, Reeve and all the commuter carriers. In addition, there will be higher tie-down charges. Thus, the entire rate structure will go up. Who will ultimately pay the cost? You and I, every time we purchase an airline

ticket or use the airport for whatever reason. The effect on the visitor industry itself could be diasterous.

As you can see, we're in a race against time to develop a plan to protect our existing revenue streams and to create opportunities using the airport as a hub for new business activity.

Our window of opportunity is slowly closing, and we can't afford to wait. We need to sell Anchorage International as a place the airlines will want on their route schedules -- whether it be for passengers, cargo or simply refueling. And the most direct way to go about this task is to mount a marketing campaign, promoting our plant and its services to the world.

Funds for marketing the airport are already available. Revenues from the airport's operation go into a reserve account. The money is there. From those funds, we now need to dedicate a line item in the airport's budget to marketing.

Once a line item dedicated to marketing the airport is budgeted by the State, a cooperative effort can be developed, whereby funds from private and public sources would be combined to develop a generic campaign. This program would be modeled after cooperative efforts which have been highly successful in marketing Alaska seafood and tourism.

Based on past experience with those successful cooperative programs, we believe it will take approximately \$3 - 5 million dollars to develop and implement a comprehensive marketing plan for the airport. This seems like

a reasonable amount to launch a program to reach the world's markets. Once the groundwork has been laid, we'll have a better feel for what it will take to maintain an on-going marketing program.

Which revenue streams need to be protected and developed?

Obvious ones are, of course, those passengers who are stopping over in Anchorage, on their way to or from a primary destination. Our research shows that 84% of those on flights stopping over in Anchorage would be interested in a stay of 4 -7 days. One-half of those would have stopped on the trip they were on if they would have known they could. Once we tell them they are able to stopover, we need offer an irresistible incentive for them to do so.

One good example of a stopover program was developed by the Port Authority of New York and New Jersey for passengers transitting through the three major airports: Kennedy International, Newark International and LaGuardia. They call it, "On Your Way Over, Stopover". The package includes one-night hotel at a choice of hotels, sightseeing, VIP shopping service at Macy's or Bloomingdales with language assistance, a choice of Broadway theatre tickets, a welcome kit, etc., all at a low package price, depending on the visitor's selections. They've advertised this program in periodicals all over Europe.

The Anchorage Convention and Visitors Bureau is taking its cue and is moving ahead to develop local stopover programs. But the bigger job before us is to let passengers know ahead of time that stopover opportunities exist.

Other international passengers of great interest to us are those on either end of the transpolar route who could be persuaded to use Alaska as a visitor destination. New research by the State of Alaska shows that the potential for Japanese and German visitors selecting Anchorage as a visitor destination nearly equals the potential for visitors coming from the U.S. If we do our job right in selling our destination, it is possible that we could attract an additional 200,000 visitors a year from Germany and Japan, or a 50% increase in vacation/pleasure travel.

While passengers are important, air freight offers even greater potential for growth. By increasing freight handling at AIA, we would see an increase in landing revenues (which are based on the gross takeoff weight of the aircraft) and fuel revenues for the airport. In the private sector, we would see an increase in business and land development surrounding the Anchorage International, as well as crew expenditures at hotels, restaurants, car rental, and retail and service businesses.

International air freight is a rapidly growing market. In recent years, international air cargo shipments have increased at twice the rate of passenger travel. The main reason for this growth has been the overall increase in the importance of speed in international transactions. This is particularly true in Alaska when large volumes of perishables, such as fish, are shipped to outside markets.

The most cost-effective freight for air transportation is low-volume, high-value, and relatively low-weight products, such as electronic

components, mini-computers, and precision instruments. Other less obvious air freight products are those with time-sensitivity, such as high-fashion apparel, pharmaceuticals, animals, produce, seeds and flowers. These markets need to be actively developed.

I mentioned fuel fees, and I'd like to stress that fuel is an important revenue stream. The airport operates a fuel storage farm and many operators have underground storage tanks. On an average day, approximately 1.2 million gallons are pumped. This means approximately \$24,000 a day, or \$9 million annually in fuel flowage fees.

A natural response to growing freight business would be land and business development near the airport. The development of an airport industrial park and/or a foreign trade zone designation would offer Anchorage new jobs and revenues in a wide range of business activities, including freight forwarding, processing and manufacturing, warehousing and distribution, and much more.

Anchorage presently handles over 300 million pounds of freight each year, a 14.5% increase from ten years ago during the pipeline days. The opportunity is there, but we have to knock on some doors.

There is an old saying regarding the value of advertising: a codfish lays thousands of eggs, and this is done silently. A chicken lays one egg and cackles. The result: nobody eats codfish eggs, and nearly everyone eats chicken eggs. Therefore, we need to cackle about our airport. I guess that would fit in with the bureau's "Wild About Anchorage" campaign.

Who is backing the plan to market the International Airport? This idea was further advanced by the Anchorage Business Council's Airport Committee, which I happen to co-chair, and others. The council, by the way, was formed by Mayor Tony Knowles with the mission of spurring economic development in Anchorage. Both the Municipality and the Anchorage Business Council have endorsed our committee's recommendation. The Greater Anchorage Chamber of Commerce has since given the idea its full support, along with the Anchorage Convention and Visitors Bureau.

We'd like to invite your support as well, because as residents of Alaska and users of the airport, you have a stake in its future operation. We presently have the lead time to plan for the decade ahead. But we can't afford to wait. We need to plan for the 21st century now.

I've enjoyed this opportunity to speak to you today about protecting our airport's future. I've discussed how we've grown in the past 26 years, and which opportunities and challenges await us; I've explained how, through innovative marketing, we can keep the airport solvent and help spur economic development, and I've noted who supports that kind of thinking.

Buckminster Fuller, in describing his Dymaxion World Map, said that the map showed two things: 1) that the colder an area gets, the more the annual temperature variation. (I'm sure all of us in Alaska would concur.)

And 2) the more the geographical temperature varies annually, the more inventive the humans who live in those areas have to be to survive. "If you live by Lake Victoria in eastern Africa," he said, "you will invent a wooden boat if you wish to cross it. If you live beside Lake Baikal in central Siberia and you wish to cross that body of water, you will invent a wooden boat in the summer and skates and a sled in the winter."

That "inventiveness" has to be harnessed, along with financial resources, in order to develop Anchorage International Airport's future markets. In addition, we need the utmost cooperation and support of our elected officials and the state bureaucracy to establish Anchorage International as a premiere airport for trade, commerce, and passengers, truly the "center" of the world. Let's work together to put Anchorage on Main Street!

Crosswinds at the Crossroads



Photo: David Brookes

Changing winds aloft are blowing storm clouds toward Anchorage's status as 'Air Crossroads of the World'

BY JUDITH FUERST

AS AIR TRAFFIC PATTERNS evolve, Anchorage risks losing its claim to the title "air crossroads of the world."

Change is in the winds aloft: There's a bypass now, and the intersection's fuel pumps aren't needed by new aircraft capable of flying increased ranges. Anchorage International Airport is no longer the mandatory pit stop it was for traffic between Europe and Asia less

than a decade ago.

"We've never had to work for our airport traffic; everything has just fallen into place," says Dan Dixon, director of the Office of International Trade in the state Department of Commerce & Economic Development. He identifies three factors endangering Anchorage International's status as a major airport for international traffic: improvements in air transport technology, relative

slowness in marketing the airport and the sluggish development of Alaska as a destination or tourist stopover point for world travelers.

Dixon warns: "Dramatic losses in Anchorage International Airport traffic will have an immediate multimillion-dollar impact on the state's economy in lost revenues. However, the more devastating impact will be on our efforts to sustain and secure growth for our tourist industry and our efforts to provide a foundation for expansion of international trade."

A task force proposed by Dixon began meeting in August to address marketing of the state's major international airport. Its members include representatives of the Division of Tourism, the airport's duty-free shop, the Anchorage Convention & Visitors Bureau (ACVB), the state Department of Transportation & Public Facilities (DOT), the mayor's office and the state legislature.

"It's a baby step in the scheme of things—the first organized step to facing up to what's coming down the road," Dixon says. That specter lurking down the highway is declining revenues for the city, the region and ultimately the state.

It was geography that put Alaska on aviation maps, so to speak. In 1957, Scandinavian Airlines System developed the polar route. Carriers landed at Fairbanks International Airport for refueling in the early years of polar aviation. But as traffic patterns evolved Anchorage became the stopping point for flights traveling from Asia to Europe or the eastern United States.

