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7039 HOUSE LABOR & COMMERCE

SOUTH CAROLINA

Senate Bill 689

Creates the Health Benefit Plan Demonstration Project to develop test models for providing health insurance coverage to state residents currently uninsured with an emphasis on the working uninsured. Requires the Health and Human Services Finance Commission to develop, implement and administer the project, which is exempt from the insurance code and insurance regulations. Requires model programs tested by the project to generate funds from employers and employees participating in the program to be utilized in securing the health insurance offered through the program. Sunsets on May 15, 1993. Act 561-90. Effective May 15, 1990.

Senate Bill 1332

Makes technical changes to the South Carolina Health Insurance Pool Act (Act 127, Laws 1989) to, among other things, permit a person paying a premium for health insurance comparable to the pool plan in excess of 150% of the pool rate, or has received notice that the premium for a policy would be in excess of 150% of the pool rate, to make application for coverage under the pool. Effective June 5, 1990. Act 697-90.

UTAH

House Bill 67

Establishes the Utah Comprehensive Health Insurance Pool Act with premiums between 125 percent and 200 percent of individual standard rates. The pool shall be funded through general revenue funding, by premiums paid by pool enrollees, and by employers of employees enrolled in the pool. Employers shall contribute the same dollar amount that such employer would pay for health insurance for similar employees not covered by the pool policy. Dependents of the employee also are eligible for coverage under the pool. The bill was approved 3-12-90.

VERMONT

Senate Joint Resolution 57

Memorializes Congress to enact a national health program. The bill was approved 4-25-90.

VIRGINIA

Senate Bill 480

Allows insurers to issue limited mandated benefit policies, i.e., policies exempt from existing mandates. Such policies may be offered to certain individuals, families, or groups of less than 50 members. Under the proposed law, certain managed care provisions to control costs are required and others are considered optional. This bill would provide for a minimum level of basic benefits of primary, preventative, and hospital care including, but not limited to, a minimum of thirty days of inpatient hospitalization coverage, prenatal care, obstetrical care, and well-baby and well-child care up to age six. The insurance policy must meet disclosure requirements and is subject to prior rate approval and certain actuarial standards. The provisions of this act are scheduled to sunset on July 1, 1994. Chapter 90-795. The bill was approved 4-9-90. (Same as VA HBN 1108)

WASHINGTON

House Bill 2410

Extends current Medicaid coverage of hospice services until June 1991. Chapter 90-25. The bill became effective 3-13-90.

House Bill 2603

Creates a Children's Health Program to provide medical care to children under 18 who live in households with an income at or below federal poverty level and who are not eligible for medical assistance. The health care provided shall be equivalent to that provided to children under medical assistance. Chapter 90-296. The bill became effective 7-1-90.

House Bill 2959

Authorizes school districts to require uninsured students to purchase health insurance coverage from the school district and allows school districts to reduce or waive premiums for low-income students. Chapter No. 90-74. The bill became effective 6-7-90.

Senate Bill 6418

Establishes a health professional substitute resource pool to provide short-term physician, physician assistant, pharmacist, and advanced registered nurse practitioner personnel to rural communities where such health care professionals are unavailable due to provider shortages. Such short-term assistance should complement active health provider recruitment efforts by rural communities where such shortages exist. Chapter 90-271. The bill became effective 3-29-90

Senate Bill 6834

Authorizes the development of basic group disability policies and health care service contracts for employers with less than 25 employees. Under this bill, all forms, policies and contracts shall be submitted to the Commissioner for approval. Chapter No. 90-187. The bill became effective 6-7-90.

WEST VIRGINIA

House Bill 4128

Changes the termination date for the Task Force on Uncompensated Health Care and Medicaid Expenditures from 1990 to 1993. The bill was approved 3-19-90.

WISCONSIN

Assembly Bill 644

Increases the Medicaid income eligibility level for pregnant women and children under six years of age to 133 percent of the poverty level. Also authorizes the state to impose a monthly premium of Medicaid coverage of pregnant women and children under six years of age whose family income exceeds 133 percent of the federal poverty level. Chapter No. 90-351.The bill was approved 4-27-90.

Assembly Bill 822

Creates, in two counties, a pilot volunteer health care provider program for licensed health care providers who make available certain services to low-income uninsured persons ineligible for any aid program. Chapter No. 90-206. The bill was approved 4-13-90.

Senate Bill 397

Expands the state medical assistance program to include coverage for podiatrists' services and appropriate additional money to fund that coverage. Chapter No. 90-333. The bill was approved 4-26-90.

Senate Bill 542

Among other things, increases Medicaid eligibility for pregnant women and children, requires the Health Department to establish and administer a program to subsidize health insurance premiums for AIDS patients, and requires that a health insurance plan that provides coverage for dependent children also provide coverage to a limited extent for adopted and adoptive children. Chapter No. 90-336. The bill was approved 4-27-90.

WYOMING

House Bill 86

Raises Medicaid's income allowance level Medicaid in cases where a covered spouse is institutionalized. That spouse's income will not be considered available to him for Medicaid eligibility purposes as long as it does not exceed two-thirds of the maximum income allowed by federal law. Chapter No. 90-65. The bill became effective 7-1-90.

House Bill 150

Patterned after the National Association of Insurance Commissioners' model, this bill creates a health insurance risk pool for the uninsurable with losses funded by assessments against health insurers. Pursuant to this section, for the total amount of assessments due up to one million dollars from all members in any one calendar year, 100 percent of each member's proportionate contribution to the one million dollars shall be allowed as a credit. This credit shall be applied against any premium tax owed by the member in the year for which the assessment is payable. Chapter No. 90-58. The bill became effective 7-1-90.

HIAA

ON HEALTH CARE FINANCING FOR ALL AMERICANS

HIAA SUMMARY RESPONSE TO CANADIAN-STYLE PUBLIC HEALTH INSURANCE

Many groups are advocating the adoption of Canadian-style public health insurance. In Canada, public health insurance plans run by the provinces cover all residents and are the sole payers for hospital and physician care. Patients have free choice of doctors and hospitals and face no out-of-pocket costs at the time of service. Financing comes almost entirely from taxes.

Public health insurance advocates like Canada's universal coverage, and they claim that Canada has controlled health care costs more effectively than the United States because Canada spends only 9 percent of its gross national product (GNP) on health care, as compared to 11 percent of GNP spent in the United States.

- **Despite these claims, Canada has not controlled health care cost escalation.**

If trends in health care costs per capita are analyzed, it becomes clear that Canada has not fared better than the United States at controlling cost escalation. Over the past 10 years (1977 to 1987), real health care costs per capita grew at an average rate of 4.3 percent per year in Canada, compared to 3.9 percent per year in the United States. The percent of GNP devoted to health care grew more slowly in Canada than in the United States not because Canada controlled health care spending, but because Canada's economy grew faster than ours. Between 1977 and 1987, Canada's GNP per capita grew an average of 2.1 percent per year in real terms, compared to the 1.6 percent per year growth in the United States.

- **Government is bigger in Canada.**

Canadians pay a high price for their public health insurance system and other government-funded services. Excluding defense, the public sector consumes a 30 percent larger share of the total economy in Canada than in the United States (36.7 percent of GNP compared to 28.3 percent of GNP). The net government deficit (across all levels of government) is almost 50 percent larger in Canada when compared to total economic output (Canada's is 3.6 percent of GNP, while the United States' is 2.4 percent of GNP). These statistics are from 1987 figures.

- **Canadians endure long waits for major surgery, and the standard of care is beginning to fall behind current available technologies.**

More importantly, Canadians have to put up with the health care consequences of government attempts to control costs. Because there are no charges to patients, access to care for "sniffles, sneezes, and splinters" is no problem in Canada, but some patients in need of serious surgery have to wait many months for their operations, due to lack of facilities. Modern diagnostic equipment is also in short supply in some provinces, which leads to long waits for such tests as computerized

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tomography scans and mammograms. Provincial authorities tacitly have admitted that waiting lines for heart surg .ry are too long, since they agree to pay for Canadians to have surgery in U.S. hospitals.

This "rationing by queue" is the inevitable result of government attempts to control costs by restricting health care budgets while publicly espousing a commitment to universal access. Because anything new represents an additional cost, bureaucratic budget control discourages innovation, perpetuates existing inefficiencies, and leads to obsolescence.

The strength of the American health care system is its ability to adapt quickly to changing needs and to develop and rapidly employ new and better ways of treating illness. Such responsiveness is clearly not possible when all major resource allocation decisions are made by a government, particularly a government concerned primarily with cost control.

- **Controlling health care budgets does not eliminate unnecessary care and waste in the health care system.**

While arbitrarily restricting access to expensive high-technology procedures, Canada's provincial health plans make no attempt to determine whether care ordered by physicians is really necessary, despite the large volume of evidence (in the U.S. and elsewhere) that a significant proportion of services ordered by physicians are unnecessary, ineffective, or actually counter-indicated. Inappropriate care, which may constitute as much as 25-30 percent of all care rendered according to some estimates, is the real cause of waste and excess expense in the health care system.

- **Canadians are stuck with a "one size fits all" system.**

Canadians lack choices—not of specific doctors and hospitals, but of the overall delivery system and the extent of coverage. In the United States, if an employment-based group chooses to reduce its current outlays for insurance premiums and protect themselves only against very major medical bills, for example, they can buy lower-cost insurance.

These choices are not available to Canadian citizens. All must belong to the same system and accept its deficiencies as well as its benefits, unless they choose to be restricted to the very few private hospitals and physicians or to seek care outside the country. Thus, if the government seeks to control costs by restricting the availability of hospital beds or new equipment, citizens who need care must either wait for service or pay privately to go outside the system.

- **The Canadian system would be in worse shape if it did not have the U.S. health care system right next door.**

First, Canadians need not spend large sums developing new medical technology—they can wait for the United States to develop it and reap the benefits when it is ready.

Second, the United States relieves the pressures that would otherwise build requiring expansion of the Canadian system and additional spending. For example, with few exceptions (e.g., cataract surgery), it is almost impossible for individuals to shorten their waiting periods for surgery within Canada because there are virtually no private hospitals; but Canadians who are willing and able to pay privately to obtain care sooner can come to U.S. hospitals and clinics. The provinces had no other short-term alternative for reducing surgical waiting lists. If the United States were to adopt the Canadian system, this safety valve for Canadians would no longer exist, nor would there exist one for Americans.

• Conclusion

Clearly, the United States must work to assure access to health care for all Americans. Equally clearly, we must do a better job of containing health care cost increases, while we also maintain quality of care. But public insurance based upon the Canadian model is not an approach that would work well in the United States.

The U.S. private market is responding to the growing demand for cost containment and quality assurance and is moving aggressively to implement and improve managed care systems that will meet this dual need. Private insurers also recognize the need for universal availability of health care coverage and have developed specific proposals to make coverage available to the broad spectrum of Americans who currently are without.

June 1990

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HIAA

ON HEALTH CARE FINANCING FOR ALL AMERICANS

HIAA SUMMARY RESPONSE TO S. 768; THE BASIC HEALTH BENEFITS FOR ALL AMERICANS ACT

HIAA agrees that proposals to address the uninsured must include significant expansion of public coverage. Such expansion should be targeted to those populations most in need — the poor and near poor populations.

- **HIAA agrees that special tax subsidies and exceptions for small employers are necessary and appropriate.** HIAA supports providing financial assistance to small employers who face a substantial burden when they try to provide private coverage. We also support extending the 100 percent income tax deduction to self-employed individuals. Finally, HIAA supports the concept of making lower cost tailored plans available to very young firms.
- **HIAA supports the concept of assisting low income workers in their achieving the cost sharing and premium contributions associated with employer-based coverage.**
- **HIAA supports an Employee Reduction Income Security Act (ERISA) preemption of state benefit mandates.**
- **HIAA opposes employer mandates or other efforts to compel employers to provide health benefits through tax penalties.** We are concerned with the negative employment effects associated with employer mandates and believe that large scale expansion of the employer-based system must be met with successful efforts to contain rising health care costs.
- **HIAA believes that the uniform regional/state rates envisioned under the bill would create major market distortions and would prove to be poor economic policy.** This structure would (a) create tremendous cross-subsidization from areas with lower health care costs to areas with higher health care costs; (b) break the link between costs generated by health care use and health care premiums, thereby eliminating incentives for employers to seek out the most efficient local financing and delivery systems and also to maintain a safe work environment; and, (c) reduce employer economic incentives to locate in lower cost, nonmetropolitan regions. We recommend another approach, which is outlined under HIAA policy.
- **HIAA believes that the current structure of the public program would result in an undesirable, unnecessary, and costly shift of individuals from private to public coverage.** When fully phased in, the public coverage under S. 768 would be available to anyone who does not have employer-based coverage, regardless of income or whether coverage is available through a private source. Further, the open-ended structure would, in all likelihood, exacerbate enrollment problems and create fiscal difficulties (due to adverse selection). It will also instigate perverse incentives for states to make fiscal decisions based

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upon actions by neighboring states. In other words, if voters perceive that they are subsidizing the public coverage of neighboring states (indirectly through federal matching funds), they may be inclined to expand their own program beyond what is believed to be necessary or financially prudent. This phenomenon would be more likely under the broad-based program envisioned by the Act than under the current Medicaid program.

- **While HIAA recognizes the need for appropriate reform of the insurance marketplace, we oppose the responsibilities delegated to the U.S. Secretary of Health and Human Services under the bill.** There already exists, at the state level, a highly developed regulatory structure which carries out many of the functions which would be placed under the control of the U.S. Secretary of Health and Human Services.

Initiatives to address the access to health care coverage issue should build and improve upon the existing public/private system without promoting large scale and unnecessary substitution of existing sources of coverage. Proposals to expand private coverage should not hastily mandate or compel employers to provide health benefits, but should instead focus on making coverage more available and affordable. Such efforts should include introducing a range of small employer insurance market reforms; establishing a reinsurance mechanism to guarantee availability of coverage and making the small employer market reforms feasible; making lower cost prototype benefit plans possible; and assisting financially needy employer groups and individuals with their purchase of private coverage. For more details regarding the above, see the HIAA Summary of Recommendations on Expanding and Improving the Health Care Financing System.

HIAA

ON

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HIAA SUMMARY RESPONSE TO THE PEPPER COMMISSION'S RECOMMENDATIONS FOR THE UNDER 65 POPULATION

The Bipartisan Pepper Commission released a series of recommendations for reforming our nation's health care system. The report makes a number of positive recommendations which HIAA supports.

For instance, HIAA supports the Pepper Commission proposals to expand government coverage to poor and near poor individuals and to target tax subsidies to small employers. HIAA also supports targeted government assistance to low income workers to help them pay the premium contributions and cost sharing associated with their health plan. HIAA supports the concept of a federal preemption of state benefits and provider mandates and many of the underlying concepts for reform of the small employer health benefit market. HIAA also supports a number of the suggestions for constraining growth in health care costs and for assuring the delivery of quality care through managed care and other initiatives aimed at establishing better practice guidelines and standards of care, including the study and demonstrations on medical malpractice reform.

