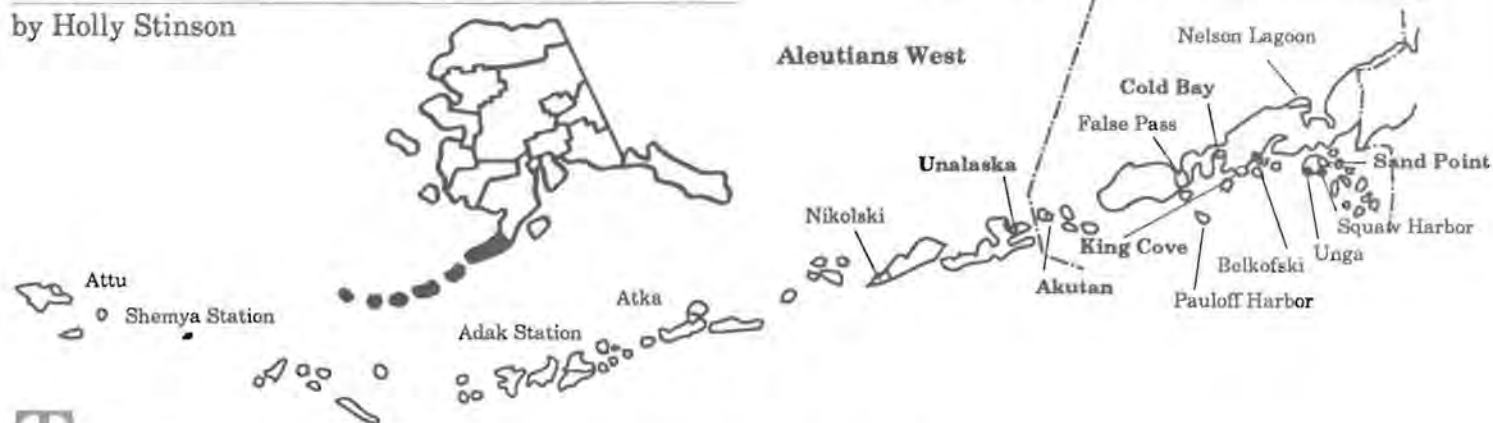


The Aleutians: Islands in a Sea of Change

by Holly Stinson



To many Alaskans, the Aleutians are not really thought of as part of the state. Instead, they are seen on maps as a tiny box of islands floating in the Gulf of Alaska. For most Aleutians residents, their economic lifeline has been with Seattle more so than with other parts of Alaska. Geography explains both of these points. The Aleutians are a chain of volcanic islands that extend west from the Alaska Peninsula in an 1,100 mile-long arc. (See map.) They serve as a dividing line between the Bering Sea and the North Pacific Ocean. This great distance, along with the very fact that they are islands, means they are isolated communities. Their location has dictated the structure of their economy to a great extent.

The Aleutian and Pribilof Islands are home to two separate types of communities: the military enclaves supported by the Pentagon and the civilian communities supported almost entirely by the fishing industry. Both types of communities are undergoing change to some degree. With the ending of the Cold War, the function of military bases is being redefined; the economies of the civilian communities are changing as the structure of the fishing industry changes. This article discusses the current economic picture of these changing communities in the two census areas that include the Aleutian and Pribilof Islands.

Economy of Eastern Aleutians Tied to Salmon Harvest

The Aleutian Islands recently divided when the Aleutians East Borough was formed in 1986. Six communities make up the Aleutians East Borough -- Cold Bay, King Cove, Nelson Lagoon and Sand Point on the Alaska Peninsula and Akutan and False Pass on the chain of Aleutian Islands. According to a 1988