Sometimes the stops are for refueling only, particularly with cargo flights. Even with planes capable of greater ranges, cargo flights often are routed through a refueling point. By trading payload for fuel weight, the trip becomes more revenue-efficient. Also to be considered in the tradeoff, though, are additional crew and fuel required for landing and takeoff.

Passenger flights, on the other hand, often travel nonstop when able, because most customers prefer direct routing. Typically operational people on carrier staffs argue for stops, while marketing personnel support nonstop routes.

In addition to refueling, many carriers recater planes here, make crew

changes and enter cargo and passengers into the United States to avoid more congested customs clearance in the Lower 48. Each service contributes to airport revenue.

One substantial revenue source for Anchorage International Airport is income from the duty-free concession where international passengers shop during their brief layovers. In 1985 Duty Free Shoppers contributed \$14.25 million to airport operations—30 percent of the system's revenue.

Now, however, what geography giveth, technology threatens to taketh. That's already been the fate of three other major refueling points in international air traffic—Gander, New Foundland; Shannon, Ireland, and Bermuda Island. The introduction of the jet eliminated the need to make fueling stops at these locations. Although each has managed to retain traffic, none sees the magnitude of flights—or the revenue from transit air traffic—previously enjoyed.

Anchorage International Airport's contribution to the municipality was calculated in an October 1985 study conducted for the Alaska DOT by Applied Economics Associates. Total economic input was valued at \$1.51 billion in 1983, which generated total employment of 13,472.

Contributing to the airport's economic impacts were air transportation, visitor-related, freight forwarding and travel arrangement operations. Those segments directly employed 8,086, with the remaining 5,386 employed as a result of spending by those directly employed.

Total revenue for the Anchorage portion of the state's international airport system (Anchorage and Fairbanks) for the fiscal year ending June 30, 1985, was \$39.5 million. Fairbanks International's contribution was \$3 million. Because operating expenses for Anchorage and Fairbanks were \$16 million and \$6 million, respectively, the income generated at Anchorage International subsidized operations at Fairbanks International, thereby contributing to the Interior's economy as well.

Dixon believes 1990 is a critical year for the future of Alaska's airport system. By then carriers will have made important routing decisions based on the delivery of new Boeing aircraft. The new generation 747-400 has optional crew quarters to eliminate the need for stops to relieve crew and a range of 8,000 miles. It is the increasing range of aircraft that weighs most heavily in carrier decisions on whether to land or bypass Anchorage's crossroads.

Carriers that have ordered the new planes include Northwest Airlines, Cathay Pacific Airways, Lufthansa German Airlines, Korean Air Lines, Singapore Airlines and KLM Dutch

Royal Airlines. Deliveries of the planes are scheduled to begin December 1988. Except for Cathay Pacific and Singapore, these carriers now land at Anchorage International Airport.

Craig Campbell of Coffman Associates, an airport consulting firm, reports Singapore was known to be considering flights through Anchorage, but with the larger planes probably won't have to. Also, KLM has noted a lack of growth in its routes via Anchorage and is one of the carriers likely to reduce services when it begins flying the new planes, according to Campbell.

BOB COE, PRESIDENT of the Alaska Division of Duty Free Shoppers Ltd. and a member of the state-organized task force, has a vested interest in international transit traffic and keeps tabs on international carriers using Anchorage. He notes in April KAL pulled three inbound and four outbound flights, JAL added two overflights—nonstop routes between Europe or the eastern United States and Asia—and Air France added one overflight. In September, JAL pulled one flight stopping at Anchorage and began another overflight. JAL pulled yet another flight in October.

Earlier this year, JAL—which claims to account for one-fourth of Anchorage's entire international operations—landed at least six freighters and six passenger flights a day. But the carrier's business travelers increasingly opt for nonstop flights from Tokyo to New York or Europe.

Those flights are traveling 98 percent full, while others stopping in

Anchorage have seats available according to Mitsuo Kitamoto, district manager. Consequently nonstop flights that bypass Anchorage are the area expected to grow.

Another factor changing the relative importance of Anchorage as a refueling center is the ability to travel through Russian air space. JAL is one of a select group of carriers now flying over the Soviet Union in accordance with a bilateral agreement allowing limited use. The route shortens the polar trip, saving three hours in transit time, according to Campbell.

He also points out more foreign carriers are opting for other U.S. landing sites—Seattle, for example, which serves a large population center. "Anchorage is behind the power curve in competition from West Coast airports," Campbell notes. Another region of the country winning new international traffic is the South, particularly Atlanta and Dallas. For example, Delta Airlines recently inaugurated a route from Tokyo to Atlanta.

Airport marketing aimed at attracting international carrier routes has become much more sophisticated in recent years. The stakes are high in terms of airport revenue and regional economic impact. Sandy Daggett, public affairs officer for the Port of Portland, which operates the international airport there, says Delta's Portland service is expected to create an economic impact of \$25 million in the State of Oregon.

The carrier will route five flights per week in its new Tokyo-Portland service. The economic impact is based on 1979



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figures and considers tourism generated by the routes as well as airport revenue. To land the new service, Portland spent \$300,000, including consulting fees and legal costs.

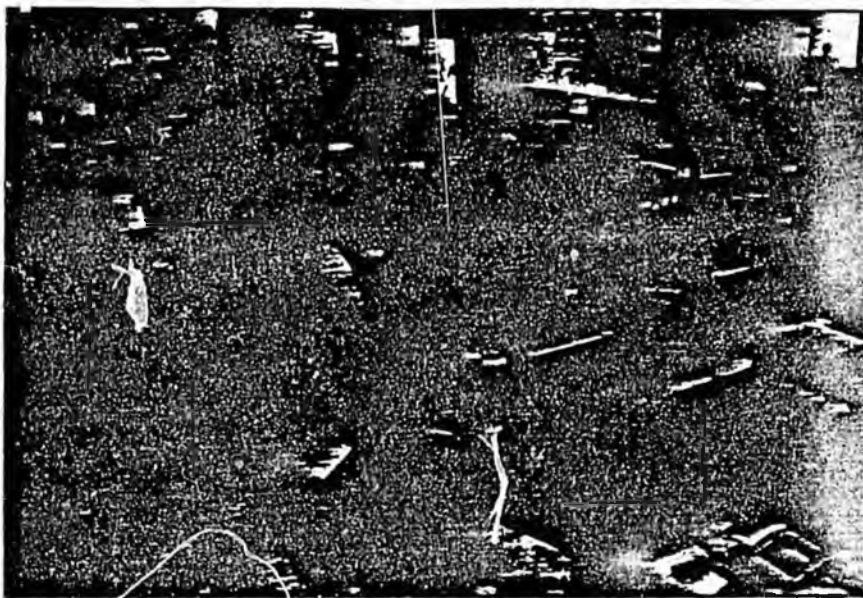
Daggett says an important factor in securing Portland's position as an international gateway was the more than \$4 billion in trade with Japan attributable to the region, which also includes southwest Washington. In the absence of such a trump card, Anchorage must play on other strengths: lack of congestion, facilities, low pricing and a destination for tourism.

"There is a problem developing on the horizon," says Campbell. "Anchorage must go after carriers. It's going to have to be the cheapest if its goal is to keep airlines here." Other former fuel stops have retained flight operations in

the British Columbia's promoted nearby as a skiing location and attracts many Asian visitors for winter as well as summer travel.

ALTHOUGH ALASKA has the opportunity to sell JAL passengers on tourism in the state when they stop in the international terminal, "the only available display is the duty-free shop" and "bears." Kitamoto suggests one stuffed bear might be enough, but displays currently reinforce misconceptions about a hostile, remote and ice-covered Alaska. Even the stopover tourist booth, which hands out pamphlets, is remembered for its picture of igloos and Eskimos.

"I don't know how the State of Alaska thinks," says Kitamoto. "I would like to say to the state to show more of



In 1985, the Duty Free Shoppers concession contributed \$14.25 million in revenue to Anchorage International Airport.

various ways: Gander, Newfoundland, has been successful at establishing itself as a service base for charter flights, while Shannon, Ireland, and Bermuda have become destination stops.

Anchorage International Airport currently is not taken seriously as a destination for international travelers. Says Robert Gibbons, spokesman for Northwest, "Alaska is viewed as a domestic tourist market." Although Anchorage once was included in the carrier's international service, "the thrust of operations in Anchorage has shifted to international freighter service and domestic passenger traffic. The international passenger side fell apart with the advent of 747 service," according to Gibbons.