However, the report also includes elements which are politically and economically unfeasible, e ments that HIAA cannot support.

- It is HIAA's belief that scarce public funds and assistance should go first and foremost to the needy. The proposal unnecessarily makes public coverage available on a very broad scale.

  The program's structure would likely lead to costly substitution of public coverage for existing private coverage. One would expect employers in high cost regions and higher cost employers to buy disproportionately into the public plan (since under the public plan the employer's costs are capped at a defined percentage of payroll). For employers buying into the public plan, the plan eliminates any linkage between the cost of coverage and the true health care costs incurred by the employer (which therefore eliminates incentives to increase efficiency and to maintain healthy work environments). Further, the concentration of high cost employers in the public plan would lead to large public sector losses which would necessitate either (a) an infusion of public dollars funded by increasing tax revenues to subsidize the high cost employers, or (b) efforts to enlist lower cost employers in the public plan (e.g., by lowering the payroll tax). The problem with alternative "a" is that the American public appears unwilling to accept a major tax increase (particularly when revenues will assist other individuals). A major problem with alternative "b" is that it would institute an inflexible public program for a larger segment of the population, something that neither employers nor the American public wants.

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In almost any scenario, employers located in regions with lower health care costs would wind up cross subsidizing, through public funds, those employers in higher cost regions that have opted into the public plan.

Employers in many cases would find it advantageous to provide private coverage for higher income employees and cover lower income employees (e.g., part-time or temporary) with the public plan. From a labor standpoint this may be viewed as unfair and discriminatory.

Employees' preferences and needs would be subject to an arbitrary decision by the employer, who would determine whether it was more advantageous to pay for public or private coverage.

HIAA statistics strongly suggest that the public program will severely limit its provider payment rates, thereby forcing a cross subsidy from other payers.

- While HIAA supports the general direction being taken in small employer market reform, specific requirements that coverage be sold on "the same terms to all employers" are troubling. This implies a crude form of community rating, which is highly problematic for a number of reasons. One, it would lead to more employers that pay higher premiums. Their number would be substantially greater than the employers that received lower premiums. Two, making coverage substantially more costly for the majority of small employers may cause many employers to drop coverage or seek refuge in self insurance. Three, it entirely breaks the link between an employer's true health care costs and the premiums which employers pay. This mitigates an employer's incentive to seek out more efficient financing and more efficient delivery systems in order to maintain a safe and healthy work environment.

- The "basic" benefit package identified in the Commission's proposal needs to be more basic. Perhaps most importantly, the "limited" mental health benefit could prove to be very costly.

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HIAA SUMMARY RESPONSE TO THE HERITAGE FOUNDATION PROPOSAL FOR HEALTH SYSTEM REFORM

The Heritage Foundation proposal for health system reform and cost containment makes several valid points. Perverse incentives (though not just consumer incentives) are a main cause of cost escalation. Consumers do need incentives to be concerned about costs of care. Government price and budget controls can produce undesirable consequences. A market-based strategy must be a major part of the solution.

On the other hand, the Heritage Foundation proposal is inadequate in several important ways.

- The proposal places far too much reliance on the individual consumer's ability to solve their coverage problems and unwisely eliminates employer-based coverage. Employers, unlike consumers, have the clout to negotiate with providers to change the system. Because they have both the incentive and the leverage to bring about system changes, employers are critical actors in the effort to bring costs under control. Moreover, the administrative and marketing costs for employment-based plans are much less than if all plans were sold to individuals. Simply giving individual consumers incentives to choose a low-cost plan will not control costs. With so many different plans and the complexity of many benefit structures, most consumers would not have the time or the skill to make reasoned judgments about the level of benefits that would best suit them, about the adequacy of coverage, about the value of the benefits relative to the price, and about the quality of providers' services. The screening process that employers now provide to help decide which plans to offer employees greatly reduces the complexity of the task.
- The proposal totally ignores the critical role that providers, especially physicians, play in determining resource mix and cost of care. The assumption is that if consumers have proper incentives, then that will be enough to force providers to become more efficient and less costly. Given the highly technical nature of medicine, the cost-increasing incentives of fee-for-service physician reimbursement, and the natural reluctance of physicians to change the way they deliver care, this assumption is unrealistic.
- The proposal offers no details of any kind to illustrate the process by which consumer incentives will be translated into efficient delivery systems designed to produce high-quality, low-cost care. The argument assumes that making consumers cost-conscious will produce the desired outcome. Yet, major structural changes are required if costs are to be contained; these changes do not just happen. We believe that managed care systems are a major part of the answer. Attention must be addressed to the conditions and mechanisms that are necessary to produce managed care systems and the other system changes that are necessary.

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- The proposal vastly underestimates the problems of adverse selection. If consumers have a choice of many different plans, rather than just a few, competitive pressures will force the plans to compete not by trying to provide services more efficiently, but by trying to attract healthy individuals. Healthy individuals, with low probability of high expenses, will naturally want to join a plan that insures similar low-risk individuals, since the cost will also be much lower. The advantage to be gained by underwriting low-risk individuals will overwhelm any savings that could be realized through providing services more efficiently. Even with the tax-credit subsidy, the high-risk people will find the cost of insurance very burdensome. If the Heritage approach is not the answer to cost control, what is? The solution is to be found in the development of improved managed care. Managed care systems, of which HMOs and PPOs are the best-known examples, are designed to monitor treatment decisions to assure that care is appropriate and efficiently provided. They provide comprehensive, integrated care through selected panels of providers who are chosen because they are known to be cost-effective, and who agree to practice within defined constraints to assure quality and efficiency. The closed nature of the provider panel and the incentives for consumers to use panel providers creates an environment where standards to assure appropriate cost-effective care can be developed, implemented, and accepted by both providers and patients. For physicians, the attraction of managed care systems is an assured supply of patients. For purchasers, the attraction is high-quality, less costly care. The insurance industry has made a major commitment to the development of such systems and believes that they must be a major part of any plan for health system reform.

HIAA

ON

HEALTH CARE

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MANAGED CARE

BACKGROUND: The high cost of health care is a major problem for the United States. All who pay—employers, individuals, and government—are burdened by continual increases in health expenditures. Moreover, escalation of health costs greatly complicates the task of finding ways to provide coverage for the large number of Americans who are without either public or private health insurance.

Although cost escalation has many causes, research shows that one key problem is that patients receive much care that is not appropriate for their condition. Some get care that is more intense and expensive than necessary. Others receive care that is not beneficial and may even be harmful. Eliminating such inefficiencies—which may account for 25 percent or more of medical expenditures—is clearly a critical objective, both as a way of reducing costs and improving quality of care.

Payers of health care are aware of such inefficiencies and are demanding more accountability and better performance from those who make health care decisions in order to assure that patients receive good value for money spent. Increasingly, managed care is recognized as the best mechanism for carrying out such improvements. The key objective of managed care is to assure that patients receive appropriate care, that is, high quality care efficiently provided in the least costly setting.

DEFINITION: Because it is still evolving, managed care embraces a variety of existing and developing structures. It may be defined as systems that integrate the financing and delivery of appropriate health care services to covered individuals by means of the following basic elements:

- Arrangements with selected providers to furnish a comprehensive set of health care services to members;
- Explicit standards for the selection of health care providers;
- Formal programs for ongoing quality assurance and utilization review; and
- Significant financial incentives for members to use providers and procedures associated with the plan.

Managed care organizational structures are evolving in response to marketplace demands and will continue to do so. Today's structures include health maintenance organizations (HMOs), preferred provider organizations (PPOs), and exclusive provider organizations (EPOs), as well as mixed arrangements that combine elements of HMOs, PPOs and indemnity plans to accommodate employer and operating environment requirements.

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Managed care plans arrange with selected providers to furnish health care services to plan members. Explicit criteria are used for the selection of providers, and formal programs for ongoing review of the quality and appropriateness of services are incorporated into the plan.

Plans provide financial incentives for covered individuals to use providers who deliver appropriate quality care. In some managed care plans, the cost of services is covered only when health care is received from selected providers. Other managed care plans provide individuals more latitude in the choice of providers. Out-of-pocket costs, however, are usually higher when out-of-plan providers are chosen.

Some state legislators are concerned that managed care, including both contracting arrangements with providers and utilization review techniques, could adversely affect the quality of health care. Their concerns have been encouraged by some associations of providers representing hospitals, physicians, dentists, pharmacists and allied health professions. These groups have drafted and advocated state legislative proposals that would restrict or prohibit the operation of managed care programs.

HIAA POSITION: HIAA is firmly committed to the expansion of managed care programs and techniques in order to assure high-quality, cost-effective health care. Managed care systems have the means to avoid unnecessary and inappropriate care.

Therefore, HIAA is opposed to legislation or regulations that would impose barriers to the development and implementation of managed care in its current and evolving forms. Legislation or regulation that unduly limits insurers' ability to carry out rigorous utilization review is one such barrier. Legislation that opposes utilization review takes many forms, but generally seeks to put inappropriate restrictions on who can conduct reviews and what can be reviewed.

HIAA is also opposed to legislation that would restrict an insurer's freedom to form networks or contract selectively with providers. Legislation that opposes networking also takes many forms, but generally seeks to put restrictions on the ability to pay providers anything but their usual and customary fees, or to contract with a limited number of providers.

HIAA believes:

- Insurers should be free to negotiate whatever price they can with providers. One important way to reduce costs is to be able to buy provider services at lower prices, and managed care systems need to have freedom to negotiate lower prices. On the other hand, in some instances plans may wish to offer higher-than-usual fees to especially efficient providers.
- Insurers should be able to pay providers in ways that create appropriate incentives. If provider reimbursement systems reward high-cost medical practice, it will be very difficult to reduce costs. Managed care systems need to be able to alter reimbursement incentives to reward efficient providers. Severe restrictions on capitation payment, for example, are inappropriate and unwarranted.
- State laws should not place artificial limits on the amount of consumer cost sharing that can be imposed on PPO plan enrollees who choose to get care from off-panel providers. If a PPO has a panel of providers that can provide

needed high-quality services more efficiently than other providers, it is entirely appropriate to require consumers who choose not to use these efficient providers to pay the extra costs. HMOs, which all states allow, do not pay anything when consumers receive care from non-HMO providers.

- Legislation should not establish inappropriate barriers to insurer efforts to establish effective utilization review programs and should require providers to make available, at a reasonable cost, patient records and other information necessary to monitor cost and quality of care. Monitoring medical practice patterns is critical to managing care. If reviewers cannot get access to medical records at reasonable cost, or if excessive restrictions are put in place to limit who does utilization review or what the process will be, managed care plans cannot accomplish the critical task of encouraging providers to become more efficient.
- Insurers who are negotiating to form provider panels should not be compelled to enroll every provider who wishes to be included. A key mechanism that managed care plans use to constrain costs is to contract only with efficient providers. If plans are required to include on their panels all willing providers, this critical element of control is eliminated.
- States should not mandate that insurers cover services and categories of care, since doing so often adds to costs and limits the plan's ability to develop cost-effective benefit packages. Research evidence shows that legislation that requires coverage of certain provider categories or particular services generally causes a net increase in costs. The buyers of insurance plans, not state government, should be the ones who decide what services and provider groups should be covered. Legislation mandating coverage of particular provider groups is often simply a reflection of that group's desire to create demand for their own services as a way of enhancing income.

HIAA supports the concept of physician peer review as a method of determining appropriateness of care. In doing peer review, however, it is not appropriate to rely solely on local peer assessment. Studies of differences in patterns of medical practice from area to area within a state demonstrate that the typical method of treatment in one community is often significantly different from that in another community even though the conditions of the patients are essentially identical. The differences, in other words, are not medically justified. Thus, local habit or customary practice is not necessarily the best standard for assessing medical appropriateness or necessity for a given treatment.

The collective judgment of physicians who are experts in a given field and who have done a systematic study of the scientific research must ultimately form the basis for determining what is appropriate care in a given situation. It is for this reason that HIAA supports the development of medical practice guidelines and protocols. When developed, these can form a rigorous, scientifically defensible standard for educating physicians about the best medical practice and for judging the appropriateness of care.

GLOSSARY: Below is a list of some of the current managed care structures now available:

Health Maintenance Organization (HMO): This was the original managed care arrangement, first emerging as prepaid group practices in the 1930s. The

name "health maintenance organization" was coined in the early 1970s, and was given to 1973 federal legislation promoting its development. HMOs provide:

- An organized system for providing health care in a certain geographic area, as well as responsibility for providing or otherwise assuring delivery of that care;
- An agreed-on set of basic and supplemental health maintenance and treatment services; and
- A voluntarily enrolled group of people.

In exchange for a set amount of premium or dues, HMOs provide all the agreed-on health services to their enrollees; there are generally no deductibles and no or minimal copayments. The HMO bears the risk if the cost of providing the care exceeds the premium received. There are now several types of HMOs:

- The staff model, where providers are directly employed by the HMO;
- The group model, where medical groups contract with the HMO (Kaiser plans are the best-known example of this type);
- The independent practice association (IPA), where the HMO contracts with physicians in independent practice, or with associations of independent physicians. IPA physicians frequently have arrangements with more than one HMO; and
- The network model, which contracts with two or more independent group practices.

Preferred Provider Organization (PPO). A PPO consists of groups of hospitals and providers that contract with employers, insurers, third-party administrators or other sponsoring groups to provide health care services to covered persons and accept negotiated fee schedules as payment for services rendered. There are different sponsoring arrangements:

- Hospital-sponsored PPOs, which often include a network of institutions in order to cover a wider geographic area, as well as many of the physicians on their medical staffs;
- Physician-sponsored PPOs, which are developed by local medical societies, other local professional associations or clinics, or groups of physicians;
- Third-party payer-sponsored PPOs, which include those initiated by commercial insurers and Blue Cross and Blue Shield plans;
- Entrepreneur-sponsored PPOs, which create a broker relationship with the entrepreneur acting as an intermediary between the provider and payer of service;
- Employer- or labor-sponsored PPOs, which contract directly with providers on behalf of their employees or members;
- Other provider-sponsored PPOs, which are developed by nonhospital and nonphysician providers, such as dentists, optometrists, pharmacists, chiropractors and podiatrists, through their professional associations, local groups or clinics.

Exclusive Provider Organization (EPO). People belonging to an EPO must receive their care from affiliated providers; services rendered by unaffiliated providers are not reimbursed.

Point-of-Service Plans. Also known as open-ended HMOs or PPOs, these plans permit insureds to choose providers outside the plan at any time yet are designed to encourage the use of network providers. If a provider is affiliated with the HMO or PPO, the service is covered (perhaps after a modest copayment). If an out-of-network provider is chosen, reimbursement may be significantly reduced.

A number of managed care techniques are used to assure quality and appropriate care. These include, but are not limited to, quality assurance, utilization review, case management and use of a primary care physician. Although the combination of elements will differ among plans, each managed care plan operates as an organized system where patient services are subject to review and coordination by health professionals.

