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Juneau to connect with jet flights going both north and south. But in travelling to Juneau from the smaller communities, the residents often prefer to use the ferry system because of its lower cost, safety, and dependability.

Juneau has the widest selection of available goods in Southeast due to its frequent barge, ferry, and air service, and its population base. There are also more doctors, dentists, and medical specialists in Juneau than in other Southeast communities. The Southeast Alaska Regional Health Corporation operates a regional clinic in Juneau; and an alcoholism treatment facility as well as a shelter for battered women and children, serving northern southeast are in Juneau. Juneau is also the regional headquarters for many organizations and government agencies including, the Forest Service, the Bureau of Indian Affairs, the Coast Guard, the Postal Service, and many others. In general, people from all over Southeast travel to Juneau to meet their shopping, business, and medical needs. Frequent and dependable ferry service is essential to this travel.

The movement of construction equipment to smaller communities from Juneau by ferry is extremely important. Many Southeast communities do not have paving equipment, asphalt plants, cement trucks, a sufficient number of dump trucks for projects, or good crane trucks to complete certain projects. Contractors from Juneau have the equipment and move it with them to the communities for projects such as water line installation, paving roads, and building projects. The ferry is the only practical way to move it.

As with other Southeast communities, student travel by ferry has become very important. 95% of the student's travel is by ferry. Students travel in groups of 10-60 to sports activities, music and drama festivals, and to debate and foreign language conferences. There is approximately one of these groups from Juneau-Douglas High School travelling in SE Alaska each week. Any reduction in ferry service would mean a corresponding reduction in student travel.

The Gold Medal Tournament is an annual adult basketball tournament in which most of the Southeast communities participate. It is held in Juneau and attracts approximately 1,000 people. The demand for ferry service at tournament time is so great that walk-on reservations must be made to get on the ferry bringing participants and spectators into Juneau. This event may seem minimally important, but it is the highlight of many communities' spring and has become a social tradition throughout. Angoon even closes its schools to coincide with tournament time. Gatherings such as this decrease the isolation people begin to feel after a long, cold winter.

Juneau to the smaller communities is equally important. Juneau receives approximately 16 27-ft. vans each week from the south, loaded with groceries, mail, and supplies. The desire for quick, frequent dependable service are reasons freight companies cited for ferry use. Juneau is served by barge lines once a week. Ferries arrive from Seattle or Prince Rupert 3 times a week. Ferries are off-loaded quickly, with vans heading for their destination upon arrival. With barge service it takes longer from the time the barge docks, to the loading and delivery of containers. There is no benefit to shipping on the ferry from Seattle or Prince Rupert if the frequency is no better than that of the barge. Thus, if the Seattle and Prince Rupert runs are reduced in the winter from 3 to 1 per week, the ferry system would loose more than the corresponding reduction in revenues; it would loose the business of those who use the ferry for its more frequent deliveries from the south. Foodland, a local store, uses the ferry exclusively in order to insure the freshest produce, milk products, and meat by getting deliveries twice a week. This is not possible by using the barge. Contractors, hospitals, the fishing industry, and the forestry industry use the ferry for its speedy delivery.

The movement of freight out of Juneau to the smaller communities is of growing importance. People in the smaller communities have become accustomed to diets of fresh produce, meats, and dairy products. The ferries are the only cost effective way of providing these items to some communities. Since many of these commuities are served by barge once every 4-6 weeks, a reduction in ferry service would severely limit the availability of these products. Other freight such as car parts, hardware, furniture, fishing gear, etc. make up the bulk of items for transport to the smaller communities. As it is now, the car decks of the feeder ferries are oftentimes too full to carry all the traffic needing transport. A cut in the service offerred by these ferries would increase this problem and the ferries may get into the undesireable position of prioritizing users of the system.

In general, the ferry's importance to Juneau is derived from the transport of tourists and Southeast residents from outlying communities into Juneau, and the transport of freight out of Juneau.