"Nobody knows about Alaska," says JAL's Kitamoto. "Alaska means icy." Canada is much more sophisticated in its marketing, he explains. For exam-

Alaska—trains, hotels, facilities at Denali. Give the costs and camping information. Let people know how accessible the glaciers are. Other airports all have pictures; only Anchorage has so few in its gate areas."

Although Kitamoto expects JAL's freight to increase, he feels the passenger traffic is on uncertain footing: "I don't know what will happen in five years." Once passenger traffic is lost to Anchorage International Airport in nonstop routing, he gives it "no chance to recover."

According to Don Dickey, director of the Alaska Division of Tourism, more than \$150,000 has been spent on international tourist promotion in Anchorage International over the last two years. Additionally, the division will be a major funder for the task force to the tune of about \$100,000.

Research firms are sampling to obtain a clearer description of passen-

gers passing through Anchorage International and to better understand attitudes of the Japanese and Germans. A continuing problem Dickey notes is carrier preference for selling through tickets rather than ticketing for a layover in Alaska. Hence the Division of Tourism also is meeting with carriers and tour companies to solve those problems and examine incentives.

Reyn Bowman, president and chief executive officer of the ACVB, says the state has been slow to embrace the opportunities of international tourism, but adds, "Now we're making real progress. The Division of Tourism is spending 7-8 percent of its budget on overseas tourists."

According to Rolf Klug, vice president of marketing and sales for ACVB, a 1983 study by Alaska Pacific University showed 84 percent of international transit passengers indicated an interest in visiting Alaska. A further gauge of tourist potential was findings that 52 percent liked winter-oriented travel and 50 percent could have stayed over on that trip.

Says Bowman, "The carriers will keep planes flying in here as long as people want to come. If we don't develop a consumer interest in Alaska as a destination, we stand to lose traffic and see the cost of domestic service increase. If we do develop consumer interest, we've

got a win-win situation. But we've got a race with time before carriers receive new aircraft and shift to nonstop flights."

William R. Snell, deputy commissioner of DOT, says, "We've had some flattening off in international passenger service, but it is not a significant decline." Adds Larry Michou, assistant director of administration for Anchorage International, "Our rate base remains solid because as passenger traffic has dropped, cargo, which is heavier and uses more fuel, has increased."

Michou says if the duty-free concession is lost somewhere down the line due to losses of international passenger traffic, the revenue "could be rolled into other fees."

Gina Marie Lindsey, manager of statewide aviation with DOT, points out Anchorage can be cheaper than some of its competitors because of duty-free revenue. Therefore, the loss of Duty Free, which employs about 270 in its Anchorage operations, could mean an increase in airport user rates, both domestic and international.

Snell reports the airport management has initiated four programs aimed at strengthening Anchorage's position in international airport competition. To benefit carriers serving Anchorage and the airport, the airport has promoted

the development of a ride consortium in which member airlines own and control distribution of fuel services. He credits the effort with helping attract new business and stabilizing pricing.

Second, for the first time in Anchorage's history, five-year operating agreements have been signed with the major carriers serving Anchorage and Fairbanks. "Now we know our revenues and commitments for five years, and the airlines get predictability too," he says.

Third, DOT is cooperating in a marketing strategy promoting the airport and increased tourist stopovers. He notes, however, "The airport will market itself if we have competitive facilities for cargo and passengers."

FINALLY, DOT is seeking means to advance Anchorage's use as a hub. It is considering ways to raise capital for facilities. Snell notes any development is expected to involve the private sector. The Alaska Industrial Development Authority and DOT may provide the land, with someone else operating the facilities. Establishment of a foreign trade zone is being considered as well.

Anchorage International Airport would have something to celebrate regarding increased cargo tonnage if a corporation consisting of United Parcel Service and DHL Airways-International Parcel Express (IPX)-is awarded the small package service to Japan. The consortium, which has said it will allow other companies to purchase stock in the venture if it's selected, is one of three applicants.

The final selection will be made by the U.S. Department of Transportation following the recommendation of administrative law judges appointed to weigh the merits of each contender. IPX has stated it would use Anchorage, Cincinnati and Louisville with Tokyo. The two other proposals have been filed by Federal Express, which would use Portland and Memphis with Tokyo, and Orion Air, which has specified Seattle with Tokyo for its service.

IPX traffic through Anchorage would be a welcome addition and perhaps start the airport down the road to becoming a cargo hub. One factor weighing against that happening-or at least one that might limit the size of any hub operation-is the relatively small regional population base. In the past, Anchorage has reaped the benefits of being between major trade and tourist centers of the world. But that position already has been eroded and will not draw international traffic a decade from now unless carriers determine Anchorage International Airport has more than geography to offer.

"We could be facing a grave problem in loss of revenue and jobs. It's later than it should be," says Dixon. □

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Editorials

Unlocking the gates

FOR SEVERAL years Alaskans have been asking for a waiver of visa requirements for international travelers passing through Anchorage International Airport. The waiver, sponsored by Rep. Don Young, became law last week when Congress enacted a new immigration law.

That means it is time for Alaskans to pursue the programs they envisioned as possible if visas were eliminated. The federal government is, more or less, telling us through the waiver action, "Here's what you asked for, now let's see what you can do with it."

More than one million passengers spend an hour or more at the airport while they are traveling between Europe and the Orient. They have been confined to the airport and the airlines faced heavy fines when one failed to re-board the plane he arrived in.

Alaskans have seen those travelers as potential visitors to Anchorage and possible visitors to other areas of the state before going on to their destinations. The visa requirement discouraged efforts to promote stopovers.

A FIRST STEP would be to pursue a concerted program to win support from the airlines. At present they do not want stopovers in Anchorage and it is easy to understand why. When a passenger disembarks here, his seat is usually empty on the

second half of a long journey between continents.

From an economic standpoint, the airlines must have the prospect of boarding as many passengers in Anchorage as disembark. The designation of Anchorage as the Olympic City for 1994, when it comes, will serve as a mighty catalyst to this end.

It is critically important that this program be successful. Anchorage must become a destination city instead of only a transit point on the global airways. Its value as a transit point is diminishing as new planes and technology permit overflying.

Both Northwest and Japan Airlines no longer stop here. United Airlines has initiated service over the North Pacific with no stop in Anchorage. There is talk of flying non-stop between Japan and Europe.

SUCCESS in this venture is essential. If one out of four international travelers stopped to visit Anchorage, there would be at least 1,000 a day in town and if they stayed three days there would be 3,000. To accommodate them there would be more hotels, more tour buses, more restaurants, more service establishments of every sort.

Such growth would be the forerunner of additional growth to accommodate the Olympic games in 1994 and the new era of international status and fame.



Editorials

The new tourist season

THERE WERE a lot of happy numbers in a new report from the state's Division of Tourism, which took a statistical look at people who travel to Alaska during the off-season months of fall, winter and spring.

A surprising number — 42 percent — are pleasure visitors. And 24 percent of those come to visit friends and relatives. Business-related trips are the reason for 52 percent of the off-season travel, the state's survey showed — and that's surprising only in that some might have guessed that and even larger percentage of winter-type travel would be of a business nature.

AMONG THE other pleasant findings of the report was the discovery that off-season visitors sightsee and do other touristy things just

as much, if not more, than do those who come our way in the summer — and they average 10 years younger in age.

They also tend to come here more than once, and stay longer while they're here.

All of which speaks well for the state's effort to expose more and more visitors to the wonders and beauties of Alaska that can't be seen during June, July and August.

And it's something all of us might keep in mind, when the time comes to invite relatives and friends to visit the 49th State. As a matter of fact, you might want to remember to include an invitation in some of the Christmas cards you'll shortly be addressing to family and friends in far away places Outside.

Opinions . . . Other views, other insights

Alaska's international airports offer economic opportunity

At a time when the state is struggling with the wrong end of OPEC politics, attempting to be the cornerstone of the international fisheries and hopeful of receiving the nod from the International Olympic Committee, we need to remember the economic opportunities at home. In this writer's view, an important part of the state's economy involves some buildings and some asphalt. That's the Anchorage and Fairbanks airports.

The problem is that technology may doom our airports. If we don't come up with a viable plan, a new generation of aircraft may result in stops at Anchorage and Fairbanks being a vestige of the past. In my estimation, the commercial future of our airports is as important to our economic future as our high profile items.