- Quality assurance is a process by which a managed care plan monitors and takes action as necessary to assure that quality care is delivered by selected providers. The process measures the extent to which quality has been attained and periodically reevaluates health care to assure that established standards are being met.
- Utilization review is a system of reviewing the medical necessity and appropriateness of patient services within guidelines developed by physicians. Performed by health care professionals, it is comprised of several processes and may be used for both inpatient and outpatient services. Processes may include preadmission certification, application of practice guidelines, continued stay review, discharge planning, second surgical opinion and retrospective review. Because of the explosion of costs in all aspects of ambulatory care in recent years, programs to require preauthorization of ambulatory procedures are now evolving.
- Preadmission certification is a process in which a health care professional (such as a registered nurse) evaluates an attending physician's request for a patient's admission to a hospital by using established medical criteria.
- Continued stay review, also called concurrent review, is a process whereby a review organization continues to examine medical information during a patient's hospital confinement to determine the need for continued hospitalization.
- Discharge planning is a process in which a health care professional from a review organization works with an attending physician and hospital staff to arrange for appropriate discharge of a patient from the hospital, including a plan for the patient's subsequent care. Its purpose is to determine when patients are ready to go home, perhaps with the support of a nurse or other home health provider, or are able to be transferred to a nursing home.
- Second surgical opinion programs require patients to seek a second surgeon's opinion if elective surgery is recommended for certain conditions. Elective surgery is defined as that which can be avoided or delayed without undue risk to the patient and which allows sufficient time to seek another opinion.

- Retrospective review provides for the establishment of a utilization profile of inapproppriate care for monitoring trends and addressing excessive use or cost.

Other managed care techniques include case management, which is a process that provides a comprehensive plan of care and rehabilitation for people suffering from severe conditions such as trauma, premature birth or AIDS. Through flexible interpretation of plan provisions, case management coordinates the use of all appropriate types of therapy and equipment in the most appropriate setting. Case management often supports alternatives to institutional care, such as physical therapy and other services delivered in the home, that achieve better patient outcomes at lower cost.

In many managed care plans, a primary care physician serves as the initial screening, testing, treatment and referral source for a patient. This physician oversees health care services rendered to patients by other providers and assumes continuing responsibility for the overall course of treatment.

HB

46

(7)

[redacted]OUSE COMMITTEE REPO[redacted]

Date Referred: March 13, 1991 FURTHER REFERRALS: Finance

Date of Committee Action: 3-26-91

The LABOR AND COMMERCE Committee considered: HB 46

HOUSE BILL NO. 46 ESTABLISHING THE AK SPACEPORT AUTHORITY

"An Act creating the Alaska Spaceport Authority; providing an exemption from municipal sales and use taxes; and providing for an effective date."

RECOMMENDATIONS: [ ] the same title
be replaced with CSHB 46 (CITT) [ ] a new title

[ ] have attached amendments(s)

[X] do pass

[ ] do not pass

[ ] no recommendations

[ ] individual recommendations

[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept)

[ ] fiscal impact _____

[ ] zero fiscal note _____

APPROVES PREVIOUS: (Dept/Date)

[X] fiscal note(s) Commerce + Econ Dev.

[ ] zero fiscal note(s) _____

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
	✓				
				X	
	—				
	✓				

CHAIRMAN'S SIGNATURE

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. CSHB 46

Revision Date: _____ Department Affected: Commerce & Economic Dev.

Title: Establishing the Alaska Aerospace Development Corporation BRU: Alaska Aerospace Development Corporation

Component: _____

Sponsor: Rep. Moyer

Requestor: Rep. Moyer **COMPONENT SERIAL NO.** | | | | |

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES	126.4					
TRAVEL	37.6					
CONTRACTUAL	118.0					
SUPPLIES	1.5					
EQUIPMENT	19.0					
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	302.5	*	*	*	*	*
CAPITAL						
REVENUE						

FUNDING: (Thousands of Dollars)

GENERAL FUND	302.5					
FEDERAL FUNDS						
OTHER Corp. Rec.		*	*	*	*	*
TOTAL	302.5	*	*	*	*	*

POSITIONS:

FULL-TIME	2					
PART-TIME						
TEMPORARY						

Estimate of current year impact: _____

ANALYSIS: (Attach a separate page if necessary.) Assumes the AADC will become effective July 1, 1991. Initial year would be funded from the general fund.

*Subsequent years will be funded from corporate receipts of the AADC revolving fund. Since this is a new organization, it is not possible to predict annual costs beyond FY 92.

Prepared By: Guy Bell, Director Phone: 465-2587

Division: Administrative Services Date: _____

Approved by Commissioner: Glenn A. Olds Galloway Space Heat II

Agency: Department of Commerce & Economic Development Date: _____

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

FISCAL NOTE - CSHB 46

ALASKA AEROSPACE DEVELOPMENT CORPORATION

Personal Services:		$126.4
Executive Director (26A)	$ 90.1	
Secretary I (10B)	$ 36.3	
Travel:		$ 37.6
Executive Director	$ 20.0	
Board (4 meetings/year)	$ 12.0	
Honorarium/Stipend	$ 5.6	
Contractual:		$118.0
Office Space (500 sq. ft. @ $2.00/ft)	$ 12.0	
Professional Services (bond counsel engineering, actuarial, etc.)	$100.0	
Utilities (phones, other)	$ 6.0	
Supplies:		$ 1.5
Office Supplies	$ 1.5	
Equipment:		$ 19.0
Telecopier	$ 3.0	
Computer/Word Processing	$ 10.0	
Furniture	$ 6.0	
FY 92 TOTAL		$302.5

9111D

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. CSHB46(ITT

Revision Date:
Title: Creating AK Aerospace Development Corporation
Sponsor: Moyer
Requestor: ITT

Department Affected: University of Alaska
BRU: ALL
Component:
Component Serial No. ALL

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY92	FY93	FY94	FY95	FY96	FY97
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL						
REVENUE	0.0	*	*	*	*	*
FUNDING: (Thousands of Dollars)						
GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0
POSITIONS:						
FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact:

ANALYSIS: (Attach a separate page if necessary.)

SEE ATTACHED

Prepared by: Brian Rogers
Division: Vice President for Finance
Phone: 474-7448
Date: 3/7/91

Approved by: Brian Rogers, Vice President for Finance
Agency: University of Alaska
Date: 3/7/91

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Fiscal Note - Bill #CSHB 46 (ITT) Analysis

Creation of the Alaska Aerospace Development Corporation will not entail new costs by the University of Alaska. Any costs of university participation in meetings with the corporation will be borne from existing funds.

Depending on the success of the Alaska Aerospace Development Corporation in attracting new aerospace related businesses to use the Poker Flat Research Range, the university may receive revenues to support operation of the research range in fiscal '93 and thereafter. Until the corporation is operational, however, the university has no way of knowing what those revenues may be.

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. HB 16

Revision Date: _____ Department Affected: Administration

Title: An act creating the Alaska Spaceport Authority BRU: Risk Management

Component: _____

Sponsor: Mover, Kookonen

Requestor: Labor & Comm. & Ec. Dev. COMPONENT SERIAL NO. [ ][ ][ ][ ]

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
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	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS:

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

Estimate of current year impact: Nil.

ANALYSIS: (Attach a separate page if necessary.)
See following page

Prepared By: Don Hitchcock Phone: 465-2180

Division: Risk Management Date: 2-27-91

Approved by Commissioner: Millett Keller

Agency: Department of Administration Date: 2/1/91

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90

1991 LEGISLATION
POSITION PAPER
DEPARTMENT OF ADMINISTRATION

Division Risk Management Bill Number HB 46

Bill Title An act creating the Alaska Spaceport Authority

Position Statement: Explain briefly what bill does, its impacts and Department's position, i.e. a) support, b) do not support, c) neutral or d) oppose.

This act creates a new public corporation of the State, with a board of directors, executive director and support staff. It is unclear as to the extent of the increased staffing involved with inherent workers' compensation, general and professional liability exposures.

It is mentioned that the authority will procure and maintain insurance coverage for liability that may arise as a consequence of its activities, and its buildings, structures and other facilities against loss. Again there is no indication of the extent of such facilities, although we would presume they would approach Risk Management for such coverages as it is more economical to participate in the self insurance program operated by Risk Management.

Casualty risks (workers' compensation, general, auto and professional liability) could be picked up as part of the standard assessment on the Department of Commerce's monthly payroll. All other coverages would be billed on a direct RSA basis (property, aviation, etc.)

Our position is neutral — this is only a reminder that insurance costs could be involved depending on Alaska Space Port Authority activity.

APPROVED:

Director Donald Hitchcock Division Risk Management
print name

Signature [signature] Date 2/27/91

Commissioner Millett Keller

Signature _____ Date _____

(For more information, call Barbara Pritchett 465-2200) Rev. 1/23/91

HOUSE SPECIAL COMMITTEE ON INTERNATIONAL TRADE AND TOURISM

ALASKA STATE LEGISLATURE

P.O. BOX V, JUNEAU 99811
(907) 465-2973

MEMORANDUM

To: Members, House Special Committee
on International Trade and Tourism

Feb. 27, 1991

From: Representative Tom Moyer
Chairman

Re: Proposed CSHB46, establishing the Alaska Aerospace Development Corp.

The purpose of this memo is to provide you a general overview of this legislation, of which I am the sponsor.

Alaska has enormous but unrealized potential in a resource too often overlooked - the space above us. This bill is an attempt to take advantage of that resource and to bring to Alaska a share of the rapidly expanding commercial space industry.

Alaska is home to Poker Flat, the nation's only civilian launch facility. Because of its high latitude, Poker Flat is an optimum site to launch rockets into polar orbit. Already, Alaska has been contacted by private companies interested in launching rockets carrying communications equipment. By expanding Poker Flat's current sub-orbital capacity and perhaps developing other launch sites, Alaska could find itself at the forefront of government and private industry research into global warming, land use management and weather patterns and other commercial applications.

Proposed CSHB46 would create a public corporation, the Alaska Aerospace Development Corp., to be managed by a seven-member board of directors appointed by the governor. Affiliated with the University of Alaska, the corporation would promote space and aerospace-related economic development. The vital educational and research functions of the university would be preserved and enhanced.

The corporation would have the authority to issue bonds to improve launch facilities and receive grants or other funds. The Poker Flat range was established in 1969 and about 230 rockets and another 900 smaller weather rockets have been launched from the site.

POKER FLAT RESEARCH RANGE UPGRADE

Geophysical Institute-University of Alaska Fairbanks
Fairbanks, Alaska

UPGRADE

POKER FLAT RESEARCH RANGE

AS THE ONLY ARCTIC ROCKET RANGE ON U.S. SOIL, POKER FLAT provides cost-effective support for varied scientific needs, including the work necessary to understand the massive effects of solar activity on the earth and in the unexplored regions of our solar system.

230 MAJOR HIGH-ALTITUDE ROCKETS HAVE BEEN LAUNCHED at the range since it was established in 1969 by the Geophysical Institute, University of Alaska Fairbanks. Sounding rocket launches support the work of researchers at NASA, the Defense Nuclear Agency, Air Force Geophysics Laboratory, university researchers and others.

AS THE LARGEST LAND-BASED RANGE IN THE WORLD, WITH DOWN-RANGE land area extending north to the Arctic Ocean, Poker Flat provides excellent payload recovery. The suborbital down-range limit is 6,000 kilometers.

POKER FLAT INCORPORATES ROCKET ASSEMBLY AND LAUNCH capabilities, along with the telemetry receiving stations and ground-based diagnostics needed for launch decisions for space, aeronomy, and atmospheric science experiments. Its location provides excellent access for research in the northern polar region.

UPGRADE TO A WORLD CLASS SPACE FACILITY

AS THE NATIONAL ARCTIC SPACE AND ENVIRONMENTAL RESEARCH Center the upgrade supports the U.S. position in the forefront of upper-atmosphere research. It will improve our capability to monitor atmospheric conditions as they relate to earth systems science and questions of global climate change.

THE UPGRADED FACILITY WILL PROVIDE THE FULLY INTEGRATED land- and space-based observatories that are required to keep pace with technology and space initiatives in the 1990s and beyond.

IT WILL INCORPORATE RENOVATED OR REBUILT LAUNCH PADS, PAYLOAD assembly buildings, and control facilities; an integrated command center and optical observatory; integrated air sampling station and data-handling capabilities; improved observation networks, including down-range observatories in rural villages which invite the participation of rural Alaskans in near-earth space research.

INTENT OF LEGISLATION TO MODERNIZE THE UNITED STATES NORTHERN HIGH LATITUDE MISSILE TEST FACILITY

- The Poker Flat Research Range (PFRR) is the only high latitude rocket launch facility available to the Department of Defense (DOD) and the National Aeronautics and Space Administration (NASA). An average of more than ten large sounding rockets have been launched per year for the past twenty years into the otherwise inaccessible polar upper atmosphere.

- It is the intent of this legislation to bring the Poker Flat Research Range up to the standards of equivalent DOD and NASA installations around the world. This will be accomplished by upgrading the launch facility and the scientific data acquisition system according to a schedule proposed by PFRR in consultation with range users and the appropriate DOD and NASA agencies.

- The upgrading will include the refurbishment of existing facilities and the design and construction of new facilities to replace that begun by the Defense Nuclear Agency in the late 1960s.

- The upgrading shall also include the design, construction, and purchase of scientific instrumentation for the acquisition of data on the polar atmosphere and the evaluation of the data in near real-time in order to provide the launch commander with knowledge of the state of the polar upper atmosphere and will result in a considerable reduction in time and money for field operations by DOD, NASA, and other agencies.

- The resulting facilities and scientific systems shall be the property of PFRR which is owned and operated by the Geophysical Institute of the University of Alaska Fairbanks.

- It is not the intent of the legislation that the resulting increase in operations and maintenance costs should be taken from the budget of the executive agencies.

- It is expected that the Air Force Space and Missile Test Organization shall act as executive agent for the Department in conjunction with NASA Wallops Flight Facility, which operates the range under agreement with the Department of Defense.

- Oversight of the project shall be accomplished by a committee of representatives from the appropriate agencies which will meet yearly to determine that the goals of the project are accomplished.

MicroSat Launch Systems

CIT Tower, Suite 200
2214 Rock Hill Road
Herndon, VA 22070
(703) 733-2819 (voice)
(703) 733-2827 (fax)

National Space Policy
Space Industry Trends
and the
Potential Economic Impact on Alaska

The following is intended to provide a quick shapshot of (1) the commercial elements of the U.S. National Space Policy; (2) the economic impact of this policy on the U.S. commercial sector; and (3) some of the potential direct and indirect benefits that could accrue to Alaska from commercial space activity.