Table 1

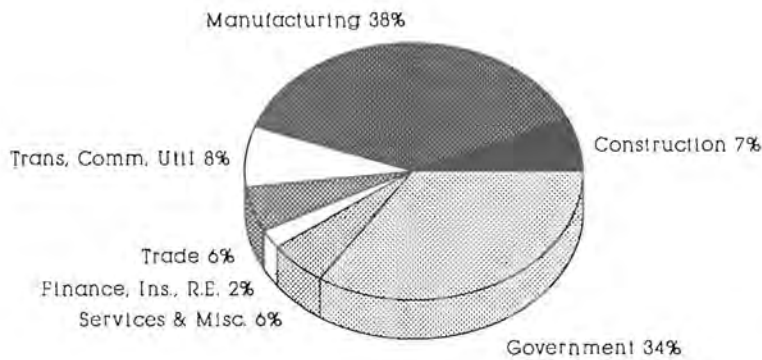
Aleutian Islands Population in 1988

	Total Population	Uniformed Military
Total Aleutian Islands	8,274	2,698
Aleutians East Borough	1,573	
Akutan	86	
Cold Bay	154	
False Pass	87	
King Cove	535	
Nelson Lagoon	65	
Sand Point	615	
Balance of Aleutians East Borough	31	
Aleutian Islands West Census Area	6,701	2,698
Adak	4,143	2,076
Atka	83	
Attu	27	27
Nikolski	34	
Shemya	603	576
St. George	156	
St. Paul	521	19
Unalaska	1,131	
Balance of Aleutian Islands West	3	0

Source: Alaska Department of Labor, Research and Analysis Section

Figure 1

Aleutian & Pribilof Islands Employment by Industry, 1988



Source: Alaska Department of Labor, Research and Analysis Section

estimate, 1,573 people lived in the Borough, almost three-fourths of them in King Cove and Sand Point. (See Table 1.)

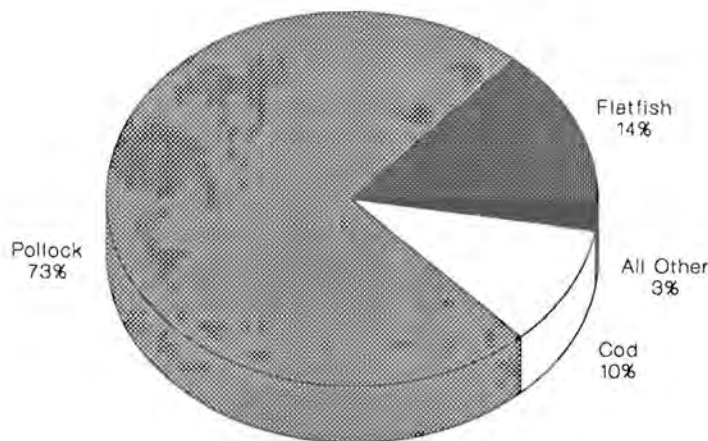
The entire Aleutian chain relies on the fishing industry, but this eastern portion traditionally depended more on the salmon harvest while the western half relied more on the crab, and now groundfish, harvest for their livelihood. All of the communities in the Aleutians East Borough with the exception of Cold Bay rely on fishing and fish processing for their main economic activity.

Majority of Jobs in Processing, Government

A glance at Figure 1 and Table 2 reveals a regional economy based overwhelmingly on government and manufacturing. Almost three-fourths of all jobs -- 72% -- are in these two sectors. In this region, manufacturing jobs almost exclusively mean seafood processing jobs. This eastern portion of the region is no exception. Processors are located throughout the Borough, both land-based and floating operations. The Peter Pan plant at King Cove is one of the largest processing facilities in the state. Trident recently opened a new plant at Akutan which will employ as many as 400 people to process pollock into various products, including fish meal and surimi. One community seen on the map but not mentioned here is Port Moller, because this "community" consists entirely of a seafood processing plant.

Figure 2

Groundfish Catch in Aleutians* In 1989



* Includes Aleutian Bering Sea and Western Gulf Regions.

Source: Alaska Department of Fish and Game

Most of the jobs with the processors, though, are not held by local residents. Many processing facilities are so self-contained as to be called a "community within a community". They supply their own food and housing needs, and generate their own electricity. Few goods or services are bought through the local economy. In some communities a firm's management may live in town, and local residents may staff the firm's office. Local residents are more often employed in other industry sectors -- trade, services, transportation or government -- or in fish harvesting.

Aleutian Islands Wage & Salary Employment - 1980-1989*

	1980	1981	1982	1983	1984	1985	1986	1987	1988	9 mo. Avg. 1988	9 mo. Avg. 1989*
Total	3,252	3,436	3,158	3,387	3,231	3,172	3,418	3,565	4,273	4,252	4,647
Mining	**	**	**	**	**	**	**	**	**	**	**
Construction	112	118	81	131	108	147	210	214	290	285	138
Manufacturing	1,586	1,625	1,255	1,269	870	874	959	1,173	1,600	1,884	2,114
Transportation	127	183	209	191	186	237	247	312	325	332	369
Trade	111	122	121	116	197	127	203	216	221	212	235
F.I.R.E.	**	**	**	**	**	**	**	**	**	**	**
Services & Misc.	160	161	170	313	371	306	277	207	254	278	211
Government	1,081	1,131	1,230	1,267	1,324	1,337	1,385	1,315	1,467	1,431	1,489
Federal	676	686	723	729	720	694	742	682	825	776	854
State	68	66	76	72	74	80	74	70	81	76	83
Local	337	379	431	467	530	563	569	563	561	579	552

* Only the first three quarters of 1989 data are available.