A 1985 study indicated that Anchorage International Airport contributed \$1.5 billion to the Anchorage economy. Indica-



tions were that the airport alone generated employment of 13,472 people. The cost for this is only approximately \$20 million.

There's nothing that says international flights will continue to call at either the Anchorage or Fairbanks airport. Right now, we are the air crossroads of the world, but new long-range Boeing planes may change that. Already some interna-

tional passenger carriers are beginning to fly direct.

The state, the municipality, and those involved with the airport, must concentrate on this issue. The airport may not be the sexiest issue, but it is one area where we haven't experienced a downturn.

For example, there are international carriers, like Korea Airlines, who are unable to pick up or discharge passengers because they do not have landing rights. The reason for this seems to stem from events at the Seoul airport, which have nothing to do with Alaska. We can not accept that.

Visas have been a problem in the past, but the Alaska Congressional delegation has started a program which may solve that. From Alaska's vantage, we need to

have our international friends have the ability to pass a few days in Alaska. We

must market Anchorage and Fairbanks as destination points.

We need Free Trade Zones in order to maximize the opportunities for local businesses to take advantage of our strategic location. Our airports have to provide services competitive with Portland, Seattle, Los Angeles and other gateway locations. We've gone a long way on the services, but we can always do more.

A task force is working on the problem, and that's a start. The downside, however, is such that an all-out effort is called for. It's easy to get people excited about AWWR and the Olympics. We need the same excitement about the continued development and marketing of the Fairbanks and Anchorage airports.

An Alaskan since 1971, Tony Smith is an attorney in private practice in Anchorage.

Municipality
of
Anchorage



OFFICE OF THE MAYOR

P O BOX 196650
ANCHORAGE, ALASKA 99519-6650
(907) 264-4431

TONY KNOWLES
MAYOR

October 9, 1986

Governor Bill Sheffield
P.O. Box A
Juneau, AK 99811

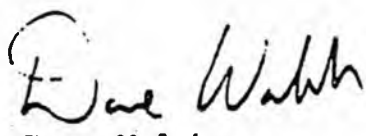
Dear Governor:

You are aware that Anchorage International Airport is the linchpin of Anchorage's economy. As such, when potential declines in its revenues come to light, we become concerned. This concern is manifest in the attached resolutions from the Assembly and Chamber of Commerce.

Anchorage is concerned about keeping our airport economically healthy and growing. To accomplish this, we need a hard-hitting marketing and public relations program. We would appreciate your assistance in this endeavor.

Sincerely,


Tony Knowles
Mayor


Dave Walsh
Chairman of the Assembly

2 Enclosures

cc: Commissioner DOT/PP

A:EJG018.TXT

8-12-86

Submitted by: Economic Dev. Subcommittee,
Brockway, Chairman
Prepared by: Assembly Budget Analyst
For Reading: August 12, 1986

ANCHORAGE, ALASKA
AR NO. 86-178

A RESOLUTION SUPPORTING THE DEVELOPMENT OF A MARKETING PROGRAM FOR ANCHORAGE INTERNATIONAL AIRPORT

WHEREAS, the Municipality is in the process of applying for Foreign Trade Zone status, and

WHEREAS, an important aspect of the success of Anchorage's Foreign Trade Zone is Anchorage International Airport, and

WHEREAS, Anchorage International Airport and the marketing thereof has been a recent topic of discussion for several community groups and in the local news media, and

WHEREAS, stopover air traffic economic opportunities at Anchorage International Airport have not been fully realized, and

WHEREAS, a viable and economically productive international airport is in the best interest of the Anchorage economy, and

WHEREAS, there are sufficient monies in the Airport Fund.

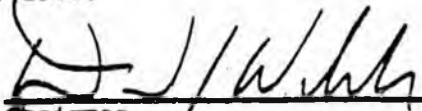
NOW, THEREFORE, the Anchorage Municipal Assembly hereby resolves:

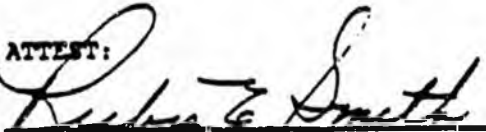
Section 1. That acceleration and expansion of the current airport marketing program is warranted and appropriate.

Section 2. That the creation of a strategic planning program for Anchorage International Airport is of utmost importance to Alaska's economic health.

Section 3. That this Assembly welcomes participation in such an effort.

PASSED AND APPROVED by the Anchorage Assembly this 12th day of August, 1986.


Chairman

ATTEST:

Municipal Clerk

ejg/reso 002



Anchorage Star of the North
Chamber of Commerce

RESOLUTION 86-07

ANCHORAGE INTERNATIONAL AIRPORT

WHEREAS, the Anchorage Chamber of Commerce has, throughout the history of the Airport, been the leading business organization in support thereof; and

WHEREAS, Anchorage is the transportation and marketing center for the State of Alaska; and

WHEREAS, the Chamber recognizes the International Airport has a primary role in the economic growth of Anchorage and Alaska; and

WHEREAS, existing State policies appear to accept a "status quo" insuring only the mutual support and a common maintenance level at major airports in the state; and

WHEREAS, there appears to be neither a near-term nor long-term plan to insure the growth for current and future commercial users, or enhancements for the public and other users at the International Airport,

THEREFORE BE IT RESOLVED that the Anchorage Chamber of Commerce calls upon the Municipal Assembly to move forthwith and:

- strongly urge the State to develop and implement a viable marketing plan with state, national and worldwide impacts, specifically for the Anchorage International Airport;
- take the steps necessary that will result in a formal role for the city in the policy development and the future of the Airport.

APPROVED BY THE Anchorage Chamber of Commerce Board of Directors this 22nd day of August, 1986.

Elaine Atwood

Elaine Atwood
President

Wayne K. Beckwith

Wayne K. Beckwith
Executive Vice President

President: Elaine Atwood Executive Committee: Larry Baker.
Ken Calhoun, George Easley, Lee Fisher, Joe Heintz, Harold Heinz, Glenda Rhodes
Board: Rod Bradley, Col. Richard Brown, Mike Burns, Dave Dittman, Sen. Jan Fairs, Al Fleckwood, Alice Hartig,
Jack Hayes, Duane Hcyman, Col. Scott Tippin, Kay Linton, Bill MacKay, Earl Miller, George N. Nelson, John Norman,
Al Parrish, Bob Penney, Chief Brian Porter.

415 F Street, Anchorage, Alaska 99501-2254 (907) 272-2401

APPROVED
Date: 4-8-86

Submitted by: Economic Development
Committee/Dana Brockway,
Chairman
Prepared by: Assembly Budget Analyst
For Reading: April 8, 1986

ANCHORAGE, ALASKA
AR NO. 86- 61

A RESOLUTION REQUESTING IMMEDIATE ACTION TO OBTAIN FOREIGN TRADE ZONE STATUS FOR CERTAIN AREAS OF THE MUNICIPALITY OF ANCHORAGE.

WHEREAS, the future of Anchorage's economy depends on appropriate and timely actions to further growth and opportunities; and

WHEREAS, the Economic Development Committee has studied the foreign trade zone concept and has heard the testimony of experts as well as from the Chamber of Commerce and Economic Development Commission; and

WHEREAS, the Economic Development Committee has found no significant negative aspects of foreign trade zone status; and

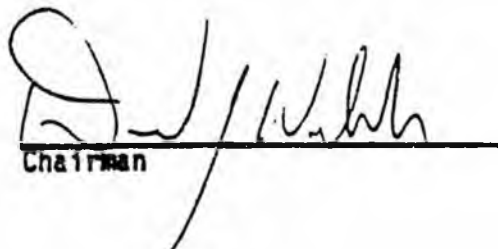
WHEREAS, the Port of Anchorage would be influenced by this change in status and thus is an interested agency.

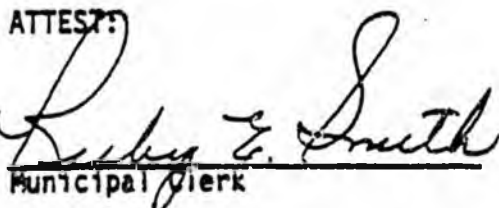
NOW, THEREFORE, the Anchorage Municipal Assembly resolves:

SECTION 1. The Municipality should immediately proceed to assess Anchorage's foreign trade zone potential, and define potential land areas for consideration.

SECTION 2. The Port of Anchorage should function as the action agency for this effort, and shall make application for foreign trade zone status, providing periodic progress reports to the Assembly.