National Space Policy

Commercial Space Policy: On November 17, 1989 President Bush issued a new National Space Policy which recognizes the importance of space commerce: "...expanding private sector investment in space by the market-driven Commercial Sector generates economic benefits for the Nation and supports governmental Space Sectors with an increasing range of space goods and services. Governmental Space Sectors shall purchase commercially available space goods and services to the fullest extent feasible and shall not conduct activities with potential commercial applications that preclude or deter commercial space activities."[1]

National Transportation Policy: On March 8, 1990, President Bush reinforced the importance of U.S. commercial space activity when he stated: "The Department of Transportation will work to maximize private sector involvement in commercial space transportation activity, and to promote public-private partnerships involving state governments and the private sector to build, expand, modernize and operate space launch infrastructure. It will also

[1] National Space Policy (November 17, 1989).

encourage federal agency and state pilot projects with entrepreneurial space launch providers to foster development of efficient, low cost private sector space services.[2]

U.S. Commercial Space Policy Guidelines: On February 12, 1991, President Bush announced implementation guidelines for the above referenced space policies. The guidelines require the government to: (1) use commercially available space goods and services to the fullest extent feasible; (2) transfer space-related technology to the private sector; (3) make space assets, services and infrastructure available for commercial use; (4) avoid overregulating domestic space activities; (5) work with the commercial sector to establish technical standards for commercial space products and services; (6) enter cooperative agreements for research, development and operations; (7) work toward establishing market-oriented competition in international trade.[3]

Alaska Aerospace Corporation Legislation: The bill currently before the Alaska legislature would establish an Alaska Aerospace Development Corporation with powers and purposes similar to the Spaceport Florida Authority. This entity would provide the focus within the State to begin attracting space industry and its inherent economic, scientific and aesthetic benefits to Alaska. The legislation is broadly written to permit Alaska and its commercial sector to compete with other states and entities who have gone after this rapidly growing market.[4]

National Economic Impact

Revenues from U.S. Space Industry: U.S. Government and Commercial Space Sector purchases of space-related goods and services totaled approximately $33.6 billion in 1990. The purely commercial element of this figure was $3.6 billion in 1990, up from $2.8 billion in 1989.[5] These revenues are spread among such

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[2] National Transportation Policy, Moving America, New Directions, New Opportunities (March 8, 1990).

[3] U.S. Commercial Space Policy Guidelines (February 12, 1991)

[4] Legislation proposed by Representative Tom Moyer, Alaska State House of Representatives (1991).

[5] See, Space Business Indicators, U.S. Department of Commerce, Office of Space Commerce, page i (June 1990).

activities as space transportation, satellite communications, satellite remote sensing, and materials research (See Appendix A). According to the U.S. Industrial Outlook, the space industry has been the fastest growing market sector for the second year in a row.[6]

The market for U.S. commercial space launch services for 1990 was approximately $1.3 billion per year.[7] This market is divided generally into large, medium and small classes of vehicles. To date, most of this revenue came from the large capacity class vehicles whose prices range from $60 to $100 million per-launch.

The newest market for commercial launch services is the small launch vehicle class, which includes MicroSat's *Orbital Express™* as well as sub-orbital vehicles. The *U.S. market* for this class in 1991 is expected to be $60 to $100 million. This figure does not take into account the foreign launch requirements for this class of launch vehicle.[8] It also does not take into account the emerging commercial market for micro-class communications satellites, which should cause demand for launch services in this class to triple in the next five years.[9]

Direct and Indirect Benefits to Alaska

MicroSat's and other space-related companies' activities in Alaska will help to diversify Alaska's industrial base -- orbital launches from Poker Flat, for example, will translate into a new source of revenues for the State resulting from the use of Poker Flat and support facilities. More importantly, commercial operations from Poker Flat will serve as a magnet for attracting launch customers and companies providing value-added services to the Fairbanks area. The increased launch activity will serve to spread the fixed costs of range operations over a larger customer base, which in turn will allow Poker Flat to be more competitive and increase business revenues. The ability to launch into polar orbit from Poker Flat

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[6] U.S. Industrial Outlook, U.S. Department of Commerce (1990).

[7] Supra, Note 5, at ii.

[8] Id. at ii

[9] Companies filing applications with the FCC are Orbcomm, Motorola, Ellipsat, Starsys and VitaSat.

should also be attractive to the U.S. Government, potentially bringing more federal support to Alaska for space-related activities. Other states, including Florida, Virginia, Hawaii, Texas, Mississippi, Colorado, Alabama and California, have recognized the tremendous economic benefits that can accrue from their involvement in the space industry.

The following estimates are based on MicroSat's current plans for Alaskan operations, its assumptions of how Alaska's space-related resources might best be used for economic development, and a review of relevant space-related economic development efforts underway in other states.

Direct Revenues: Launching the *ORBITAL EXPRESS™* from Poker Flat will result in a consistent revenue stream to Poker Flat and the surrounding community. MicroSat's market projections indicate demand for 7 to 20 launches per year from Poker Flat. Each launch could bring more than $150,000 in user fees to the Poker Flat facility.

Employment: MicroSat's operations will provide Alaskan residents with opportunities for professional and vocational employment with MicroSat, Poker Flat, or other high technology firms. MicroSat will need support for launch services, payload integration and processing, facilities maintenance, range safety, mission planning, administrative and support services and marketing year round. These employment requirements will include professionals as well as skilled and unskilled labor. To the maximum extent feasible, they will be hired from the local community. The following table lists MicroSat's anticipated requirements for employees at Poker Flat as its launch activity increases during the first five years of launch operations.

Year	# Launches	# Employees
1992/3	2	15
1993/4	6	20
1994/5	10	25-30
1995/6	15	30-40
1996/7	15	30-40
1997/8	20	40-60

Similarly, MicroSat's customers will need support during launch campaigns. As launch and other activities at and around Poker Flat increase, so will employment requirements.

By way of rough analogy, a study for the Hawaii Department of Business and Economic Development on the impact on the state of space-related economic development concluded that a commercial spaceport serving multiple small-class launch vehicles would require from 100 employees initially to 300 to 600 additional direct and indirect employees. These estimates were based on a facility similar in size to NASA's Wallops Island facility, in Virginia, which has a total area for all supporting facilities, buffer and safety zones (including areas over water) of 6,000 acres or less.[10] (See Appendix B).

The Hawaii study also notes that expanding and leveraging the state's existing space-related activities, and not including launch activities, could result in 1,250 to 1,850 jobs with some identifiable link to space. The categories used to arrive at this figure were: (1) 60 to 100 employees in astronomy and physics; (2) 40 to 50 new employees in earth and planetary remote sensing; (3) 120 to 170 employees in expanded commercial and military space activities; and (4) 1,000 to 1,500 employees at a Space Theme Park and educational center.[11] Further, support staff with no identifiable link to space would add an additional 600 to 1,800 jobs. [12]

The State of Virginia has also given high priority to encouraging space-related companies and university programs to locate in the State. Currently, there are approximately 450 space-related businesses in Virginia that employ more than 10,000 people.[13] NASA's Wallops Island launch facility employs an additional 1,250 civil servants and government contractors to support launch operations and related activities.[14]

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[10] Evaluation of the Potential for Space-Related Activities in the State of Hawaii, Final Report to Hawaii Department of Business and Economic Development (August 1987).

[11] Id. at page I-32,33.

[12] Id.

[13] Virginia Chamber of Commerce (June 1990). These figures do not include the more than 7,000 NASA employees (civil servants and contractors) at Langley Research Center (4,800 employees), Wallops Island Launch Facility (1250 employees), and elsewhere in Virginia. See Report, note 10 at page 11.

[14] Report of the Commercial Space Group to the Governor, Commonwealth of Virginia (May 31, 1988) (hereinafter referred to as "Report").

Economic Diversification: MicroSat's commercial launch activity at Poker Flat can be expected to attract high technology companies to Alaska from elsewhere in the U.S. and Pacific Basin, to use or support the *ORBITAL EXPRESS™* launch vehicle. As other launch companies and customers establish operations at Poker Flat or the vicinity, the diversification should multiply. Similar economic diversification has been achieved or predicted in Virginia, Florida, Hawaii, Andøya Norway, Cape York, Australia and other areas promoting the establishment of space-related industry (**See Appendix C**).

Florida, for example, has created a statutory entity called the Spaceport Florida Authority ("SFA"), charged with promoting, facilitating and providing for the establishment and operation of launch facilities and ranges, and complementary facilities such as space business incubators, space-related research facilities, and tourism, educational and cultural activities. It has a discretionary fund of approximately $3 million per year in legislative appropriations, and has the authority to issue $500 million in SFA (corporate-backed) bonds.[15] SFA bonds have already been committed to build processing facilities for Spacehab ($60 million) and General Dynamics ($50 million), in order to attract their commercial operations to Florida (**See Appendix D**).

In similar efforts to attract and expand space-related business to their states, Mississippi and Colorado have provided facilities at minimal or no cost for use by resident businesses involved in new space business ventures. Mississippi donated the $4 million Technology Transfer Center at NASA's National Space Technology Laboratories to the government. In return, the state will receive the latest NASA research for Mississippi businesses, as well as an estimated $8 million yearly payroll. Colorado made a manufacturing facility available to McDonnell Douglas at attractive terms for Delta II missile production at Pueblo, Colorado.[16] Further, the companies involved have committed to maintain long-term operations in those states, add to the tax base, and provide good jobs to state residents.

Attracting Federal Programs and Funding: Alaska's increased involvement in space-related activity should be very attractive to

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[15] Spaceport Florida Authority Business Plan (April 2, 1990)

[16] Spaceport Florida Feasibility Study, Part 3, Business Plan and Financial Feasibility Report (February 1989) Source, 1985 - Florida Department of Commerce. page V-6.

the U.S. Government, which has already committed to fund a $30 million upgrade of Poker Flat and associated facilities. Expanding Poker Flat to include orbital capability, coupled with the State's manifested support for commercial launch operations, should result in support from a wide range of federal agencies -- the Department of Transportation to assist in the development of space transportation infrastructure, NASA, DOD, DOE and others to purchase commercial launch and support services, and to fund programs with the University of Alaska.

The State of Virginia's efforts to develop a space industry are instructive in this regard. Although focusing on commercial space development, federal support in Virginia also increased because of its interrelationship with private companies in the space industry. For example, total NASA spending in Virginia rose from $281 million in 1986 to $325 million in 1987, and was projected to reach more than $600 million in 1989. Virginia companies received more than $220 million in NASA prime contracts in 1987. Virginia universities also received $21 million in NASA research grants in 1987, or 5% of $425 million awarded nationally[17] **(See Appendix E).**

There are also a number of federally sponsored programs to promote commercial space development that Alaska could take advantage of. For example, NASA sponsors 16 Centers for Commercial Development of Space ("CCDS") in 10 States, and plans to establish more at a steady rate.[18] CCDS's are consortia of Universities, Government Agencies and U.S. Corporations, whose purpose is to conduct joint research and development in space-related areas that have commercial promise.[19] Current participation totals more than 183 U.S. companies and 50 universities. CCDS's are co-funded by NASA and the other consortia participants. NASA funding since 1986 increased steadily from $4,500,000 in 1986 to $15,700,000 in 1989. Non-NASA funding increased dur ng these years from $1,000,000 in 1986 to $26,000,000 in 1989. This steady increase in spending, both from government and commercial sectors, indicates growing recognition of

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[17] Report of the Commercial Space Group to the Governor, Commonwealth of Virginia (May 31, 1988) (hereinafter referred to as "Report").

[18] Alabama, Ohio, Tennessee, Texas, New York, Mississippi, Colorado, Pennsylvania, Wisconsin, and Michigan. Id. at pages 13-15.

[19] CCDS's currently exist for Materials Research and Processing, Remote Sensing, Space Power, Life Sciences, Automation and Robotics, Space Structures, and Propulsion. Id.

the commercial importance of space-related research and development[20] Already, CCDS corporate participants have begun to establish new companies using the technologies developed within the CCDS (See Appendix F).

The University of Alaska, Fairbanks, with the Geophysical Institute and Poker Flat Research Range, would be ideal for hosting a NASA Center for the Commercial Development of Space. Other government agencies, such as the National Institute of Standards and Technology, and the Department of Energy, have similar programs in which Alaska could participate in to attract federal resources, private companies, and universities throughout the U.S. to Alaska for space-related cooperative research and other activity.

Increased Scientific Access to Space: Establishing an orbital capability at Poker Flat will permit Alaska's scientific community to complement its existing sub-orbital research, with independent and inexpensive access to low-Earth orbit. With this capability, Alaska can become an international hub for environmental and space-related research.

National and International Prestige: Alaska will gain tremendous national and international prestige as the first non-federal government orbital launch facility in the United States, and as a premier center for technology and space-related activity.

Enhance Educational Opportunities: Attracting commercial space companies to Poker Flat will expand existing educational opportunities. MicroSat, for example, plans to work closely with the University of Alaska to sponsor student interns with MicroSat, and to involve its professional staff for lectures and projects associated with the University's engineering and space-related research programs.

Space-Related Tourism: Space-related tourist attractions have always generated significant revenues, and could complement or supplement any launch facility. Since Alaska's Poker Flat facility, Geophysical Institute and proposed Arctic Research Center will be geographically close, a combined earth/space tourist facility could make for a world class attraction. Such a facility could provide

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[20] A Copy of Space Business Indicators is attached

financial support for the operational and research facilities that sponsor it.

The Spaceport Florida Feasibility Study recognized this fact, and proposed the establishment of an analog moonbase surrounded by a lunar research center. The study listed the approximate number of tourists that visited space-related facilities in Florida in 1985, each spending between $15 and $30 dollars per day on admissions, concessions and souvenirs: (1) Spaceport USA (Kennedy Space Center) 2,100,000; (2) Air Force Museum (Cape Canaveral Air Force Base) 85,000; (3) U.S. Naval Aviation Museum (Florida Panhandle) 200,000; and for comparison purposes (4) Walt Disney World (the various space-related attractions, including LAND/Space Agriculture; Horizons/Space City; Spaceship Earth/Satellite Communications; Space Mountain; Mission to Mars) 20,000,000.[21]

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[21] Id. at IV-38.

MicroSat Launch Systems

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(703) 733-2827 (fax)

Domestic and International Competition among Spaceports

There are approximately 20 spaceports worldwide that have operational capability to launch small class launch vehicles such as MicroSat's *Orbital Express™* Additional launch sites, such as Andoya, Netherlands; Churchill, Canada; Poker Flat, Alaska; that currently support sub-orbital missions are planning or contemplating an expansion to orbital capability. The accompanying Appendices identify most of these facilities and provide a selected comparison of their attributes.

CHAPTER V

COMPETITION

A. EXISTING/PROPOSED LAUNCH SITES

Several operational launch sites in the world currently have the capability to launch orbital vehicles. The major sites and their current statuses are identified in Table V-1; the capabilities to launch equatorial and/or polar orbits, and to service the previously identified market segments, are also indicated in the Table. To provide a perspective of the relative frequency of launches, the number of orbital launches from 1957 through 1985 is indicated. Some of these sites could be considered as competition to Spaceport Florida, depending on the launch services and financial packages that they can provide.

The major launch sites that would probably be in competition (at various levels) with Spaceport Florida for commercial launch services are discussed below:

- Guiana Space Center, Kourou, French Guiana -- This facility is located five degrees north of the equator, which makes it advantageous for equatorial launches. The Space Center can now support two parallel launch campaigns, with a capacity of ten launches per year. A further planned expansion will increase capacity to fifteen launches per year. Launches are occasionally delayed because of heavy winds.