HAINES

The City and Borough of Haines (pop. 1847) is located 75 miles north of Juneau on Lynn Canal. It is 1/2 hour from Juneau by air and 4 1/2 hours by ferry. Haines is connected by road to the interior. Twenty-two miles up this road is Klukwan, a small Chilkat Indian Village with a population of 192. Klukwan has no businesses, so it relies totally on Haines for goods and services. Haines is a major entry point for land travel from Southeast Alaska into Canada or the Interior of Alaska, and from the interior to Southeast, Prince Rupert, and Seattle. This function, however, is only possible because of the ferry system. Despite the still recent completion of the Klondike Highway connecting Skagway to Whitehorse, Haines may still be described as the northern terminus of the Marine Highway System. It is the Panhandle's closest link to the rest of Alaska.

The Haines economy in the past ten years has often seemed to be reacting to the on-again, off-again attempts to keep the sawmill operating. Presently, the sawmill is not operating. Fishing has been an important contributor to the economy, but has recently been facing tougher times. Now the community is turning towards its tourism potential as a means of finally stabilizing the Haines economy. This effort has been helped a great deal by the publicity and attention which has been given to the annual fall eagle migration to the Chilkat River. Work on promoting the eagle reserve as a place to visit is progressing, and a visitor information center is under construction. In addition, other efforts are being made to promote Haines as a place to visit rather than just pass through. The underling key ingredient for Haines' tourism potential is its accessability by ferry. Without the ferries, Haines becomes simply a place at the end of a very long spur road.

It is difficult to overemphasize the importance of the ferry system to the Haines economy. For example:

(1) There are five hotels in Haines (a total of 128 rooms), with a gross income of $625,000. The owners of the hotels state that 90% of their business is derived from travellers on the Marine Highway System.

(2) Even though Haines has little more than a thousand residents, it has 11 restaurants, seven of which remain open year-round. The owners of the restaurants estimate that 80% of their business is derived from ferry travellers.

(3) There are are four automobile service stations. The operators of these stations state that 40% of their business derives from ferry traffic.

(4) In 1985 43,534 passengers embarked at Haines, and 13,454 vehicles. 40,867 passengers and 12,424 vehicles disembarked. In comparison, Juneau, which had the highest number of disembarkations had only 1,650 more vehicles disembarking than Haines.

It appears that when people drive down from the interior to connect with the ferry, they have a strong desire not to miss their connection south. And so they arrive early - early enough to need accommodations. Other examples abound of the importance of the ferry system to th Haines community:

(5) Approximately 1/2 of the food in the grocery stores arrives via the ferry; restaurants and bars receive all their supplies by ferry.

(6) Approximately 1/2 of the construction materials sold in Haines arrives by ferry.

(7) The ferry system itself has 27 employees in Haines; including two seasonal and one part-time.

Of all the communities of Southeast Alaska, it is clear that Haines is the most vulnerable and would be hurt the most by any significant curtailment in ferry service. The community has experienced a taste of the impact of ferry service reductions this winter. Last winter Juneau residents could conveniently travel via ferry for the weekend to Haines. This year, however, the schedule will not allow them to go to Haines and return for the weekend. The result is that some businesses in Haines have had their worst winter ever. Indeed, a tour company that had planned some group tours to the Haines area to enjoy the eagle migration had to cancel their plans due to the scheduling difficulties.

Apart from the aspects already identified, it appears as well that Haines is more dependent upon the ferry system than other communities in terms of social and cultural events. Haines is the site of the annual Southeast Fair. The fair, scheduled every year in August, has become a major event. Last year, attendance was approximately 8,000. And the ferries play a vital role. The event has become such a popular one for for Juneau residents (and those travelling

through Juneau) that demand for space far exceeds capacity. To their credit, managers of the system have cooperated by scheduling an extra run to Haines. The ferries carry horses, other animals, and exhibits as well as people to the fair.

While the fair may be the largest event, there are other cultural events and ongoing functions which depend on the ferries. The famous Chilkat Dancers of Haines use the ferries exclusively in their regional tours. They report that approximately 25% of their audience for Haines performances stem from the ferries. Also, there is an annual drama festival and competition in the summer which draws people to Haines by ferry.