PASSED AND APPROVED by the Anchorage Municipal Assembly this 8th day of April, 1986.


Chairman

ATTEST:

Municipal Clerk

FINAL REPORT

EXCERPTS FROM
THE ECONOMIC IMPACT
OF
THE ANCHORAGE INTERNATIONAL AIRPORT

SUBMITTED TO:

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

SUBMITTED BY:

APPLIED ECONOMICS ASSOCIATES, INC.

WITH
R.E. HANSEN RESEARCH ASSOCIATES
AND
DR. WILLIAM B. BEYERS

OCTOBER, 1985

CHAPTER III

THE DEVELOPMENT AND GROWTH OF THE ANCHORAGE INTERNATIONAL AIRPORT

The Anchorage International Airport had its genesis when, late in 1951, operations began on an 8,400 foot east-west and a 5,000 foot north-south runway. The Airport was constructed under the auspices of and operated by the U.S. Civil Aeronautics Authority.

In 1959 Alaska became the 49th state of the Union and, in the following year, ownership and administration of the Airport was transferred to the State of Alaska. During the first year of State administration, construction began to extend the east-west runway to 16,600 feet, necessitated by the advent of jets which were displacing propeller driven-aircraft. Additionally, construction of new parking aprons and ramps began.

The airport expansion and modernization program was interrupted by the 1964 Good Friday earthquake which severely damaged the runways and destroyed the control tower and part of the terminal building. Necessary repairs to make the Airport operational were made quickly, but it took until 1967 before reconstruction of the east-west runway was resumed. It was completed in 1970, in time to handle the ever increasing international traffic as well as the expanding domestic operations, the latter due in large measure due to increased oil related activities.



In order to make the Airport a facility which would be accessible under all but the most adverse weather conditions, construction of a new north-south runway began in 1978 and was completed in 1980. Throughout that period, modification and improvements continued to be made to the general facilities and the existing terminal building, and a new dedicated international terminal was completed in 1982.

During the 25 years as a State owned and operated airport, the Anchorage International Airport grew from a small regional facility into an important national and international one which, in 1984, served 40 scheduled and non-scheduled airlines. Domestic and international passenger traffic rose from 274,000 in 1960 to over 4,000,000 persons in 1984, making the Airport one of the largest medium size air traffic hubs in the U.S. In 1983, for example, the Federal Aviation Administration (FAA) reported 1.04 million revenue passenger enplanements in Anchorage, compared to 1.04, 1.04 and 1.2 million at the El Paso, Texas, Jacksonville, Florida, and Syracuse, New York airports, respectively [3]. These airports serve metropolitan areas with population bases which (in 1980) ranged from 480,000 to 722,000 persons [4]. Measured on the basis of the number of trips-per-resident population, for example, the Anchorage Airport ranks second (after Reno, Nevada) among all of the 36 medium size hubs in the US with an enplanement ratio of 6.0, compared with 2.2, 1.4, and 1.6, respectively, for the other three cities named above.

Even more striking, and underlining the pivotal role of the Airport in the state's economy, is the volume of freight traffic that passes through it. According to the same FAA source [3], the Airport handled 224,000 tons of enplaned revenue freight in 1983 (20 percent of which were U.S. mail shipments), fully one-half of the total tonnage of



all of the 36 medium size hubs in the U.S. combined, and only slightly less than the tonnage passing through the Los Angeles International and Kennedy International Airports (267,000 and 253,100 tons, respectively) - large hubs serving metropolitan areas with nearly 50 times the population of Anchorage. (In the same year, 72,200 tons of freight were enplaned at the Seattle-Tacoma International Airport.)

The large fraction of U.S. Mail is noteworthy, since subsidized shipments of parcel post are 60 to 80 percent less expensive than airfreight cargo of identical weight. As a result, outlying communities are able to purchase goods at considerably lower than "market" prices, a benefit we have not measured. (Market prices include necessary payments to all factors of production, including a normal return to capital.)

In the sections that follow, we will briefly discuss and document the extraordinary growth of both the domestic and international passenger and freight traffic at and through the Anchorage International Airport between 1960 and 1984.

Passenger Traffic, 1960-1984

Over the 24 year period between 1960 and 1984, total passenger traffic (arriving, departing and in transit) rose from less than 0.3 to over 4.0 million persons, at an average annual rate of 11.9 percent (Table III.1). In only three years, 1965, 1971 and 1972 did passenger traffic fail to increase (Table III.2). (The decrease in 1965 is explained by the 1964 earthquake; the decreases in the other two years are most likely due to the then uncertain future of the Trans-Alaska Pipeline.) The largest growth rate was registered by the "in transit" category, 15.3 percent. Whereas, in 1960, that class of traffic



accounted for only 16.3 percent of total traffic, by 1984 it represented 36.4 percent (Table III.3). However, as Table III.4 shows, growth rates for the several passenger groups varied substantially over time. Thus, for example, "in transit" traffic rose at an annual rate of 33.6 percent during the 1960-1970 period, 4.6 percent between 1970 and 1980, and only 2.0 percent between 1980 and 1984 (Table III.4).

Detailed data on international traffic were available for the fiscal years 1976-1984 and, together with domestic data, are shown in Tables III.5-III.7. Over the 8 year period, total traffic increased at an annual rate of 6.2 percent. However, during the last two years, international traffic declined by more than 155,000 persons, or over 5 percent per year. Over the 8 year period, the number of arriving and departing international passengers decreased by about 50 percent. Domestic traffic, on the other hand, continued to increase throughout that period.

It is unclear whether the recent decrease in international traffic portends a developing trend, or whether it is a cyclical phenomenon. However, it is well known that at least two international airlines (JAL and SAS) have exercised transit rights through Soviet airspace, which may have affected the level of international travel at the Airport. Other carriers are also contemplating route changes via the USSR which also may impact international passenger traffic to and through Anchorage.

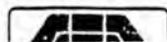


TABLE III.1

ANCHORAGE INTERNATIONAL AIRPORT
PASSENGER TRAFFIC, FY 1960 - 1984
(NUMBER OF PERSONS)

YEAR	ARRIVING	DEPARTING	TOTAL ARR & DEP	IN TRANSIT	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
1960	114,557	114,655	229,212	44,564	273,776
1961	119,468	125,955	245,423	71,536	316,959
1962	131,361	137,758	269,119	127,826	396,945
1963	140,049	143,930	283,979	125,501	409,480
1964	164,441	170,448	334,889	205,060	539,949
1965	189,451	195,335	384,786	152,003	536,789
1966	213,380	219,047	432,427	216,646	649,075
1967	268,557	269,459	538,016	414,809	952,825
1968	331,726	357,519	689,242	418,732	1,107,974
1969	391,050	424,314	815,364	648,821	1,464,185
1970	426,248	433,163	859,411	807,722	1,667,133
1971	413,735	420,249	833,984	778,211	1,612,195
1972	451,455	461,777	913,232	654,681	1,567,913
1973	478,895	488,624	967,519	633,111	1,600,630
1974	540,714	551,767	1,092,481	796,045	1,888,526
1975	694,475	706,739	1,401,214	815,116	2,216,330
1976	857,162	870,024	1,727,186	884,762	2,611,948
1977	945,048	962,392	1,907,440	936,032	2,843,472
1978	955,628	979,636	1,935,264	981,315	2,916,579
1979	995,864	1,018,651	2,014,515	1,166,400	3,180,915
1980	990,547	1,007,566	1,998,113	1,267,474	3,265,587
1981	1,059,854	1,073,108	2,132,962	1,456,894	3,589,856
1982	1,165,338	1,177,757	2,343,095	1,503,206	3,846,301
1983	1,283,720	1,295,433	2,579,153	1,425,082	4,004,235
1984	1,328,793	1,335,646	2,664,439	1,372,679	4,037,118
AARG	10.8%	10.8%	10.8%	15.3%	11.9%

SOURCE: Selected Anchorage International Airport documents.
Calculations by Applied Economics Associates, Inc.

NOTE: AARG - Average Annual Rate of Growth



Freight Traffic, 1960-1984

Reference has already been made to the large volume of freight that moves through the Airport. Table III.8 recapitulates freight movements between 1960 and 1984 and Tables III.9 and III.10 show data for annual percentage changes and the fractions of total freight arriving at and departing from the airport. A major discrepancy is noted between the volume of "departing" freight reported by the Airport in 1983 (92,466 tons) and "enplaned revenue freight" reported by the Federal Aviation Administration for the same year. The FAA data include all freight, originating or transshipped from one aircraft to another. The Airport statistics do not include freight which is transshipped. For purposes of comparing the Anchorage Airport with other US airports, the FAA data [3] were used.