** Nondisclosable

Source: Alaska Department of Labor, Research & Analysis Section.

Cold Bay is Air Hub for Eastern Region

One town in the Aleutians East Borough doesn't have a fishing orientation. Cold Bay was developed during World War II as a military base, and today remains the major air transportation hub for the area. With one of the longest runways in the state, the city would like to entice some air carriers flying the West Coast to Orient route to use Cold Bay as a refueling stop, shaving both miles and time off the stop in Anchorage.

Cold Bay is also hoping to improve their dock facilities in order to attract ships for supplies and services. Their deep water port and strategic location both offer potential for development. The dock plans are firmer than the airport scheme at this time. The Aleutians East Borough is funding \$1.1 million of the estimated \$3.3 million cost and plans are to have the project out for bid by spring 1991. Sand Point is also in the middle of a harbor and dock expansion, hoping to capture some of the boat storage business from people who now make the trip to Kodiak or Anchorage for winter storage of their vessels.

Western Aleutians & Pribilofs Have Majority of the Jobs

The Aleutian Islands West census area is comprised of three Aleutian communities -- Atka, Nikolski and Unalaska -- plus the two Pribilof Island communities of St. Paul and St. George. Five military installations are also included in this area. Table 3 shows how employment is split between the Aleutians West and Aleutians East. More than three-fourths of the jobs are in the Aleutians West census area, and an overwhelming number of jobs in this western portion are in Unalaska. Atka, Nikolski, St. Paul and St. George all have a handful of private firms. Shemya has a few private employers and some federal jobs. Adak has more than 20 private firms, 8 state agencies, over 100 local government employees, and nearly 700 federal jobs. The rest of the employment is all in Unalaska.

Unalaska: Groundfish Harvest Creates a Boom Town

This western Aleutians community has bounced back from the king crab crash in the early 1980s to become Alaska's most enduring boom town. Ranked first in value of seafood landed in 1978 and

Table 3

Employment by Census Area 1988

	Aleutians East Borough Annual Average	Aleutians West Census Area Annual Average
Total	1,022	3,251
Mining	*	*
Construction	11	279
Manufacturing	639	981
T.C.U.	60	265
Trade	46	176
F.I.R.E.	*	*
Services & Misc.	21	233
Government	211	1,256
Federal	29	796
State	0	81
Local	182	379

* Nondisclosable

Source: Alaska Department of Labor, Research and Analysis Section

1979, its economy crashed as the stocks of king crab crashed. With the emergence of the groundfish harvest in the North Pacific and Bering Sea, this town has made an economic comeback.

In 1989 Unalaska was second in the nation, behind Bedford, Mass., in value of seafood landed (\$107 million). Unalaska's harbor (Dutch Harbor) is the main port for servicing the expanding fleet of groundfish harvesters and processors. The major buildup in docking and servicing facilities took place over the last three years. Activity at the harbor is now levelling off at about 6,000 vessel calls a year.

This figure includes several dockings by foreign vessels. Not only do they take on fuel and supplies at Unalaska, but a brisk trade is carried on by local merchants who sell to foreign sailors anxious for consumer products. In addition to helping the private sector, ships docking at Dutch Harbor also bring revenue into city coffers. A 3% city sales tax brought \$3.2 million in revenues from sales of fuel and other goods. The city's raw fish tax brought another \$2.4 million into the city treasury.

The increase in local economic activity has also meant an increase in water and air transportation service. Employment in this sector almost doubled in the last five years. The boom

has also inevitably meant an increase in population. The city manager estimates there are now about 2,500 permanent residents. He notes, though, that the actual number of people in Unalaska at any one time varies from 5,000 to 7,000 depending on local activities. The limiting factor for much economic activity is the chronic shortage of housing. The shortage is being eased somewhat this summer as the local Native corporation and several private firms build new housing units. With the fluctuation in population it is hard to say if the new facilities will be adequate to ease the housing crunch.