As with most other communities served by the ferries, school travel relies greatly on the ferry system. 90% of student travel from Haines is via ferry. The purposes include travel to the annual music festival (this year held in Ketchikan) and a foreign language festival in addition to athletic events. Choosing ferry travel over air is a matter of safety more than cost, according to the high school principal.

Finally, but not least, there are numerous ongoing people services and functions which depend upon the ferries in a manner which makes life in this and other smaller Southeast communites more manageable. There are only two doctors in Haines, one of which also serves Skagway. There is no hospital. People from both communities depend on the ferries for transportation to Juneau for medical treatment unless an emergency exists. Also, periodic visits to Haines are made by a veterinarian, an optometrist, and a chiropractor, all of whom use the ferry as they carry with them a fair amount of equipment. And, twice a month both the Public Defender and District Attorney along with a judge come to Haines for judicial proceedings. They usually fly, but schedule their visits according to the ferry schedule as a backup. The local magistrate estimates that it would cost the state approximately $1500/day should those three people get weathered in. Of course, as with Skagway and Hoonah, many residents depend upon the ferry to be able to travel to Juneau for consumer goods which are simply not available in their community. It is cheaper, safer, and more dependable than flying.

In this study and report, it appears to a significant degree that the importance of the ferries rises in inverse proportion to the size of the community. Haines happens to be the one example which demonstrates the rule most dramatically. The ferries quite simply are a major factor, not just to the economy, but to the quality of life.

SKAGWAY

The City of Skagway is located at the northern end of Lynn Canal. The current population is 790. It is 93 miles north of Juneau, 45 minutes by air and 6 1/2 hours by ferry. Like a great many other places in Alaska, it has had its economic ups and downs, but Skagway's history appears to have peaks and valleys which are both higher and lower than perhaps any other. Soon after its beginning, and at the height of the rush to the Klondike gold fields, Skagway (combined with nearby Dyea) was the largest city in Alaska (pop. 8500). Of course when the boom turned to bust, the population declined rapidly. Skagway might have turned into a ghost town were in not for the construction of the railroad in 1899. Eventually the railroad became the mainstay of the economy, transporting ore from the Yukon to Skagway to be loaded on ships, and tourists and freight north to Lake Bennett and Whitehorse. But the iron mines closed in 1981 forcing the railroad out of business in 1982. This put the very life of Skagway in jeopardy. But the opening of the Klondike Highway connecting Skagway with Whitehorse has given the town new vitality.

Now Skagway concentrates almost entirely on tourism and the ferries are an important component of this economy. 230,000 people visited Skagway last year. Skagway's population doubles in the Summer in an effort to accommodate their visitors.

While the vast bulk of tourists come by cruise ship, it is the visitors who come by ferry who spend money in local restaurants, hotels, service stations and grocery stores. This is because food and lodging is included in the cruise ship package. Thus, the 36,000 visitors who came by ferry in 1986 are an important component to these Skagway businesses. And, to an increasing degree, this component is not restricted to the Summer period. Skagway is working hard at encouraging Juneau residents to travel north for winter breaks. Since this winter is the first winter that the road to Whitehorse has remained open, visitors are being encouraged to come to Skagway for cross-country skiing or to go to Whitehorse. Due to the winter opening of the road, those business remaining open all report increased winter business. Of course, the ferries play an important role in making the increased winter traffic possible.

The opening of the road also means that tourists traveling north with their car now have the option of disembarking at Skagway. Thus, Skagway now joins Haines as an entry point for travel to the interior and Canada. The 1985 Port Traffic Summary Data indicates that 29,577 passengers and 5,731 vehicles embarked from Skagway. 31,522 passengers and 6,402 vehicles disembarked. Presently, (March 1987) Skagway receives four main-

line ferries/week, and one visit by the Le Conte. In the summer, service increases to five mainline ferries while service by the Le Conte remains about the same.