The data show that between 1960 and 1984, total freight movements increased ten-fold, at an average annual rate of 6.1 percent. Growth rates on a year-to-year basis, however, were very uneven. Not surprisingly, and pointing to the Airport's strategic role in the development of the state's economy, are the enormous growth rates (in excess of 23 percent) of freight traffic registered during the pipeline construction period 1973-1977 (Table III.11).

That Anchorage is the Alaskan entrepot and that the Airport is its essential transportation pipeline is manifested by the fact that throughout the 1960-1984 period, "departing" far exceeded "arriving" air freight tonnage. One explanation for these asymmetrical flows is that goods are shipped to the Anchorage maritime port, or arrive over the road, and are then redistributed by air to the rest of the state which has no other transportation links to the "outside"; another is that



large quantities of relatively high value, perishable fish are flown to foreign and domestic markets during peak harvest periods. Rapid access to markets significantly increases the value of these products. At the Seattle-Tacoma International Airport, in comparison, arriving and departing cargo for each of the years during the same period were nearly always in balance. Clearly, many outlying communities could not survive and an array of economic activities would not take place or would be severely curtailed without the cargo services provided through the Airport.

As in the case of passenger traffic, detailed data for international and domestic cargo movements for the fiscal years 1976-1984 are displayed in Tables III.12-III.14. Over the 8 year period, total domestic freight traffic grew at a modest 1.7 percent. Arriving air freight increased at an annual rate of 1.1 percent. Departing traffic, on the other hand, rose nearly twice as fast, at 2.0 percent. In 1984, it accounted for approximately 64 percent of total freight movements.

In contrast, the international components registered extraordinary growth rates. Whereas, in 1976, international air cargo traffic accounted for only 5.8 percent of the total, by 1984 it represented 12.6 percent. That the Airport has become a major point of entry for foreign air cargo is indicated by the fact that in 1984 over 25 percent of total arriving cargo was carried by international airlines, compared to only 12 percent in 1976.

TABLE III.5

ANCHORAGE INTERNATIONAL AIRPORT
INTERNATIONAL AND DOMESTIC
PASSENGER TRAFFIC, FY 1976 - 1984
(NUMBER OF PERSONS)

YEAR	ARRIVING	DEPARTING	TOTAL ARR & DEP	IN TRANSIT	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
INTERNATIONAL					
1976	49,975	50,089	100,064	723,068	823,132
1977	54,629	56,906	111,535	816,609	928,144
1978	47,085	49,613	96,698	882,578	979,276
1979	27,736	26,550	54,286	1,076,925	1,131,211
1980	25,414	26,038	51,452	1,166,971	1,218,423
1981	28,447	27,534	55,981	1,349,113	1,405,094
1982	30,906	29,548	60,454	1,428,628	1,489,082
1983	27,118	27,411	54,529	1,339,294	1,393,823
1984	24,807	24,045	48,852	1,285,017	1,333,869
AARG	- 8.4%	- 8.8%	- 8.6%	7.4%	6.2%
DOMESTIC					
1976	807,187	819,935	1,627,122	161,694	1,788,816
1977	890,419	905,486	1,795,905	119,423	1,915,328
1978	908,543	930,023	1,838,566	98,737	1,937,303
1979	968,128	992,101	1,960,229	89,475	2,049,704
1980	965,133	981,528	1,946,661	100,503	2,047,164
1981	1,031,407	1,045,574	2,076,981	107,781	2,184,762
1982	1,134,432	1,148,209	2,282,641	74,578	2,357,219
1983	1,256,602	1,268,022	2,524,624	85,788	2,610,412
1984	1,303,986	1,311,601	2,615,587	87,662	2,703,249
AARG	6.2%	6.0%	6.1%	- 7.4%	5.3%

SOURCE: Selected Anchorage International Airport documents.
Calculations by Applied Economics Associates, Inc.

NOTE: AARG - Average Annual Rate of Growth

TABLE III.8

ANCHORAGE INTERNATIONAL AIRPORT
AIR FREIGHT TRAFFIC, FY 1960 - 1984
(POUNDS)

YEAR	ARRIVING	DEPARTING	TOTAL ARR & DEP
(1)	(2)	(3)	(4)
1960	12,298,166	20,549,579	32,847,745
1961	13,380,632	24,132,253	37,512,885
1962	14,777,941	24,760,609	39,538,550
1963	21,509,140	39,639,748	61,148,888
1964	19,360,527	32,631,053	51,991,580
1965	20,627,935	32,097,259	52,725,195
1966	20,762,213	37,394,229	58,156,442
1967	22,400,979	49,776,762	72,177,741
1968	25,980,908	75,573,582	101,554,490
1969	30,526,580	50,137,204	80,663,784
1970	32,241,373	60,865,051	93,106,424
1971	36,618,783	60,493,202	97,111,985
1972	44,026,537	65,937,427	109,963,964
1973	39,638,120	70,230,262	109,868,382
1974	60,748,311	83,145,442	143,893,753
1975	90,331,365	111,874,498	202,205,863
1976	106,702,662	155,280,054	261,982,716
1977	94,276,462	162,304,099	256,580,561
1978	99,169,214	162,682,389	261,851,603
1979	103,798,338	156,074,827	259,873,165
1980	96,422,556	157,568,303	253,990,859
1981	119,343,401	186,479,723	305,823,124
1982	118,350,235	181,498,461	299,848,696
1983	130,138,571	191,784,538	321,923,109
1984	137,478,750	184,931,092	322,409,842
AARG	10.6%	9.6%	6.1%

SOURCE: Selected Anchorage International Airport documents.
Calculations by Applied Economics Associates, Inc.

NOTE: AARG - Average Annual Rate of Growth

As shown in the first line of Table IV.2, expenditures on fuel constitute nearly 70 percent of the respondents' total expenditures. The Airport's financial statement for fiscal year 1984 shows that fuel and oil fees collected by the Airport amounted to \$8.3 million, or 31.4 percent of total operating revenues, the second largest income source for the Airport after concession fees of \$9.4 million (or 35.4 percent of operating revenues).

The second largest expenditure of the airlines is for wages and salaries. These disbursements are income to employees who reside in the Greater Anchorage Area, and, as such, will be respent on goods and services in the local economy. For example, an Alaska Airlines ticket agent who resides in Anchorage will spend his/her income on housing, food, clothing, entertainment and other consumption items produced and/or distributed in the local economy. These purchases constitute revenue to local businesses who, out of these receipts, pay their employees, purchase goods and services from other local businesses, and so on. This process is referred to as the "multiplier effect" and when measured quantitatively (see Chapters V and VI) will describe an ultimate level of output, earnings, or employment that is generated throughout a regional economy as a result of an initial, direct economic stimulus - the purchase of a good or service, for example. Employee benefits, representing other labor income, similarly generate multiplier effects. Together, expenditures on wages and salaries and employee benefits accounted for 14.9 percent of the total expenditures indicated by the respondents.

Expenditures for goods and services, including contract maintenance, and food, lodging, and transportation for flight crews, as well as most of the other/miscellaneous expenditures represent purchases



by the airlines from local businesses. These operational purchases, representing 15.0 percent of total air carrier expenditures in Anchorage, also generate multiple output, earnings and employment effects throughout the local economy.

The remaining airline expenditures, terminal building rent, landing and parking fees, and state and local taxes, represent payments to government agencies. These expenditures, accounting for 1.5 percent of total expenditures, are ultimately returned to the private economy, although not necessarily in the region in which the revenues were generated, in the form of wage and salary payments to government employees and purchases from private firms.

Other important data were collected from the commercial air carriers. The respondents indicated that they employed 1,183 Anchorage residents and paid for a total of 68,941 hotel rooms in Anchorage due to flight crew and unscheduled passenger layovers. The hypothetical question included on the questionnaire asked for the most likely alternative routes for passenger and freight traffic in the event that the Airport closed for one year: Five respondents indicated that both passenger and freight traffic would be re-routed through Fairbanks, four indicated that passenger traffic would be re-routed through the USSR, while two indicated that freight traffic would be carried over the Soviet route as well. Vancouver, B.C. was also indicated as a terminus or refueling point. Two carriers indicated that passenger traffic would not be re-routed at all.