Processors in Unalaska Expanding

In addition to servicing the floating processor fleet, Unalaska is home to several land-based seafood processing plants. Three firms already in Unalaska are undergoing major expansions in order to take advantage of the latest seafood products: surimi and fish meal.

Surimi is a fish paste made from pollock; fish meal is made from fish parts wasted in traditional processing. Alyeska Seafoods has spent over \$12 million building a new fish meal plant which will quadruple their product output. They also make creative use of another waste product -- fish oil -- by mixing it with diesel fuel to operate their power plant and some of the processing

equipment.

UniSea will finish a \$60 million expansion by this September which will double both their fish meal and surimi processing. With housing in short supply, part of their expansion includes two new bunkhouses for employees. Even though the production of fish meal is highly automated and not labor intensive, UniSea's expansion will create 200 new jobs. Westward Fisheries is also expanding their seafood and surimi plant -- up to \$70 million worth of new plant will translate into 250 new jobs by early 1991.

The Changing Groundfish Story

Today's economic activity in Unalaska would not be happening if not for the Magnuson Act, passed in 1976, which extended American control of the fisheries from 3 to 200 miles offshore. Previously, groundfish were harvested by foreign fleets and taken to foreign shores. Joint ventures began harvesting in the Aleutian area by 1980 -- Americans caught the fish and delivered them to foreign processors at sea. By 1987, the joint-venture fishery accounted for 90% of the total Eastern Bering Sea groundfish harvest.

Since then, the joint-ventures are being displaced by American-owned floating processors and onshore processors. Their 90% allocation in 1987 has been turned around. In 1990, their share of the groundfish is 10% while the American companies' share is 90%. The caveat to be mentioned here is that many American companies are partly or wholly owned by Japanese firms. A total "Americanization" of the groundfishery has not yet occurred.

Table 4 shows the importance of the groundfish harvest. It accounts for 34% of the state's total seafood value, nearly equal to the salmon harvest's 38% share. Almost all (90%) of the groundfish catch is harvested in the region covered in this article (designated Aleutian Islands, Bering Sea, and Western Gulf). As can be seen in Figure 2, pollock is the major species of groundfish harvested, making up 73% of the groundfish catch in this region.

Residents Catch, Instead of Process, Fish

Although the fishing industry is the lifeblood of most Aleutian communities, local residents are more often engaged in fish harvesting instead of fish processing. In 1988 the Commercial Fisheries Entry Commission issued 346 fishing permits to persons with Aleutian Islands addresses. Counting in crewmembers would greatly increase the number of people actually harvesting. Most seafood harvesting jobs are not included in the Alaska Dept. of Labor's (AKDOL) statistics, so they are not reflected in the tables or figures accompanying this article.

St. Paul, St. George Expand Harbors

Northwest of Unalaska are the Pribilof Islands of St. George and St. Paul. The economies of both communities are changing since the fur seal harvest ended in 1983. St. Paul served to some extent as a base for oil and gas exploration activity in the early 1980s. The local seal plant was converted to a seafood plant and now processes crab, cod and halibut. The big news in St. Paul is the new \$30 million investment in improved harbor facilities. As the center of the groundfish harvest moves west into the Bering Sea, the City of St. Paul hopes to attract vessels for offloading and services, economic activities similar to those now enjoyed by Unalaska. Using St. Paul as a base would save time and fuel for the Bering Sea fishing fleet. St. George is also improving its harbor, but on a smaller scale than St. Paul's. About \$6 million has been spent on the harbor to date, and future improvements are in the planning stage.

Processing Jobs Jump in '88, '89

After falling in 1982-1985 as the crab harvest fell, jobs in this industry have steadily increased, posting large gains in the last two years. Employment grew 36% in 1988 and another 33% during the first six months of 1989. Since the groundfish harvest is year-round, these new jobs are also year-round. However, these jobs are not always filled by local residents. An AKDOL report analyzing residency status of workers by firm showed that it is common for seafood

Table 4

Value of Commercial Fish Harvest In 1989

Species	Total Value (in thousands)	Value of Aleutian Catch (in thousands)	Aleutian catch as % of Total
King crab	\$104,976	\$101,316	96.5%
Tanner crab	156,225	131,931	84.4
Dungeness crab	8,151	10	0.1
Shrimp	1,343	0	0.0
Misc. shellfish	3,256	1,886	57.9
Halibut	76,100	6,782	8.9
Groundfish	456,600	410,058	*89.8
Salmon	505,332	56,300	11.1
Herring	18,800	1,300	6.9
TOTAL	\$1,330,783	\$709,583	53.3%

*Estimate

Source: Alaska Department of Fish & Game

processors to have a non-residency rate among their employees of over 50% (when residents are defined as people who filed for a permanent fund dividend). In many cases support staff are recruited locally; they along with management usually live in town.