Like other Southeast communities, Skagway depends on the ferry system for its basic transportation needs. The ferry offers a low-priced, dependable means of transportation to Juneau with its greater selection of consumer goods and services. Since Skagway is situated in a narrow valley with steep mountains on either side, it receives winds from the north, especially in winter, which are severe. The winds make flights into Skagway uncomfortable and at times impossible. The ferry offers a dependable option. Most people schedule their departures according to the ferry schedule, so that even though they may plan to fly, they will not be stranded by a flight cancellation.

Skagway's health professional is a Physician's Assistant, with a doctor from Haines visiting once every two weeks. The ferry is an important link between Haines and Skagway for the transfer of medical supplies, drugs, and personnel. If people need more medical services than are available in Skagway, they usually travel to Juneau, and often by ferry.

Given the recent efforts by Skagway businesses to attract winter business, buoyed by the opening of the road for winter traffic, people in Skagway are naturally disheartened at the prospect of decreased ferry service. For it is the current level of ferry service which largely makes it possible for the winter business to grow. That is, the appeal is being made to Juneau residents for a winter foray to Skagway and Whitehorse, and such a visit by car necessarily involves use of the ferries.

V.

RECOMMENDATIONS AND FINDINGS

RECOMMENDATIONS AND FINDINGS

The intent of this section is to provide a helpful perspective of ways to improve our Alaska Marine Highway System (AMHS). We intend no offense. Indeed, this section, like each of the others is to lend assistance.

From the beginning, the goal of the AMHS has been to allow residents of Southeast access to the same transportation opportunities as those residents of areas on maintained road systems. The service has been treated fiscally as lump sum appropriations, turned over to an administrator for disbursement, much like other passthrough programs such as Education Foundation, Municipal Assistance, and Revenue Sharing. But there is a major difference: school districts and local governments statewide are not able to meet their own funding needs. For that matter, neither is the State's land based highway system. But the AMHS on the other hand, is entirely capable of providing most of its own revenues. It has in the past, and studies indicate that the system has the potential, in the short-term (within five years) to provide from 55 to 60 per cent of its operating costs through system receipts.

This potential, however, is dependent upon the continuation and expansion of service. The system generates no revenues sitting off-line at dockside, and in some cases may cost the system more than when operating and generating revenues. The system is a long way from realizing its revenue potential. The solution, however, does not lie in a change of schedule or reduction of service. It lies in necessary changes to the delivery of those services, specifically day-to-day operation, manning requirements, public perception, and management. The following are some areas revealed during this study where significant improvements could be made:

(1) Advisory Board

Foremost among our suggestions is that the Legislature and Governor form a small advisory board to work with the AMHS to develop goals and implement strategies over the next three years. This recommendation cannot be overstated. The board could well serve as the ingredient necessary to make the AMHS the paradigm of marine transportation and the backbone of economic development. The small board should be comprised of transportation and marketing professionals, legislators, and users.

(2) Vessel Lay-Up

One item that should play an important role in the decisions on funding levels are vessel lay-up costs and the amount

of time vessels spend in port for maintenance. Here is a listing of overhaul costs per week for each vessel, shown as a percentage of its weekly operating costs:

Aurora - 51.4%	Tustemena - 65.5%
Chilkat - 82%	Bartlett - 90.8%
LeConte - 49.8%	Columbia - 71.1%
Matanuska - 66.1%	Malaspina - 42.9%

Lastly, the Taku has a percentage of 50.3%.

If you accept the validity of the 1984 Task Force Report that the system could be providing 55 to 60 per cent of its own funding within five years, then only on the Malaspina would it cost significantly less to lay-up for maintenance than to operate. Further, the time periods for lay-ups for maintenance seem to be excessive. They range from a five week maintenance period for the Chilkat to 19 weeks for the Columbia. By contrast, the cruiseship Stardancer lays up for 8 days per year. All other maintenance is done on board, during operation.

Our recommendation is that the Legislature and Governor establish a five year series of attainable revenue goals as a percentage of operating cost, and that these goals be evaluated along with actual experience prior to each fiscal year appropriation. In this manner, the Legislature can encourage the system to eliminate those areas of apparent excess cost, such as the maintenance time on vessels.