- Tanegashima, Japan -- The National Space Development Agency's (NASDA's) principal launch facility has capacity for only two launches per year, due to restrictions protecting the Japanese fishing industry. The H-2 rocket, under development, will increase this capacity to four launches per year. The H-2 could be operational by 1992/93. Although the location at 28° north requires twelve percent more energy than launches from the Guiana Space Center to achieve geostationary orbit, the location is well-suited to serve the

proposed Space Station, which is planned to have a 28.5° inclined orbit. Proposed locations for Spaceport Florida are at a similar latitude.

- Kagoshima Space Center, Japan -- This facility, at 31° north of the equator, serves the Institute for Space and Astronautical Science (ISAS). In addition to balloons and sounding rockets, a few small orbital rockets could be launched from the facilities.

- Kennedy Space Center and Cape Canaveral Air Force Station -- This facility provides most of the current U.S. launch capacity. Launch capacity, with existing facilities and operations, totals roughly 20-25 launches per year. Further renovations and modifications to existing launch complexes could permit an additional 10-15 launches per year.

- Vandenberg Air Force Base, California -- This facility is used almost entirely for military payloads and launch vehicles. Annual capacity is estimated at ten launches, with expansion capabilities to 15.

- Wallops Island, Virginia -- The Wallops Flight Facility on Wallops Island, Virginia, administered by the Goddard Space Center, has been used for an extensive sounding rocket program, as well as for launches of the Scout launch vehicle.

- San Marco, Kenya -- This facility, developed by NASA and the Italian government, with technical support by LTV-Vought Corporation, consists of two offshore platforms in the Indian Ocean. Since its establishment, eight Scout vehicles have been launched from these platforms, through 1987.

- Xi Chang, Peoples Republic of China -- Recent expansion provides capability for six or seven launches annually, some of which are for other countries. China is marketing its Long March vehicle.

- Sriharikota, India -- These launch facilities have been used solely to launch Indian payloads, to date. By 1993, India plans to develop a polar launch vehicle that supposedly will be technically competitive with those of the space leaders.

Table V-1
WORLDWIDE LAUNCH SITES

Launch Sites	Lattitude	Expendable Launch Vehicle Capability	Orbit*	Status	Number of Oribital Launches 1957–1985
Cape Canaveral (USA)	28.5N	All	E	Operational	371
Vandenberg (USA)	34.7N	All	P	Operational	469
Wallops (USA)	37.9N	Suborbital/Small	E	Operational	19
Palima Point (USA)	19.0N	All	E/P	Planning Stage	–
Kourou (French Guiana)	5.2N	All	E/P	Operational	20
Kagoshima (Japan) (1)	31.1N	Suborbital/Small	E/P	Operational (1)	16
Tanegashima (Japan)	30.4N	All	E/P	Operational	15
Shuang Cheng-Tzu (PRC)	40.6N	Suborbital/Small	E	Operational	14
Xi Chang (PRC)	28.1N	All	E	Operational	3
San Marco (Kenya)	2.9S	Suborbital/Small	E	Operational	8
Hammaguir (Algeria)	–	–	–	Not Operational	4
Plesetsk (USSR)	62.8N	All	E/P	Operational	1111
Baykonur (USSR)	45.6N	All	E/P	Operational	728
Kapustin Yar (USSR)	48.4N	Suborbital/Small	E/P	Operational	82
Woomera (Australia)	31.1S	Suborbital/Small	E	Operational	2
Cape York (Australia)	11.0S	All	E/P	Planning Stage	–
Sriharikota (India)	13.9N	Suborbital/Small	E/P	Operational	3
Thumba (India)	8.0N	Suborbital/Small	E	Operational	–
Alcantara (Brazil)	2.0S	Suborbital/Small	E/P	Construction	–
Esrange (Sweden)	68.0N	Suborbital	–	Operational	–

*E = Equatorial, P = Polar

(1) Proposed Range At Hokkaido To Be Operational By 2000

Source: United States Department of Commerce, 1986; Congressional Research Service, "Space Activities of the United States, Soviet Union and Other Launching Countries, 1957-1984," February 1987.

TABLE I-2

COMPARATIVE STRENGTHS OF SELECTED LAUNCH LOCATIONS

Selected Launch Locations/ Sponsors (Existing And Potential)	Status	Operating Performance And Down Range Characteristics: Position For Equatorial Launches	Position For Polar Launch	Range Safety Concerns	Supporting Resources: Access to Sea Lanes & Air Service	In-Place Communications Network	Available Skilled Labor & Training Facilities	Infrastructure--Power, Roads, Sewer, Etc.	Unappropriated Areas	Local Land Conditions: Available Land For Expansion	Reliable Weather	Geologic Stability	Quality Living/ Working Environment
Hawaii	Feasibility Being Evaluated	Favorable (18-22° N. Lat.)	Favorable	Localized Mitigatable	Favorable	Highly Favorable	Highly Favorable	Location-dependent, requires development	Available, location-specific	Adequate with some growth limits	Temperate climates	Neutral/ Unfavorable	Highly Favorable
Kourou (French)	Guyana Space Center	Highly Favorable (5° N. Lat.)	Favorable	Negligible	Some limitations; improving	In-place	Adequately staffed to meet current needs	In-place	Available	Available	Favorable	Neutral	Remote location
Japan	Space Center (NASDA) Tanegashima	Unfavorable (30° N. Lat.)	Unfavorable	Limitations: overfly fishing grounds	Nearby port	In-place	Adequately staffed to meet current needs	In-place	Limited	Limited	In typhoon corridor	N.A.	Remote location
	Proposed range at Hokkaido (operation by 2000)	Unfavorable (42-46° N. Lat.)	Favorable	Unknown	Unknown	Unknown	Unknown	Unknown	Unknown	Available		Unknown	Unknown
	Kagoshima Space Ctr. and Operational (ISAS)	Unfavorable (31° N. Lat.)	Favorable	Limitations: overfly fishing grounds	Nearby port	In-place	Adequately staffed to meet current needs	In-place	Limited	Limited	In typhoon corridor	N.A.	Remote location
Australia	Proposed Cape York Int'l Space-port	Favorable (11° S. Lat.)	Unknown	Favorable	Nearby airport and seaport	Limited	Limited	Limited	Highly Favorable	Highly Favorable	Favorable	N.A.	Unfavorable

TABLE 1-2 (Continued)

COMPARATIVE STRENGTHS OF SELECTED LAUNCH LOCATIONS

Selected Launch Locations/ Sponsors (Existing And Potential)	Status	Operating Performance And Down Range Characteristics			Supporting Resources				Level Land Conditions				
		Position for Equatorial Launches	Position for Polar Launch	Range Safety Concerns	Access to Sea Lanes & Air Service	In-Place Communications Network	Available Skilled Labor & Training Facilities	Infrastructure--Power, Roads, Sewer, Etc.	Unpopulated Areas	Available Land for Expansion	Reliable Weather	Geologic Stability	Quality Living/ Working Environment
Indonesia	Java Launch Site	ADDITIONAL INFORMATION TO BE INCLUDED IN FINAL REPORT											
Singapore	NJ current plans for launch facilities												
India	Sriharikota launch site												
China	East wind range operational	Unfavorable (40° N. Lat.)	Unknown			In-place/being developed	Adequate to meet current needs	In-place/being developed	Favorable	Favorable	Unknown	Unknown	Unknown
Brazil	Interested in cooperative development of Space Port	Favorable	Unknown										
Christmas Island	Launch site considered in past	Highly Favorable	Favorable	Highly Favorable	Limited	Limited	Limited	Limited	Favorable	Limited	Favorable	Unknown	Unfavorable

TABLE I-2 (Continued)

COMPARATIVE STRENGTHS OF SELECTED LAUNCH LOCATIONS

Selected Launch Locations/ Sponsors (Existing and Potential)	Status	Operating Performance And Down Range Characteristics			Supporting Resources					Local Land Conditions				
		Position for Equatorial Launches	Position for Polar Launch	Range Safety Concerns	Access to Sea Lanes & Air Service	In-Place Communications Network	Available Skilled Labor & Training Facilities	Infrastructure--Power, Roads, Sewer, Etc.	Unpopulated Areas	Available Land for Expansion	Reliable Weather	Geologic Stability	Quality Living/ Working Environment	
United Str.	Kennedy (28° N. (Operational)	Some Limits	Unfavorable	Favorable	Favorable	Favorable Favorable	Highly	In-place self-contai	Large sites	Favorable ture,	Tempera- lightening, hurricane limitations	Favorable	Favorable	States Space
	Vandeburg AFB	Unfavorable (34° N. Lat.)	Favorable	Some limitations	Favorable	Favorable	Highly Favorable	In-place	Large sites self-contai	Favorable	Favorable	Close & Seismic Risk Zone	Favorable	
	Wallops Island	Unfavorable	Unfavorable	Limitation	Favorable	Favorable	Favorable	In-place	Near tourist resort	Limited	Lightening, Temperature	Favorable	Favorable	

FORUM

Space industry could be good for Alaska

By REP. TOM MOYER

FAIRBANKS — It's predictable that those of us who talk about Alaska launching satellites into space have taken some ribbing. But such a possibility is not science fiction.

The prospects of hundreds of new jobs for Alaskans and additional dollars for the state treasury are not pie in the sky — if Alaska acts now to take advantage of its enormous potential in the commercial space industry.

Alaska is home to the nation's only civilian rocket range — Poker Flat, located about 30 miles north of Fairbanks and founded by the University of Alaska Fairbanks. Since 1969, scientists have launched hundreds of small rockets and weather balloons from this 1,600-acre site, to research everything from the aurora to global climate change.

In recent months, a growing number of commercial space companies have quietly visited Poker Flat to investigate launching sophisticated communications satellites into polar orbit from the range. One company, MicroSat Launch Systems, projects a market demand for seven to 20 launches a year from Poker Flat, with each launch generating more than $150,000 in user fees and requiring up to 60 new employees.

The state of Hawaii, which recognized its potential for cashing in on the commercial space industry two years ago, estimates a small commercial spaceport there would generate an initial 100 to 300 employees, with up to 1,850 space-related jobs. Virginia, a leader in the U.S. space industry, has attracted 450 space-related businesses which employ 10,000 people. Nationally, the commercial space industry grew from $2.8 billion in 1989 to $3.6 billion last year.

Earlier this year I introduced legislation (House Bill 46) designed to make Alaska a player in this growing industry. The bill would create an Alaska Aerospace Development Corporation whose mission is to attract to Alaska commercial space companies and assist their operations. It also would preserve the important research and educational activities at Poker Flat, which is managed by UAF's Geophysical Institute under contract with NASA.

The most significant development that makes Alaska so attractive for commercial space launches is miniaturization. The new technology permits unmanned spacecraft to be smaller, lighter, cheaper and smarter than ever.

Large satellites of an earlier era weighed 5,000 pounds or more, cost $200 million to build and required huge rockets to push them into space. The new "lightsats" weigh less than 500 pounds, are 10 times cheaper to build and can be launched with 50,000-pound rockets, not much larger than those now in operation at Poker Flat.

The communications giant Motorola, which visited Fairbanks in January, has proposed putting into orbit a constellation of 77 lightsats to relay mobile telephone calls. The company has not yet decided on a launch site.

While there are nearly two dozen launch sites around the world that may be better developed than Poker Flat — from Japan to Brazil to Australia — Alaska enjoys several unique advantages:

• Geography. Alaska is obviously closer to the polar orbit, key for certain types of communications, and therefore it's cheaper to place satellites in that orbit from Alaska. Hawaii, Virginia and Florida also can launch into polar orbit, but require larger booster rockets to push through heavier atmosphere and such an enormous distance.

• Lack of bureaucracy. Commercial vehicles can be launched from military facilities, such as California's Vandenberg Air Force Base, but obtaining the necessary permits can take years and military activities can disrupt launch schedules. Poker Flat's approval process is quick and the new aerospace development corporation would streamline commercial launches.

• Upgrading. Poker Flat recently received a $30 million federal grant to improve its facilities, including the installation of a new tracking system. Through the efforts of Joe Hawkins, an innovative UAF electrical engineering professor, Alaska last month was one of only 14 states to earn federal "Space Grant" status, which means an annual flow of dollars to support student-designed rocket launches.

If we play our cards right, the Last Frontier can be a leader in the Final Frontier.

□ Tom Moyer, a Democrat, is a freshman representative from Fairbanks District 19 and a lifelong space buff.

METRO
The Anchorage Times

TUESDAY
March 19, 1991

Hickel seeks commercial satellite plan

By DAVE PATRICK
TIMES CAPITAL BUREAU

JUNEAU — Gov. Walter J. Hickel wants to launch Alaska into the commercial satellite space age by backing a new facility at the Poker Flat Research Range outside Fairbanks, an administration official said.

"We want to be the first state to go to commercial launches. It really takes Alaska into the 21st century," said L.O. Galloway, assistant commissioner of the Department of Commerce and Economic Development.

Poker Flat, located 30 miles northeast of Fairbanks, is operated by the University of Alaska-Fairbanks' Geophysical Institute. The university has ties to NASA in teaching, aeronautic research and related fields.

The facility has launched hundreds of rockets, used primarily for meteorological studies at sub-orbital altitudes of up to 30 miles, Galloway said.

Hickel supports a $3.4 million state appropriation to make Poker Flat launch-ready for commercial micro-satellites weighing nine to 300 pounds, Galloway said.

The high-tech satellites could be used for a variety of purposes including communications, research, oil spill monitoring and game management, Galloway said. The funds would be used to build launch pads able to hold the 30,000-pound rockets.

"That would allow university systems throughout the U.S. to get into research in their schools and have their own satellites in the air," Galloway said.

Rep. Tom Moyer, D-Fairbanks, has introduced legislation to establish the Alaska Aerospace Development Corporation, a public corporation affiliated with the university.

The corporation would promote ties between the university and the aerospace business and probably be a resource of funds to enhance Poker Flat, Moyer said.

"I would look forward to a cross-fertilization of the university and industry," he said.

Moyer's bill is scheduled for a Thursday hearing before the House Labor and Commerce Committee.

See Satellite, back page

Satellite

Continued from page B1

The governor has met with executives of MicroSat Launch Systems, a Houston-based company, about locating a commercial launch system in Alaska, he said. Bruce Kraselsky, MicroSat vice-president, said the company is interested in the Poker Flat range because of its unique operation.

"Alaska has the only non-federal government launch range in the country and there are tremendous benefits to that," he said.

"We are looking very seriously at basing our operations in Alaska. (But) We are being pursued by Florida, Virginia and Hawaii," Kraselsky said.

Companies face a 5-year start-up time at federally-operated launch sites, compared to six- to nine-months at Poker Flat, Galloway said. MicroSat wants to launch its first satellite in early 1993, Galloway said.

Because of Poker Flat's location, satellites could more easily be launched into polar orbits from Alaska than Florida or Virginia, Galloway said.

THE ALASKA
JOURNAL OF COMMERCE
Vol. 15, No. 11 | Alaska's Paper of Record | Established 1976 | One Dollar | March 18, 1991

Commissioner Glenn Olds — Photo by Margaret Bauman

SPACEPORT ALASKA?