A considerable number of processing jobs in the Aleutians are not included in Alaska AKDOL statistics. The jobs on floating processors registered in Washington state show up there as manufacturing employment. Of the 263 permits issued by the Alaska Dept. of Environmental Conservation to processing vessels this year, half listed a Washington address for their firm. The vessels on that list, however, are not all large processing facilities; they range in size from 24 to 400 feet. The number of factory trawlers is hard to pinpoint but has been estimated recently at 70 (both Alaska- and Washington-based).

Fish Tax Revenues Fund Local Services

Another important aspect of the seafood industry is the revenue that comes back to the communities from the state's raw fish tax. Most communities also have a local fish tax. Together these monies often fund more than half of the local operations. A tax credit of 50% was extended to shore-based processors in an effort to even out any competitive

advantages enjoyed by the floating processors and encourage land-based investments. Although the legislature did not renew the program this session, firms which already have made qualifying investments can take the tax credit during the next two years. A total of 89 plants statewide took advantage of this program; ten of these are in the Aleutians. The four plants making the largest expenditures (\$10-\$20 million) are all located in the Aleutians.

The Debate: Onshore vs. Offshore Processors

A long-running debate centers on land-based versus floating processors. While neither type of processing facility employs many local residents, plants on land pay local property taxes in addition to the raw fish tax on pounds of fish delivered to them. However, they are taxed at a lower rate than offshore processors. Some floating processors escape the raw fish tax altogether if they operate outside the 3-mile limit of state control. If offshore processors permanently dock for one year, they are considered onshore and taxed at the lower rate. Shore-based processors also contribute more to the local economy because of their demand for local goods and services.

Besides the debate over contributions to the local economy, a perhaps bigger issue is whether or not the increasing number of factory trawlers will overharvest the resource. Unlike land-based processors, floating plants can simply move to a new region if the resource is exhausted in one area. An example of this occurred in 1989 in the Gulf of Alaska. The quota of pollock was reached by late February; usually this fishery is open through November or even December. Kodiak-based plants were left without pollock to process for the rest of the year, while the factory trawlers simply moved westward to new fishing areas.

Because of the above scenario, there are now proposals before the North Pacific Marine Fisheries Council to begin allocating groundfish among land-based and floating processors. If such an allocation becomes law, more floating processors may permanently dock, thereby qualifying as land-based facilities.

Faced with the possibility of overharvesting, the Council has also set a cut off date for entries in the groundfish industry. Any boat not already in the water (or already under construction) as of January 19, 1990, may, in the future, be barred from fishing in the North Pacific.

Other Issues Face Fishing Industry

There are other issues facing the fishing industry in addition to onshore/offshore allocation and overharvesting. The by-catch of untargeted species can mean early closure of a fishery. This is the first year that federal observers are on vessels fishing in the North Pacific, and the by-catch observed by them on many vessels differs from what was previously reported. The most serious of the by-catch species at this time is the sea lion. Their numbers are decreasing at such an alarming rate that this mammal was recently put on the list of federally protected species. The possibility existed that the sea lion would be placed on the more restrictive federal list of endangered species, which could have meant a total closure of most of the fishing grounds in the Aleutian region.

Another concern is the pollock catch in the "doughnut hole", which affects both U.S. and Soviet stocks. Overharvesting in this area of contested control means fewer fish to migrate into the 200 mile limit of U.S. ownership, and therefore fewer fish for U.S. vessels to harvest. The Magnuson Act is up for reauthorization; these and other questions will then be revisited. Who will set quotas, how will the resource be allocated, will roe-stripping be outlawed, will there be regulations forcing processors to use more fish wastes? This industry will certainly continue to change in the future.