Airport Related Services

Airport related services consist mainly of concessionaires doing



business at the Airport itself. Also included in this category are firms providing ground transportation to and from the Airport, such as car rental agencies, and travel agents. In short, this industry classification includes those local firms who provide goods and services to passengers arriving at and departing from the Airport. In contrast to commercial air carriers, not all of the businesses rely entirely on the Airport. In order to gauge the dependence of such firms on the Airport, a hypothetical question asking how current operations would be affected if the Airport did not exist was included on the questionnaire. As a further check, respondents were also asked to provide data on the level of gross receipts from operations in Alaska and the level of gross receipts from operations conducted at the Airport. In addition, the questionnaire requested information on employment and expenditures in the Anchorage area.

Airport related services questionnaires were mailed to 46 firms. Fourteen were completed and returned to AEA, while five of the original 46 were returned as non-deliverable. Taking 41 (the original 46 minus the 5 returned) as the relevant base to compute the response rate, 34.1 percent of the firms surveyed responded, as indicated in Table IV.1. Table IV.3 summarizes the information provided by those respondents who indicated that they were at least partially dependent upon the existence of the Airport. The data from the surveys were adjusted to take into account those firms who indicated less than 100 percent dependence and therefore the figures in Table IV.3 reflect estimates of the respondents' levels of expenditures and employment directly tied to the Airport.

As shown in Table IV.3, expenditures on employee compensation (wages and salaries plus benefits) constitute the largest fraction of



TABLE VI.10

SUMMARY OF THE IMPACT
OF THE ANCHORAGE INTERNATIONAL AIRPORT
ON ANCHORAGE, 1983

IMPACT MEASURE	DIRECT IMPACT	INDIRECT & INDUCED IMPACT	TOTAL IMPACT
(1)	(2)	(3)	(4)
Output (dollars)	\$ 697,600,000	\$ 453,500,000	\$1,151,100,000
Earnings (dollars)	\$ 223,000,000	\$ 151,600,000	\$ 375,100,000
Employment (number of employees)	8,086	5,386	13,472

SOURCE: US Department of Commerce, Bureau of Economic Analysis, RIMS-II;
Applied Economics Associates, Inc. See Table VI.9 of this chapter.

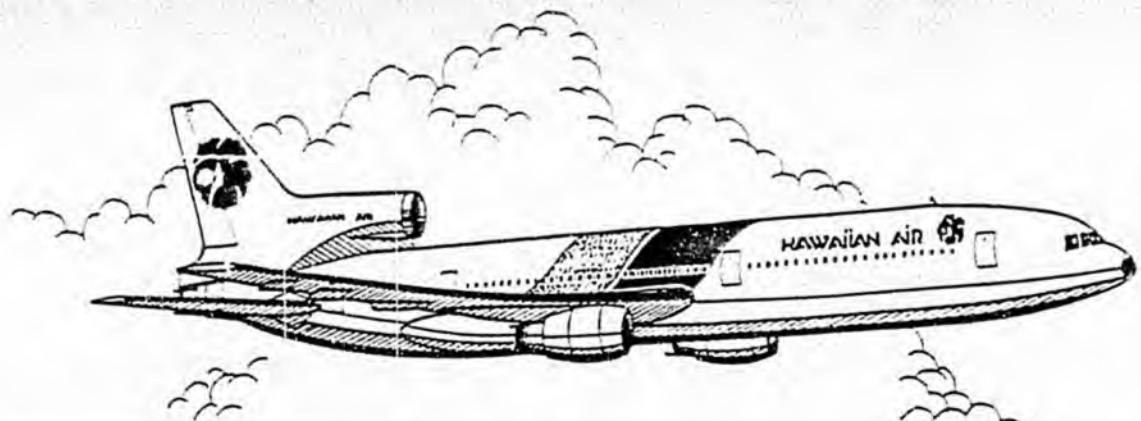


TABLE VII.1
SUMMARY OF AIRPORT-RELATED ECONOMIC IMPACTS ON THE ANCHORAGE ECONOMY
1983
(MILLIONS OF DOLLARS; NUMBER OF EMPLOYEES)

SECTOR	TOTAL OUTPUT	EARNINGS		EMPLOYMENT	
		DIRECT	TOTAL	DIRECT	TOTAL
(1)	(2)	(3)	(4)	(5)	(6)
Air Transportation	\$829.2	\$152.8	\$261.2	4,233	8,052
Visitor-Related	270.6	56.7	92.3	3,306	4,594
Freight Forwarding	26.5	6.3	10.5	220	371
Travel Arrangement	24.8	7.7	11.2	328	456
<u>Total</u>	\$1,151.1	\$223.5	\$375.1	8,086	13,472

SOURCE: Tables VI.5 - VI.9





AIRPORT HAPPENINGS

As announced in October, Hawaiian Airlines is starting non-stop service to Honolulu, Hawaii. The flight, using a Lockheed L-1011 Tri-Jet departs in the morning, arriving in the islands during mid-afternoon.

While it is not new service, Western Airlines has become the wholly owned subsidiary of Delta Airlines. Just this past year Western celebrated its 60th anniversary, making it America's oldest airline. Western has announced that it will continue to operate as Western Airlines until April 1, 1987. Thereafter it will become a part of Delta Airlines and operate under the Delta name and colors. There has been no announced change in service to Anchorage resulting from the acquisition.

As reported in the Anchorage Times on January 4, 1987, British Airways has announced a reduction in service through Anchorage, starting this spring. Most flights between London and Tokyo will be flown non-stop, via Siberia instead of making the traditional refueling stop in Anchorage. This option became available to the international air carrier community in 1985 when the Soviet Union agreed to allow limited access to international air carriers over Siberia in exchange for expanded landing rights at European and Asian cities. British Airways will retain limited weekly scheduled service through Anchorage and has not announced any plans to terminate service at the airport.

PUBLIC INVOLVEMENT

On January 8, 1987, Coffman Associates held a public meeting with members of the Turnagain Community Council to discuss the refined alternatives for the airport. The meeting was well attended and members of the council were extremely interested in the Lake Hood development plan. It was recognized that considerable effort had been conducted by the consultant team to include many suggestions presented during previous meetings which ensure neighborhood compatibility with the airport. Since development recommendations have not yet been finalized, members were advised that comments would be considered in the final program.