By Tim Bradner
Alaska Journal of Commerce

Related story, Page 2

JUNEAU — Spaceport Alaska? Go ahead and laugh now, but Alaska's new Commerce commissioner, Glenn Olds, says he'll have the last laugh — all the way to the bank.

> *"It's going to go, and it's going to go big."*
> *— Glenn Olds*

"It's going to go, and it's going to go big," Olds said in an interview.

He said the state has already been approached by one major company, a pace-setter in the field, interested in using Alaska as a high-latitude launch point for small-payload satellites.

Skeptics laughed when far-sighted Alaskans promoted the state as a hub for international air cargo on fast-growing Europe-Asia and Asia-U.S. air routes, Olds pointed out. Now Anchorage, even Fairbanks, are well-known names, and even becoming home, to the pilots of big jumbo air-freighters.

The commissioner, along with University of Alaska Fairbanks staff and Fairbanks Rep. Tom Moyer, are convinced that the same geographic advantage that Alaska parlayed into hundreds of new jobs in air cargo can be duplicated in space-related industries. Moyer has a bill in the legislature creating an Alaska Spaceport Authority to attract and manage funding for space-related commercial development.

"Alaska has three key advantages in attracting high-latitude launch customers," Olds said. Launching from a northern location makes polar orbits easier to attain. These are ideal for small payload satellites, those 300 pounds or under, which are launched into low orbits and are designed to monitor environmental change and weather.

Secondly, a northern latitude

Continued on Page 3

Spaceport

Continued from Page 1

launch avoids certain problems encountered in launches from more southerly latitudes, in that there is less interference from the earth's magnetic field, Olds explained. When launching into polar orbits, that translates into added lift efficiency.

The third major advantage is that Alaska has the nation's only civilian rocket launch facility, the Poker Flats range operated by University of Alaska Fairbanks 30 miles north of that Interior city. Established in 1969, about 230 large rockets and another 900 weather rockets have been launched from Poker Flats.

Launches from Alaska could lead to expanded research in global warming, mapping for land use management and remote sensing, weather patterns, and improved communications, he said.

Moyer's bill creating an Alaska Spaceport Authority sets up a mechanism to attract grants and encourage space-related business. Moyer's House Bill 46 would oversee a revolving fund that would help finance space commercialization efforts, receive federal money and issue bonds to help finance space projects.

This would help Alaska attract commercial projects now going to government facilities in other states, such as Florida, he said.

"Because of Alaska's high latitude, Poker Flats is an optimum site to launch rockets into polar orbit," Moyer said. "The key to future commercial expansion there is the trend toward the miniaturization of satellites which allows the smaller rockets launched from Poker Flats to carry increasingly sophisticated payloads.

"Alaska already is a recognized leader in several scientific fields and we could be in new space commercialization as well," he said.

Olds said that space-related businesses are high-tech, high-pay "clean" industries, ideal for Alaska.

NASA and Lockheed Space Sciences Laboratory in Palo Alto, Calif., also recently recognized the university's potential in space-related fields with its Space Grant Program, where $250,000 in annual funding from NASA and Lockheed will fund collaborative work between UAF faculty, student interns and Lockheed personnel on rocket and payload research projects.

The university's Geophysical Institute, which is already a leader in high-altitude atmospheric research, will manage the Space Grant Program.

Alaska has opportunity to become part of national space quest

When people think of space they think of Cape Canaveral, Florida; Houston, Texas; and Vandenberg Air Force Base in California. What people don't realize is that the future in space for the private sector may be Fairbanks, Alaska. The future of space research depends on low-cost access to space. This is best provided by the private sector.

Low-cost access to space also means small payloads with tremendous capacity. With the advances in computer chips and micro-miniaturization of sophisticated electronics these technical developments are here. As federal budget shortfalls frustrate traditional scientific and military space efforts, a new opportunity opens.

Governments, universities and the private sector all need access to space for satellite communications, earth observation and environmental research. In order to conduct this research a satellite must be launched into polar orbits.

The options in the United States are Vandenberg Air Force Base or the Poker Flats Range, Alaska. Vandenberg doesn't work because of military priorities and bureaucratic red tape. Alaska needs to use the existing range at Poker Flats to develop a commercial space industry in Alaska.

This isn't something where Alaska can rest on its oars. Major concerns are working to establish an integrated regional launch facility in northern Europe. Alaska needs to make a commitment to develop Poker Flats' capabilities. Companies in the space business tend to design with an available launch facility in mind. Poker Flats has a proven record as a launch facility.

Tony Smith

Tony Smith is a former state commissioner of Commerce and Economic Development and currently a lawyer in private practice with Davis Wright Tremaine.

We need to expand and diversify Poker Flats to attract the potential market for launching small satellites. For example, Florida has just established "Spaceport Florida" to enter the market for equatorial orbits. Virginia is working with NASA to set up a Virginia air and space center with flights from Wallops Island for the same reason.

Poker Flats is owned by the University of Alaska-Fairbanks Geophysical Institute. The range is operated by the federal government with federal equipment under contract with the university. The government operates all active ranges in the United States.

Senator Stevens has recently obtained a $30 million appropriation to upgrade the Poker Flats facilities. In addition, the Geophysical Institute has applied to NASA for designation of the University of Alaska Fairbanks as a participant in the space-grant intern program. This is somewhat like the historical land grant program which was the foundation of many of our great public universities.

In Florida, the state and private sector cooperated to establish "Spaceport Florida." The authority has power and duties similar to an airport or seaport authority. The program is consistent with the United States national space policy which recognizes the U.S. commercial space sector as an integral part of the U.S. space program.

The Commercial Space Launch Act and the National Space policy require the government to make national launch properties, facilities and services available for commercial use. They require that space-related goods and services, including space transportation, be bought from the private sector. Last, they prohibit the United States government from competing with or deterring U.S. commercial space activities.

Last week, the Aerospace States Association met in Virginia. The meeting included representatives from Hawaii, Virginia, Florida, Colorado and the federal government. It was unfortunate that Alaska was not in attendance.

The private sector opportunities in space for Alaska are phenomenal. This is particularly true because of the Poker Flats Range and its suitability as a private-sector launch site for launches into polar orbit.

A few years ago, Governor Hickel, as a private citizen, gave a keynote speech entitled, "In Space — One World United." In that speech he said:

"Leaving the earth can unite our purposes and peoples . . . Our energies, talents and technologies . . . And especially our minds. The exploration of space may well be civilization's last chance to join together in a great undertaking bigger than any of us — technologies for a common purpose, a grand undertaking that can heal the divisions between men — as together we seek to go vast distances and, yet, to cover those inner distances that yearn for explanation."

The recent appropriation to upgrade the Poker Flats Range coupled with the emerging private sector opportunity for low-cost access to space have come together. Alaska is uniquely positioned to take advantage of this new industry. We can facilitate the growth of an Alaskan private-sector space industry. The opportunity is here, the resource is here and the only question is, will we seize the initiative.

UAF adds space grant designation

By WILDA WHITAKER
Staff Writer

The Last Frontier has met the Final Frontier.

The University of Alaska Fairbanks has been designated as an official "Space Grant" institution by NASA.

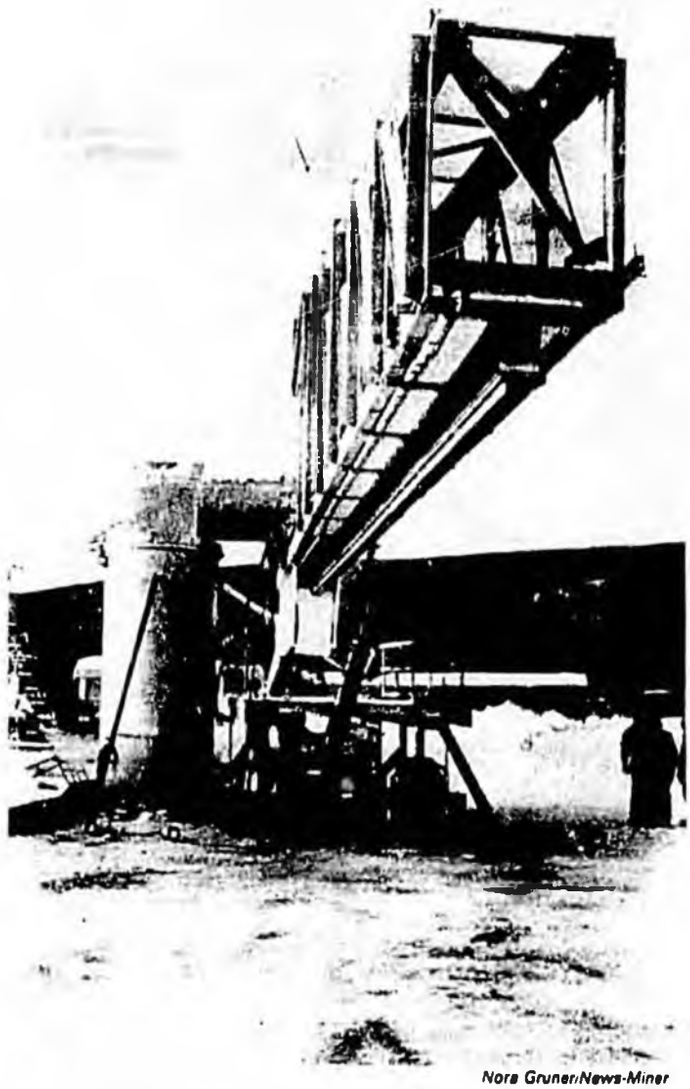
The designation means the federal government will provide money for the university to support teaching and research in aeronautics, space and related fields.

Annual funding for the program will be $250,000. The money will come from a four-year, $150,000 annual grant from NASA, and a matching annual grant of $100,000 from industrial affiliates and the university.

The first industrial affiliate will be the Lockheed Space Sciences Laboratory in Palo Alto, Ca. As an industrial affiliate, Lockheed will provide summer internships for UAF students, and Lockheed personnel will collaborate with UAF faculty on cooperative research projects and sounding rocket payloads. A payload is the portion

(See SPACE, Page 7)

Fairbanks News-Miner
2/91



Nora Gruner/News-Miner

LAUNCH SITE—Pad 4 at Poker Flat is being prepared for the assembly of a rocket.

SPACE: UAF designated

(Continued from page 1)

of the rocket that contains the instruments and experiments.

Joe Hawkins, an assistant professor in UAF's electrical engineering department, has been appointed director of the program.

Hawkins said the Alaska Space Grant Program will try to increase student involvement at the Poker Flat Research Range. Poker Flat, which is operated by UAF, is the only university-operated sounding rocket range in the world. It is located about 30 miles from Fairbanks on the Steese Highway.

The program will allow students to design, build and flight-test sounding rocket payloads, which will be launched from Poker Flat.

"It'll make the University of Alaska the only university in the world with real launch capabilities," said Jack Dillard, manager of the Poker Flat Research Range.

The program will also provide money for research grants, curriculum development, graduate student fellowships and aerospace scholarships.

"Anything that falls within the range of expanding aerospace capabilities is fair game for the program," Hawkins said.

Alaska was one of 14 states nationwide to receive Space Grant Program Grants. The states that were selected have colleges and universities involved in nationally competitive aerospace research and educational programs.

The National Space Grant College and Fellowship Program was authorized by Congress to help strengthen and enhance the nation's capability in aerospace science and technology.

The program office for the Alaska Space Grant Program will be at the Geophysical Institute.

This is the third federal "grant" designation UAF has received.

The federal government gave UAF land grant status in 1917, when the university was established as the Alaska Agriculture College and School of Mines. The Alaska Sea Grant program was established at the University of Alaska in 1970.

...the ground

UAF professor to launch Space Grant Program

SPOTLIGHT

By WILDA WHITAKER
Staff Writer

Joe Hawkins is seeing stars.

It's his job to get the new "Space Grant" enterprise at the University of Alaska Fairbanks off the ground—literally and figuratively.

Hawkins, who wrote the proposal that convinced NASA to give UAF the Space Grant status in February, will help "launch" the program through a class in which students design and build their own rocket payload. The rocket will blast off from the Poker Flat Research Range in a little over a year.

Hawkins, an assistant professor of electrical engineering, will serve as director of the program and will oversee distribution of the grant money.

To do that, he will work with not only his department, but also the Geophysical Institute, whose scientists design some of the upper atmosphere experiments sent up on rockets from Poker Flat.

"One of the goals for the Space Grant is straddling the line between the Geophysical Institute and the School of Engineering," Hawkins said.

Over the years, Hawkins has done his share of straddling various interests, as he has split his time between teaching electronics and his other love—flying small airplanes.

"Throughout the years they've always traded places between which was the vocation and which was the hobby," he said.

Growing interest

Although Hawkins has his sights set miles high now, his vision wasn't always that far-reaching.

When he graduated from high school in 1974, Hawkins had no intention of going on to college.

"It seems odd looking back, but it never even crossed my mind at the time," Hawkins said.

Instead, Hawkins decided to put to work the self-taught electronic skills he had gathered by tinkering with radios. He repaired commercial business band radios, and operated and maintained equipment at broadcasting stations in Missouri.

With the union-scale wages he was paid in a temporary position with a TV station one summer, he was able to finance flying lessons.

His interest in flying brought him to Alaska, where he knew small planes provided one of the primary means of transportation.

In Alaska, he signed on at KTVF, planning to stay only a month or so while he spent his free time seeing more of the countryside from the cockpit of a plane.

The "month" never ended. Hawkins moved from KTVF to maintaining and operating satellite tracking equipment off Chena Hot Springs Road for the European Space Research Organization. When that operation folded in 1977, Hawkins decided it might be time to go back to school.

Space shuttle work

He entered the electrical engineering school at UAF as an undergraduate, and financed his education giving flying lessons at The Flying Machine, a now defunct flying club that was located at the Fairbanks International Airport.

In addition to his university classes, Hawkins estimates he spent about 4,000 hours in the air during the following four years.

He did manage to spend enough time on the ground at the flying club to meet Donna Weihs in the spring of 1980, however.

"I saw Joe and flirted a little bit," Weihs said. "I never flew with him as an instructor, it was just that I was kind of always there, flying."

By mid-summer, Weihs had caught Joe's attention, and he asked her to join him in the backseat of his Bellanca Decathlon during a mock combat.

"Our first date was a dogfight," said the strawberry-blond, bearded Hawkins, laughing.

The romance continued after Hawkins left for graduate school at Stanford in Palo Alto, Calif. in the fall of 1982. There, Hawkins earned a doctorate in electrical engineering. He spent five years at the Space, Telecommunications and Radio Science Laboratory, known as Starlab, at Stanford. His thesis involved experiments that flew on the space shuttle mission that carried Space Lab 2.

In September of 1984, while Hawkins was still at school in California and Donna was attending school in Boston, the two were married, in between semesters. When the break was over they returned to separate coasts.

"We were married by AT&T," Hawkins said.

Rocket man

In 1987, when the University of Alaska offered early retirement for some existing professors, Hawkins was hired to fill one of the positions.

Now flying has taken a back seat to electronics, as Hawkins spends up to 80 hours a week teaching classes in the Duckering Building and researching the earth's magnetosphere at the Geophysical Institute under a 3-year grant from NASA.