Other Industries Offer Some Jobs in Aleutians

Because of remoteness, there aren't many conventional tourists in the Aleutians. But the Aleutian and Pribilof Islands are a mecca to bird watchers. The bulk of the Alaska Maritime National Wildlife Refuge is in this region, and Adak is home to an elaborate visitor center for the Refuge. The Alaska

Marine Highway has one ferry capable of navigating in the rough waters off the Aleutian Islands. It makes 3-4 runs along the Chain each summer, and a few hardy tourists are usually on board.

Mining plays a small part in the Aleutian economy. Offshore oil and gas leasing activity is currently focused on areas other than the Aleutians. Onshore, the geology of the Aleutian Islands does not lend itself to mineral deposits. One former underground gold mine on Unga Island is currently being evaluated for possible production. Located just a few miles from Sand Point, residents of that town may have employment opportunities in the mining industry.

There are many jobs in the Aleutians which are not reflected in the Alaska Dept. of Labor's employment statistics. This is particularly true in the construction industry. Because many construction firms are based in Anchorage, with projects in various other parts of the state, their employment is reported in Anchorage. With three seafood plant expansions and new housing being built in Unalaska, along with harbor improvements in many Aleutian communities and military construction (see section below), there are literally hundreds of construction jobs in the Aleutian region this summer.

The Military: A Large Presence in the Aleutians

The other side of the Aleutian economy is based on Navy and Air Force military installations. Uniformed military and their dependents stationed in the Aleutians account for almost half the population. In addition, there are close to 1,000 civilian workers and dependents in the Aleutians.

Two naval bases are located at Adak and Amchitka; Shemya is home to one of three of the Air Force's "forward ready bases" in Alaska where fighter planes are deployed to protect U.S. borders. The Coast Guard maintains two Loran radar stations with small contingents of personnel. They are located on Attu, the westernmost of the Aleutian Island chain, and on St. Paul in the Pribilof Island group.

The largest of the military bases is the naval station at Adak. Over 5,000 uniformed personnel, civilian employees and dependents of both these categories of people are stationed there. Adak ranks as Alaska's 11th largest community. Perhaps it's confirmation as a "big city" came when McDonald's opened its golden arches on the island.

Construction money on Adak's military base totals \$56.5 million for 1990; projects include housing, warehouse, and school facilities. Some construction, though a much smaller amount, is going on at Shemya's air base. The Navy is now testing and evaluating a recently-completed, \$60 million project at Amchitka, constructing an over-the-horizon backscatter radar system to track ships at sea. Construction of a second system is scheduled to begin in the summer of 1991. This \$60-80 million project will employ 250-300 workers during its two year construction phase.

Income, Unemployment Both Lower Than Most of State

Per capita income in the Aleutian Islands for 1987 was \$17,309 – more than \$1,000 lower than the state average. This is not surprising considering average monthly wages are lower than the state average. In 1988, average monthly wages were \$2,008 for the Aleutians East Borough and \$2,140 for the Aleutian Islands West census area, compared to a state average of \$2,310. A large number of seafood processing jobs, which are low-paying, helps to explain the income picture in this region. Subsistence activity, though not measurable, also contributes to the population's welfare.

Though average income is lower than the state average, the Aleutians enjoy the lowest unemployment rates in Alaska. Annual average unemployment was 1.4% (Aleutians East) and 1.3% (Aleutians West) for 1989. The Aleutians is not an area where job seekers linger if no employment opportunity appears. To be included in the labor force, though, a person must either be working or have looked for work within the last four weeks. There are many people who want to work who don't fall into either of these categories, so the true unemployment rate is undoubtedly higher than the official rate when these "discouraged workers" are included.

Summary: Aleutians Economy Tied to Seafood & Military

With few exceptions, there are just two types of communities in the Aleutian and Pribilof Island region: those that depend on the seafood industry and those that depend on the military.

U.S. control of the groundfish harvest has created an economic boom in the Aleutians that is still going on today. More than half the total value of seafood harvested in Alaska is caught in this region. There are many unanswered questions concerning the future of the seafood harvest, especially the groundfish harvest: questions about overharvesting, allocation, utilization of waste material, and by-catch of other species.

The five military enclaves in the Aleutian/Pribilof region account for more than half the area's total population. Millions of defense dollars are spent at these Navy, Air Force and Coast Guard bases, providing jobs not only for uniformed military but civilians also, in addition to jobs for construction workers and service providers.

The Aleutians are a remote, isolated part of Alaska. They are linked more to Seattle than to any city in Alaska. But their economy is growing, more ties to Alaska are being formed, and their future is bright.

About the author:

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