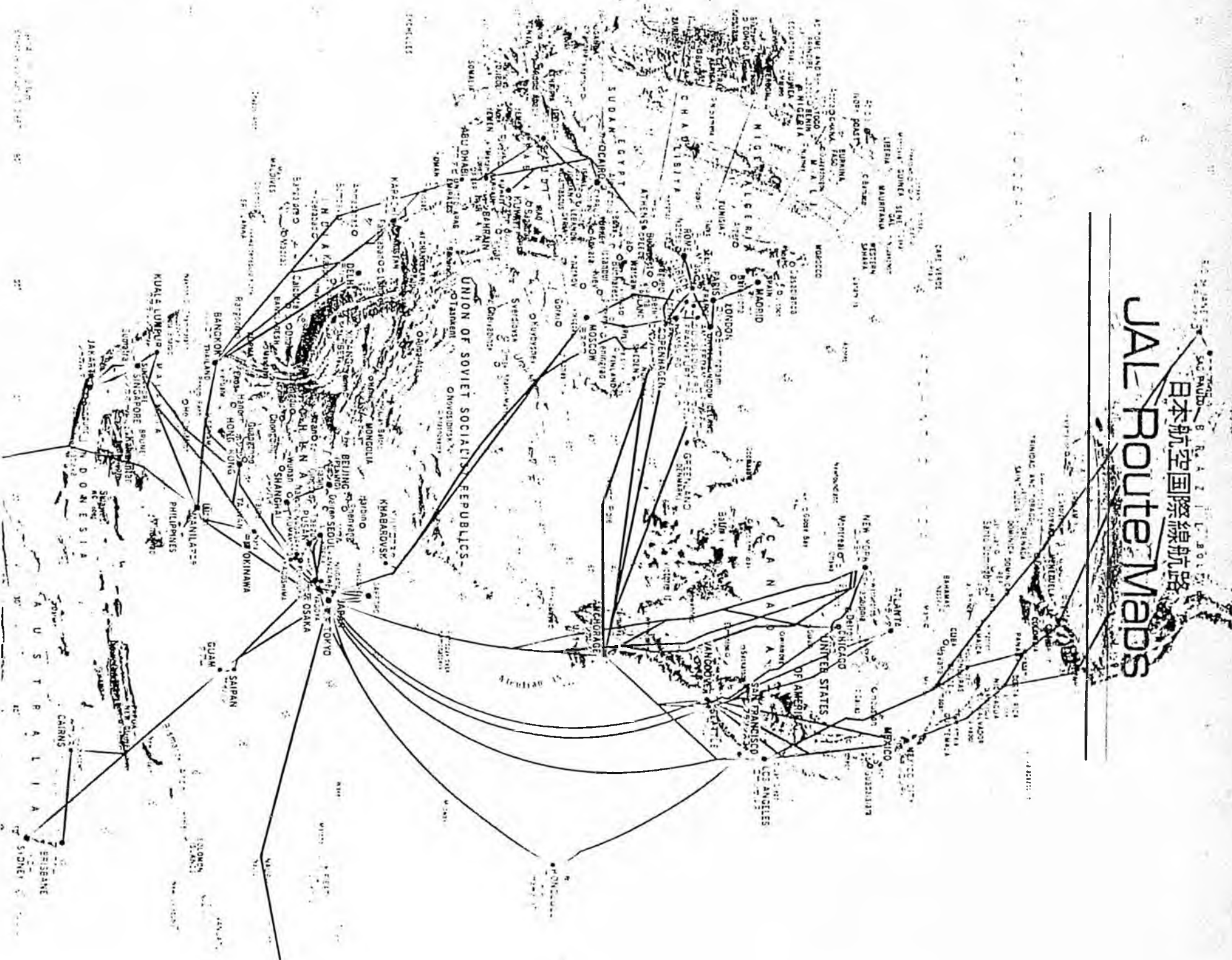
TRIVIA QUIZ

In January, Hawaiian Airlines initiated service between Anchorage and Honolulu, using a Lockheed L-1011 Tri-Jet. The airline has stated that plans are currently being developed to extend the service between Anchorage and Europe, establishing the only through service between Honolulu, Anchorage, and Europe. What is the only other American owned airline to have flown this route?

Answer: Western Airlines (soon to be identified as Delta Airlines through merger action in 1986), but service was discontinued in 1981.



日本航空国際線航路
JAL Route Maps



PAUDD 8 R A I L B O L Y

UNITED STATES OF AMERICA

WESTERN SAHARA

LIBERIA

NEW YORK

CHICAGO

LOS ANGELES

SAN FRANCISCO

VANCOUVER

SEATTLE

PORTLAND

MINNEAPOLIS

DENVER

ST. LOUIS

KANSAS CITY

MEMPHIS

INDIANAPOLIS

CINCINNATI

COLUMBUS

CLEVELAND

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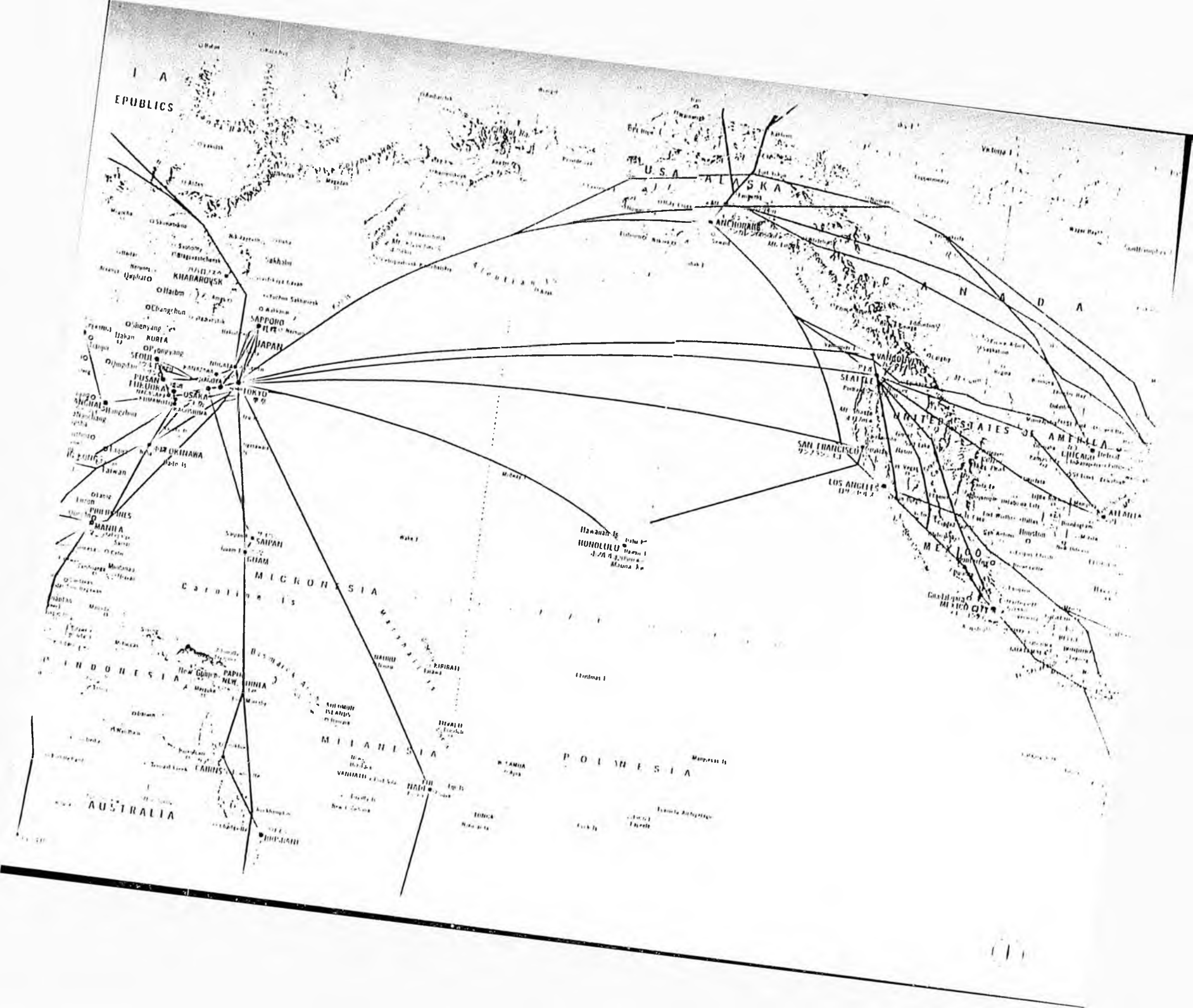
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SCR

32

FISCAL NOTE

REQUEST:

Revision Date: _____
 Title: Urging the state's financial
institutions to adopt more flexible
lending and collection policies.
 Requestor: _____

Agency Affected: Comm. & Econ. Dev.
 BRU: Banking, Securities & Corp.
 Components: _____

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 88	FY 89	FY 90	FY 91	FY 92	FY 93
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	-0-	-0-	-0-	-0-	-0-	-0-
CAPITAL	-0-	-0-	-0-	-0-	-0-	-0-
REVENUE	-0-	-0-	-0-	-0-	-0-	-0-

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

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

ANALYSIS : (Attach a separate page if necessary)

Prepared by: Willis F. Kirkpatrick
 Division: Banking, Securities & Corporations
 Approved by Commissioner: [Signature], Commissioner
 Agency: Department of Commerce & Economic Development

Phone: 465-2521
 Date: January 15, 1988
 Date: January 15, 1988

Distribution (by preparer):
 Legislative Finance
 Legislative Sponsor
 Requestor
 Office of Management and Budget
 Impacted Agency(ies)

Alaska State Legislature

Senator Paul Fischer
Senate District D
Box 784
Soldotna, Alaska 99669
(907) 262-9420 W
262-9269 H



State Senate

While in Juneau
P.O. Box V
Juneau, Alaska 99811
(907) 465-3791

MEMORANDUM

TO: Representative Dave Donley, Chairman
House Labor & Commerce Committee

FROM: Senator Paul Fischer *P.F.*

SUBJECT: SCR 32
(urging state's financial institutions to adopt
more flexible lending and collection policies)

DATE: March 9, 1988

RECEIVED
MAR 12 1987

I would appreciate your scheduling the above referenced resolution before the House Labor & Commerce Committee at your earliest possible convenience.

The resolution merely urges the state's financial institutions to look at adjusting their lending and collection policies to the needs and abilities of their customers by using more flexible approaches in order to stabilize the economy of the state during this difficult economic period. It might be well to note that the Joint Economic Recovery Committee is incorporating some of the language from this resolution into a package they will present to the full legislature.

Senate Resolution No. 32 passed the Senate unanimously on February 10.

PAF/sgn