Among other duties as director of the Space Grant program, Hawkins will oversee a group of undergraduate and graduate students as they build a 2-foot payload to fit on the end of a commercially built rocket.

The 6-foot rocket, standing just a tad taller than Hawkins, will fly about 15 kilometers or 9.3 miles into the air, taking temperature measurements.

Hawkins' various commitments mean he often puts in days that begin at 5:30 in the morning and don't end until 7 or 8 at night.

But for every hour he spends, he feels like he would need another two hours to accomplish all he wants. In order to keep from spending every waking moment at work, he has tried to strike a balance.

"The most difficult aspect . . . is trying to find that balance. For everything that gets done, there are 10 exciting things that can't be done, so you just try to make sure the one-tenth that does get done is the one-tenth that will make a difference," Hawkins said.

And while making a difference, Hawkins believes in having fun.

"I've always held that a job should be something you would do as a hobby, even if you don't get paid for it," Hawkins said.

Brian Schneider photo

NEW DIRECTOR—Joe Hawkins is the new director of the University of Alaska Fairbanks Space Grant Program. The program, which will help the university strengthen its research and teaching in aeronautics, is funded by a four-year $150,000 grant from the National Aeronautics and Space Administration and a matching grant of $100,000 from industrial affiliates and the university.

> *"The most difficult aspect (of teaching) . . . is trying to find that balance. For everything that gets done, there are 10 exciting things that can't get done, so you just try to make sure the one-tenth that does get done is the one-tenth that will make a difference."*

Joe Hawkins

Age: 35

Occupation:
Assistant professor of electrical engineering, newly appointed director of the Space Grant Program at the University of Alaska Fairbanks.

Wife:
Donna, chemical technician at the Institute of Marine Sciences.

Interests:
Aerobatics, backpacking, skiing (limited to cross-country since he developed a "quick release knee" in a downhill skiing accident.)

Most irritating habit:
Speaking in puns.

Joe Hawkins

Flying high with both feet on the ground

UAF professor to launch Space Grant Program

SPOTLIGHT

By WILDA WHITAKER
Staff Writer

Joe Hawkins is seeing stars.

It's his job to get the new "Space Grant" enterprise at the University of Alaska Fairbanks off the ground—literally and figuratively.

Hawkins, who wrote the proposal that convinced NASA to give UAF the Space Grant status in February, will help "launch" the program through a class in which students design and build their own rocket payload. The rocket will blast off from the Poker Flat Research Range in a little over a year.

Hawkins, an assistant professor of electrical engineering, will serve as director of the program and will oversee distribution of the grant money.

When he graduated from high school in 1974, Hawkins had no intention of going on to college.

"It seems odd looking back, but it never even crossed my mind at the time," Hawkins said.

Instead, Hawkins decided to put to work the self-taught electronic skills he had gathered by tinkering with radios. He repaired commercial business band radios, and operated and maintained equipment at broadcasting stations in Missouri.

> *"The most difficult aspect (of teaching) . . . is trying to find that balance. For everything that gets done, there are 10 exciting things that can't get done, so you just try to make sure the one-tenth that does get done is the one-tenth that will make a difference."*

as Starlab, at Stanford. His thesis involved experiments that flew on the space shuttle mission that carried Space Lab 2.

ate and graduate students as they build a 2 foot payload to fit on the end of a commercially built rocket.

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Wife:
Donna, chemical technician at the Institute of Marine Sciences.

Interests:
Aerobatics, backpacking, skiing (limited to cross country since he developed a "quick release knee" in a downhill skiing accident.)

Most irritating habit:
Speaking in puns.

HB

48

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. HB 48

Revision Date: _____ Department Affected: Commerce & Economic Dev.

Title: An Act relating to king salmon classics BRU: Occupational Licensing

Component: Administration

Sponsor: Reps. Ulmer and Hudson

Requestor: House Labor & Commerce COMPONENT SERIAL NO. 0 3 5 6

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
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						

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary.)

HB 48 recognizes king salmon classics as another category under the Games of Chance and Skill program. No fiscal impact is anticipated.

Prepared By: Jennifer Strickler, Administrative Officer Phone: 465-2144

Division: Occupational Licensing Date: February 1, 1991

Approved by Commissioner: Glenn A. Olds

Agency: Department of Commerce & Economic Development Date: February 1, 1991

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90
JS/dg18852D/020191a

Alaska State Legislature

HOUSE OF REPRESENTATIVES

REPRESENTATIVE FRAN ULMER

MEMORANDUM February 6, 1991

TO: Rep. David Finkelstein, Chair
Labor and Commerce Committee

FROM: Rep. Fran Ulmer

RE: HB 48; "An Act relating to king salmon classics."

HB 48 would add king salmon classics to the list of games of chance now allowed under statute, with a specific provision for conducting the classic by Douglas Island Pink and Chum (DIPAC) of Juneau.

The DIPAC Ice Classic would be operated quite similar to the Nenana Ice Classic, in that participants would guess the exact time that the first king salmon of the season returns to the DIPAC hatchery in Juneau. It will be conducted under the guidance of the Juneau Chamber of Commerce with the cooperation of the DIPAC hatchery, with an independent audit to ensure proper management. The classic fits right in with other fishing related activities in the Juneau area, such as our annual Salmon Derby. But the DIPAC King Salmon Classic promises to be more than a popular event and good time for those involved.

In addition to the fun and excitement of the contest, the Classic would bring economic and social benefits to the area. The Classic would raise funds for community services provided by the Juneau Chamber of Commerce. It would also enhance fishing, tourism and other "spin-off" opportunities by focusing media attention on the hatchery operations here. The passage of HB 48 will provide Juneau with a means of expanding our economic base to the benefit of local citizens and local enterprise.

I request favorable consideration of this legislation by the committee on behalf of the people of Juneau.

District 4B — Juneau
P.O. Box V • Juneau, Alaska 99811-3100 • (907) 465-4947

Alaska State Legislature

HOUSE OF REPRESENTATIVES

REPRESENTATIVE FRAN ULMER

MEMORANDUM February 6, 1991

TO: Rep. Fran Ulmer

FROM: Barnaby Dow

RE: Sectional Analysis of HB 48; "An Act relating to king salmon classics."

SECTION 1: under AS 05.15.060, which directs the Department of Commerce and Economic Development to adopt regulations necessary to carry out games of chance, new wording adds employees of DIPAC and the Department of Fish and Game to the list of persons prohibited from participating in the king salmon classic.

SECTION 2: allows the commissioner to issue a permit for a king salmon classic to a municipality or qualified organization.

SECTION 3: adds salmon classic permitees to the list of activities prohibited from contracting with more than one operator at a time to conduct the same type of activity.

SECTION 4: exempts king salmon classics from prohibition against licensing for activities that did not exist before statehood.

SECTION 5: defines "king salmon classic" as a game of chance where prize money is awarded for the closest guess of time. Specifically designates DIPAC and the Juneau Chamber of Commerce as the entities involved.

District 4B — Juneau
P.O. Box V • Juneau, Alaska 99811-3100 • (907) 465-4947

FACT SHEET ON HB 48. KING SALMON CLASSICS.

- Conducted by the Juneau Chamber of Commerce with assistance the Douglas Island Pink and Chum hatchery in Juneau.

- Juneau Chamber and DIPAC are the only authorized entities allowed to conduct the classic.

- Regulated by the Department of Commerce and Economic Development under the same authority (games of chance) that regulates other activities such as the Nenana Ice Classic.

- Regular audits required.

- Proceeds must be for charitable purposes.

- Compliments local fishing, tourism and related economies.

- Proceeds go to support local social programs.

GREATER JUNEAU
Chamber of Commerce
124 West 5th Juneau, Alaska 99801
Phone: (907)586-6420 FAX: (907)463-5670

November 20, 1990

Honorable Fran Ulmer
1700 Angus Way
Juneau, AK 99801

Dear Representative Ulmer:

The Greater Juneau Chamber of Commerce respectfully requests your assistance in sponsoring legislative authorization of a so called "DIPAC SALMON CLASSIC". This DIPAC SALMON CLASSIC would be a game of chance, somewhat similar to the Nenana Ice Classic, in that participants could bet on exact time of return of the first DIPAC Hatchery King salmon to the new DIPAC fish hatchery at Salmon Creek in Juneau. The Alaska Department of Commerce and Economic Development Division of Occupational Licensing has advised us there is no provision under state law to allow conduct of such a program and that specific legislation authorizing same is required. Hence this request.

Purpose of this proposal would be two fold: one is to raise money to help support civic and community service activities of the Chamber of Commerce, and two would be to help promote awareness of fishing opportunities in the Juneau area. Regarding the latter, in 1991 alone for example, the DIPAC Hatchery plans release of 30 million Pink, 100 million Chum, one million Coho, and one hundred fifty thousand King salmon fry to Juneau area waters. Returns of these fish will create a multi-million dollar economic impact on the Juneau area economy through commercial and sport fisheries, fishery support services and increased tourism potential, all of which contribute to and broaden our area economic base.

Specific methodology would be to sell game of chance tickets on the exact time of return of the first DIPAC Hatchery King salmon to a designated point in the DIPAC fish ladder at the Salmon Creek hatchery. Specific point of return would be monitored on a secured, extended play video camera, upon which date, hour, minute, and second would be superimposed, to register specific time of fish passage. This particular point of observation would be immediately past the tourist fish observation window and just preceding the holding tank where all returning fish are temporarily held prior to being physically removed for processing.

The apparent first return DIPAC hatchery king salmon, if not actually observed at time of passage past this particular window slot, will be verified in the holding pen by DIPAC employees. Fish verification will require a healed, clipped adipose fin, plus final Alaska Department of Fish & Game verification of the magnetically coded DIPAC wire tag embedded in the nose cartilage prior to smolt release. Only a clipped adipose and proper code wire tagged king will qualify as the first returning king; no other fish will count.

With the finding of such a king salmon in the holding tank, a DIPAC Hatchery employee will rewind the observation camera tape to the point of seeing that king salmon

pass thru the selected point of entry, at which time exact winning date, hour, minute, and second would be determined, with same subsequently ascertained by Chamber of Commerce Board of Directors. A multiple return of "qualified" return kings found in the holding tank will be counted by time of the first video taped fish passage return.

Camera would be provided by the Chamber of Commerce, installed and secured by DIPAC, so as to be locked and tamperproof. Camera set-up and installation would be well prior to the anticipated time "window" of first return. DIPAC employees and immediate families would not be eligible to participate in the contest. Specifics of this concept have been coordinated with and agreed to by DIPAC management.

It is anticipated ticket sales would be through Chamber members or selected retail outlets, with specific ticket price and prize level(s) still to be determined. All accounting would be subject to independent audit and would be managed through the Chamber Executive Director. All times would be computerized, with winning entries sharing prize monies equally; i.e., a single contestant picking the exact time would win the entire prize money and multiple such exact time winners would split that prize money equally. Computerized selection of nearest time would be used if exact time were not chosen.

To assist in coordinating this request for Legislation, this request is also being made of Representative Bill Hudson, and Senator Jim Duncan. We would be pleased to answer any questions you may have and/or to lend assistance in any way. Please call with questions.

Sincerely,

V. Joe Poor
Executive Director

Copy DIPAC, Attn: Sandy Williams

Advertising Specialties
9108 Mendenhall Mall Road
Juneau, Alaska 99801

(AK) 1-800-478-0993
(907) 789-0993 or 789-2454
Fax (907) 789-9535

January 29, 1991

Honorable Fran Ulmer
House of Representatives
P.O. Box V
Juneau, Ak. 99811

Dear Representative Ulmer:

This letter is written in support of the SALMON CLASSIC bill your office is considering supporting for the Greater Juneau Chamber of Commerce.

As a local business we feel this SALMON CLASSIC would be great for the City of Juneau . It would be good for the merchants, the people and the tourists visiting our great city.

We appreciate your support and if we can help you in some way please let us know.

Sincerely,

Shorty & Evelyn Oliver

Copy to:
GJCC

CCE

Cooper Consulting Engineers

8183 THREADNEEDLE • JUNEAU, ALASKA 99801 • 907-789-3422

February 2, 1991

Honorable Fran Ulmer
House of Representatives
P.O. Box V
Juneau, Alaska 99811-3100

Dear Representative Ulmer:

Thank you for introducing the Salmon Classic legislation for Juneau.

Besides providing funds for various community service projects in Juneau, the Salmon Classic provides a nontraditional advertising format that can be utilized by communities and agencies, statewide, to promote tourism and Alaska fish products. For example, the Nenana Ice Classic gets press attention in at least some areas of the Lower 48, which surely generates curiosity about Alaska and presumably influences some tourism decisions. The Salmon Classic has the same kind of potential for generating interest in both Alaska tourism and Alaska fish.

Since the Salmon Classic will be directly tied to the DIPAC Hatchery and Juneau, Juneau will probably receive the first and biggest tourism boost from the Salmon Classic. However, it will draw attention to the entire Alaska hatchery program and help other communities make their hatcheries tourist attractions. It will also draw attention to Alaska Salmon, attention that can be utilized by ASMI and other advertisers.

The Salmon Classic will be a positive event for Juneau and can be a positive event for promotion of tourism and fisheries in other sections of the state. The Salmon Classic is an entrepreneurial effort to add value to our tourism and fisheries industries. Thus it deserves support on a statewide basis, just as any other project that positively affects the economic strength of this state.

Sincerely,

John D. Cooper, P.E.
Principal

National Bank of Alaska

Juneau Office: P.O. Box 1189 • Juneau, Alaska 99802-1189 • (907) 586-3324

1-30-91

Honorable Fran Ulmer
House of Representatives
Box V
Juneau, Alaska 99811-3100

Dear Fran:

I would like to take this opportunity to formally thank you for your efforts in obtaining initial funding for engineering and planning work for the proposed Douglas Island fish processing/Seafood Industrial Park site. I believe this is a viable project with a positive risk to reward ratio, and should be pursued.

The primary purpose of this correspondence is to express my support for the Juneau (DIPAC) Salmon Classic. There is precedent for these activities in other areas of the state, and I see nothing but benefit locally from the Classic's establishment. The more we heighten awareness among tourists as well as locals regarding the value of our sport and commercial fisheries, the better off we will be in the future. Hopefully, the more attention people pay to our fisheries, the more educated they will make themselves regarding the issues involved, and be better equipped to deal with future decisions regarding harvesting, conservation, and regulation.

Thank you for your efforts in the past, and I look forward to your attentiveness to the needs of businessmen in this present session.

Sincerely,

Barry J. Cooper
Vice President
Manager

cc: Greater Juneau Chamber of Commerce
1107 West 8th, #1
Juneau, Alaska 99801

HB

49

[redacted]'OUSE COMMITTEE REP([redacted]

(7)
Date Referred: January 22, 1991 FURTHER REFERRALS: HESS

Date of Committee Action: 3-5-91

The LABOR & COMMERCE Committee considered: HB 49

HOUSE BILL NO. 49 TBT-BASED MARINE ANTIFOULING PAINT

"An Act amending the definition of slow-leaching TBT-based marine antifouling paint."

RECOMMENDATIONS: [ ] the same title
be replaced with _____ [ ] a new title
[ ] have attached amendments(s)
[X] do pass
[ ] do not pass
[ ] no recommendations
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal impact _____ [ ] fiscal note(s) _____

[X] zero fiscal note DEC [ ] zero fiscal note(s) _____

SIGNING DO PASS: SIGNING OTHER RECOMMENDATIONS:

	Check appropriate column:	Do Not Pass	No Rec	Amend
Dave Donley				
[illegible]				
Robin L. Taylor				
Irene Nicholia				
[illegible]				
[illegible]				

Chairman's Signature

FISCAL NOTE

STATE OF ALASKA
1991 LEGISLATIVE SESSION

BILL NO. HB49

Revision Date: _____ Department Affected: Environmental Conservation

Title: Amending the definition of slow-leaching TBT-based marine antifouling paint BRU: Environmental Health

Component: Palmer Laboratory

Sponsor: Ulmer, Koponen

Requestor: _____ **COMPONENT SERIAL NO.** | | 6 | 5 | 1 |

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 92	FY 93	FY 94	FY 95	FY 96	FY 97
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	-0-	-0-	-0-	-0-	-0-	-0-
FEDERAL FUNDS	-0-	-0-	-0-	-0-	-0-	-0-
OTHER	-0-	-0-	-0-	-0-	-0-	-0-
TOTAL	-0-	-0-	-0-	-0-	-0-	-0-

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: -0-

ANALYSIS: (Attach a separate page if necessary.)

Prepared By: Douglas C. Donegan, Director DCD Phone: 465-2696

Division: Division of Environmental Health Date: Jan. 28, 1991

Approved by Commissioner: Mead Treadwell, for John Sandor

Agency: Department of Environmental Conservation Date: _____

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/90

Alaska State Legislature

HOUSE OF REPRESENTATIVES

REPRESENTATIVE FRAN ULMER

TO: Rep. David Finkelstein, Chairman
Labor and Commerce Committee

FROM: Rep. Fran Ulmer

DATE: February 26, 1991

RE: HB 49

TBT BILL

TBT is an ingredient widely used in marine paints to prevent the growth of barnacles and algae on boat hulls. It is also a highly toxic pesticide that has caused death and deformities in marine life. In 1987 the legislature passed a bill and joined other west coast states in sharply reducing the amount of TBT in paint that can be sold in Alaska.

Unfortunately, the testing standard for TBT which "trips" the ban on it's sale is just one microgram per centimeter per day lower than the threshold that has since been established by the EPA and all other western states. As a result, many marine paints which meet the federal requirement are not allowed to be sold in Alaska. Fisherman and other boat owners are simply buying their paint out of state and using them "illegally" here. Stores that sell marine paint in Alaska are being penalized because of the prohibition on sale of paints that don't meet the lower (Alaska) threshold. The new bill would solve the problem by changing the level to be the same as federal standards.

Several organizations that lobbied strenuously for the lower standards in 1987, including the Pacific Fisheries Legislative Task Force, support matching the state's standards with the new federal level. California Oregon and Washington have all crafted their laws to meet the new EPA standards. The Task Force says the new standard still effectively curbs the threat to marine life, while allowing commerce to continue without undo restraint.

Thank you for your prompt consideration.

District 4B — Juneau
P.O. Box V • Juneau, Alaska 99811-3100 • (907) 465-4947

MEMORANDUM STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Division of Environmental Health

TO: Kate Tesar
Legislative Assistant

DATE: March 19, 1990

PHONE: 465-2609

FROM: Douglas Donegan DCD
Director

SUBJECT: TBT Law

I have reviewed the proposed change to the definition of "slow-leaching TBT-based marine antifouling paint." Changing the definition to allow a release rate of 4.0 micrograms per square centimeter per day, will make the state definition consistent with that of the federal Environmental Protection Agency (EPA). Consistency with federal law will simplify enforcement of state law and reduce the number of potential violators.

Changing the definition to the national standard will also have the effect of making more TBT-based paints available to Alaskan vendors.

For your information, I am also attaching a current EPA list of TBT-based antifouling paints with their release rates.

Attachment

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, DC 20460

OFFICE OF
PESTICIDES AND
TOXIC SUBSTANCES

TBT ANTIFOULANTS PAINTS

Certified Under OAPCA 1988

As of 2/1/90

COMPANY	EPA REGISTRATION NUMBER	PRODUCT NAME	AVERAGE RELEASE RATE ug/cm^2/day
1. Hempel	10250-14*	Antifouling Nautic 7680-1212-Gray	3.58
2. DeVoe	39492-39**	Navicote 2000 Red Antifouling Paint MD 4540	0.0
3. Sigma Coatings	11350-9**	7293 Pilot LL Antifouling	1.09
4. International Paint	2693-127**	Intersmooth HiSol SPC AF Plum BFA 254	3.78
5. Chugoku Marine Paints	48302-1**	AF Seaflo Z-100	4.0
6. Chugoku Marine Paints	48302-6**	AF Seaflo Z-100LE	3.1
7. Sigma Coating	11350-25**	Sigmaplane 7284 HiBuild Antifouling Red Brown	2.68
8. Ameron Coatings	8120-48**	Amercoat 698 HS Antifouling Red	3.17
9. Ameron Coatings	8120-49**	Amercoat 635 Antifouling White	3.93
10. M & T Chemicals	5204-68**	Poly-Flo 2018	3.58
11. Nautical Coatings	44891-6**	Sea Hawk Biocop 1230 Blue	3.28

TBT ANTIFOULANTS PAINTS

Certified Under OAPCA 1988

As of 2/1/90

COMPANY	EPA REGISTRATION NUMBER	PRODUCT NAME	AVERAGE RELEASE RATE ug/cm^2/day
12. M & T Chemicals, Inc.	5204-IG*	Poly-Flo 4024	3.96
13. M & T Chemicals, Inc.	5204-64*	Poly-Flo 201-A White	3.07
14. Int. Nat. Paint	2693-115**	Interlux Micron 33	2.11
15. Int. Nat. Paint	2693-123**	Interswift Copolymer A/P Red BKA 007	2.78
16. Hempel Coatings	10250-40**	Hempel's Antifouling Combic 7699-5111 Red	0.80
17. ITW-Philadelphia Resins	55363-5*	Classic Yacht Clear	2.22
18. ITW-Philadelphia Resins	55363-6*	Classic Yacht AF Coating Aersol	3.04
19. Pro-Line Paint	40238-9**	Antifouling Paint 1077	3.65
20. Rule Industries, Inc.	7995-32**	KL990 Komposition Blue	0.27
21. Rule Industries, Inc.	7995-35**	U.S.M.C.	0.41
22. Rule Industries, Inc.	7995-36**	KL990 Graph-Cop	0.39
23. Rule Industries, Inc.	7995-38**	KL990 Graph-Cop	1.77
24. Rule Industries, Inc.	7995-39**	KL990 Graph-Cote	0.88
25. Rule Industries, Inc.	7995-41**	KL990 Komposition Brown	0.26
26. Rule Industries, Inc.	7995-43**	KL990 Super Epoxycop Red	1.11
27. Rule Industries, Inc.	7995-46**	574 Super Sea Jacket	0.37
28. Rule Industries, Inc.	7995-47**	KL990 Super Expoxycop Blue	0.44

* TBT Only
** TBT and Cuprous Oxide

PUBLIC OPINION MESSAGE

DEAR: REPRESENTATIVE ULMER

NAME: CYNTHIA FLOR
TITLE: PETERSBURG SHIPWRIGHTS'S
ADDRESS: BOX 4
CITY: PETERSBURG ZIP: 99833
PHONE: 772-4500
BILL NO: HB 49
SUBJECT: TBT-BASED MARINE ANTIFOULING PAINT
MESSAGE: AS BUSINESS MANAGER FOR PETERSBURG SHIPWRIGHT'S INC., WE STRONGLY SUPPASSAGE OF HB49. CURRENTLY NO MAINTENANCE PRODUCTS ARE AVAILABLE IN THE STATE FOR ALUMINIUM BOATS. STATE AND FEDERAL REGULATIONS DIFFER, SO BOAT OWNERS ARE BUYING THE PRODUCTS IN WASHINGTON STATE ILLEGALLY.

POMID: 15123423
DATE: 91/02/14
TIME: 12:34:23
LIONAME: PETERSBURG LIO

COPIES: REPRESENTATIVES SENATOR

TAYLOR JONES
C.DAVIS
FINKELSTEIN
PARNELL
IVAN
DONLEY
BRUCKMAN
ZAHACKI

PUBLIC OPINION MESSAGE

DEAR: REPRESENTATIVE ULMER

NAME: LUCILLE CLARK
TITLE:
ADDRESS: 525 B STREET
CITY: ANCHORAGE ZIP: 99501
PHONE: 277-3733
BILL NO:
SUBJECT: 75 DAY LEGISLATIVE SESSION
MESSAGE: I SUPPORT GOVERNOR HICKEL'S PROPOSED 75 DAY LEGISLATIVE SESSION. WOULD BE TO THE TAXPAYER'S BENEFIT.

POMID: 03130611
DATE: 91/02/14
TIME: 13:06:11
LIONAME: ANCHORAGE LIO

COPIES: REPRESENTATIVES REPRESENTATIVES SENATORS

BAKER BARNES ADAMS
BOYER BROWN COLLINS
BRUCKMAN CARNEY COTTEN
CHOQUETTE DAVIDSON DUNCAN
B.DAVIS C.DAVIS ELIASON
DONLEY ELLIS FAHRENKAMP
FINKELSTEIN FOSTER FISCHER
GONZALES GRUENBERG FRANK
GRUSSENDORF HANLEY HALFORD
HUDSON IVAN HOFFMAN
JACKO KOPONEN JONES
KUBINA LARSON KERTTULA
LEMAN LINCOLN MENARD
MACKIE MACLEAN PEARCE
MARTIN M.A.MILLER POURCHOT
M.W.MILLER MOYER RODEY
NAVARRE PARNELL SHULTZ
G.PHILLIPS R.PHILLIPS STURGULEWSKI
SHARP TAYLOR UEHLING
ZAHACKI ZHAROFF

PUBLIC OPINION MESSAGE

DEAR: REPRESENTATIVE ULMER

NAME: CYNTHIA FLOR
TITLE: PETERSBURG SHIPWRIGHTS'S
ADDRESS: BOX 4
CITY: PETERSBURG ZIP: 99833
PHONE: 772-4500
BILL NO: HB 49
SUBJECT: TBT-BASED MARINE ANTIFOULING PAINT
MESSAGE: AS BUSINESS MANAGER FOR PETERSBURG SHIPWRIGHT'S INC., WE STRONGLY URGE PASSAGE OF HB49. CURRENTLY NO MAINTENANCE PRODUCTS ARE AVAILABLE IN THE STATE FOR ALUMINIUM BOATS. STATE AND FEDERAL REGULATIONS DIFFER, SO BOAT OWNERS ARE BUYING THE PRODUCTS IN WASHINGTON STATE ILLEGALLY.

POMID: 15123423
DATE: 91/02/14
TIME: 12:34:23
LIONAME: PETERSBURG LIO

COPIES: REPRESENTATIVES SENATOR

TAYLOR JONES
C.DAVIS
FINKELSTEIN
PARNELL
IVAN
DONLEY
BRUCKMAN
ZAWACKI

PUBLIC OPINION MESSAGE

DEAR: REPRESENTATIVE ULMER

NAME: LUCILLE CLARK
TITLE:
ADDRESS: 525 B STREET
CITY: ANCHORAGE ZIP: 99501
PHONE: 277-3733
BILL NO:
SUBJECT: 75 DAY LEGISLATIVE SESSION
MESSAGE: I SUPPORT GOVERNOR HICKEL'S PROPOSED 75 DAY LEGISLATIVE SESSION. IT WOULD BE TO THE TAXPAYER'S BENEFIT.

POMID: 03130611
DATE: 91/02/14
TIME: 13:06:11
LIONAME: ANCHORAGE LIO

COPIES: REPRESENTATIVES REPRESENTATIVES SENATORS

BAKER BARNES ADAMS
BOYER BROWN COLLINS
BRUCKMAN CARNEY COTTEN
CHOQUETTE DAVIDSON DUNCAN
B.DAVIS C.DAVIS ELIASON
DONLEY ELLIS FAHRENKAMP
FINKELSTEIN FOSTER FISCHER
GONZALES GRUENBERG FRANK
GRUSSENDORF HANLEY HALFORD
HUDSON IVAN HOFFMAN
JACKO KOPONEN JONES
KUBINA LARSON KERTTULA
LEMAN LINCOLN MENARD
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SHARP TAYLOR UEHLING
ZAWACKI ZHAROFF

U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
ALASKA OPERATIONS OFFICE
3200 HOSPITAL DRIVE, SUITE 101
JUNEAU, ALASKA 99801

March 1, 1991

REPLY TO
ATTN OF: AOO

The Honorable Fran Ulmer
House of Representatives
Alaska State Legislature
P.O. Box V
Juneau, Alaska 99811

Dear Representative Ulmer:

We have reviewed HB 49, the legislation you have introduced for amending the definition of slow-leaching TBT-based marine antifouling paint. We are pleased that you have introduced this legislation and find it compatible with Environmental Protection Agency's (EPA) tributyltin (TBT) leach out standard/release rate of 4.0 micrograms per square centimeter per day at steady state conditions, cited in the federal call-in notice of July 29, 1986.

We understand the need and endorse this legislation. When enacted, it will correct the current discrepancy of two differing yet allowable TBT release rates in Alaska, and achieve a uniform standard that fully meets federal stringency requirements. Such legislation fosters flexibility and greater consistency with regard to cooperative state and federal regulatory control of commercially available and viable marine pesticide products.

Thank you for the opportunity to provide comment on this important piece of legislation.

Sincerely,

Steven A. Torok, Chief
State Operations Section

ULMLTR.GCB

Petersburg Shipwrights, Inc.

Drydocking • Construction • Repair

1000 Nordic Drive • Box 378
Petersburg, Alaska 99833
(907) 772-3596

February 28, 1991

To all Legislators:

As a service industry concerned with the maintenance of marine vessels, we are strongly in favor of passage of HB49. Our customers with aluminum vessels have had no form of antifouling protection for their boats since Alaska passed their bill restricting the use of TBT. The growth that results from lack of annual maintenance can cause serious damage in the form of "pitting".

Following a steady stream of customer complaints about the lack of alternatives, I contacted several of the major marine coating manufacturers about a year ago and inquired as to whether or not they were going to ever come up with a product that would meet the State of Alaska's TBT leachate rate. They all answered NO, that the lowest they would go would be the leachate rate required by Federal law.

The difference between State and Federal laws is very small yet the negative impact on owners of aluminum vessels is quite large. Many owners out of desperation bought paint in Washington were it was sold legally until just recently when it fell under restricted pesticide control.

Let's have conformity of law! Please pass HB49.

Sincerely,

Cynthia C. Flora
Business Manager
Petersburg Shipwrights, Inc.