(3) Inventory Control and Purchase of Provisions

Perhaps the most common complaint has been the warehousing of supplies, especially foodstuffs, and the system's inability to track those provisions. We came across a report dated August 4, 1983 from Gerald Wilkerson to members of the Legislative Budget and Audit Committee regarding an audit of AMHS warehouses in Seattle and Juneau. The State Accounting System (SAS) records for the inventory at the Seattle warehouse showed the Seattle inventory at $230,621.49; while the warehouse records showed inventory at $87,161.18, a difference of $143,460.31. Acting Deputy Commissioner Eugene Black attributed the discrepancy to inadequate reconciliation procedures between the AMHS warehouses and the State Accounting System. Indeed, there were consistent diferences between other AMHS records and the SAS. The Seattle finding stands out, however, because of Governor Sheffield's AHMS Task Force, which was conducting its ispections during the same general time period. In its official report dated April, 1984, the Task Force had the following to say about its inspection of the Seattle warehouse:

Stardancer goes South!

> The warehouse space at Pier 48 currently leased by the system is not being utilized to its fullest capacity. In addition, the main warehouse is disorganized with little control in effect. Both front and rear doors to the main warehouse were open with vehicles entering unrestricted. There appears to be excess warehouse capacity and minimal control of the main warehouse area.

In the same audit report, Wilkerson also points out another shortcoming that we feel warrants immediate attention. Wilkerson states:

> Juneau warehouse records do not provide historical detail of inventory transactions which would show all purchases, adjustments, and issuance of inventory items. By not having this detail, the disappearance of inventory and subsequent adjustment of records could go undetected.

Black responded that "the data processing program purchased for use at the warehouse does not have the capability of keeping transactions by item."

We are aware that the management is reviewing these cost saving measures. Our recommendation on this matter is that the Legislature and the Governor direct the AMHS to pusue "shipside" purchase of Provisions. That is, shifting to a system of little or no inventory. The benefits are several. There seems little justification for the amount of space currently being payed for in Seattle, especially if supplies were to be purchased "shipside". Inventory could be more easily tracked because everything purchased would actually make it onto the ship rather than be warehoused. It would also allow Alaska dollars to stay in Alaska, and help to support local economies along its routes, plus build a stronger relationship with the business community. An additional effort should be made to evaluate the current procedures for the purchase of fuel by AMHS. This particular purchasing strategy needs a review beyond our budget and timetable. However, it is equally important and seems to be an area which has been neglected. It is a complex question and entails cost comparisons of food purchase alternatives and warehouse efficiencies.

(3) <u>On-Shore Ship Services</u>

The system seems to have little or no control over docking costs, and certainly no consistency in approach. One

community charges the system $600 every time they tie up a boat, while another community provides the service gratis, in recognition of the importance of the ferry to the community. We do not suggest there is no reasonable explanation, we simply do not have one. A similar problem exists with on-shore agents at the various ports of call. Some are AMHS employees, some are contract agents. Some are dedicated to their work and represent the ferry system very well. They keep regular office hours, sell tickets, meet ships, help with tie-ups etc. Some (more likely to be contract agents) keep minimal staff and minimal office hours, do a poor job on-shore costs (such as tie-ups) that are billable directly to the AMHS, do not present a good impression to passengers, and collect a higher percentage of ticket sales than do travel agents.

Our recommendation is that the Legislature and Governor direct the AMHS to determine the most cost-effective method of handling on-shore services, and further direct that those costs and methods should be as consistent as possible throughout the system. Further, that the system should function within a strict set of guidelines to ensure a consistent level of service at a consistent cost.

(5) Ferry Freight

We found a tremendous dependence by some businesses on the ferry system for freight service, but also received many complaints regarding practices on the cargo deck that often cause inconveniences to clients. There was expressed to us a feeling that the AMHS did not consistently recognize the importance of their commercial clients as a source of revenues. One example given is that the system does not enforce its prepayment requirement on vehicles. The result is that commercial opportunities are lost when a passenger vehicle cancels, because there is no incentive for the person cancelling to notify the AMHS. There is then no opportunity for the space to be filled, though there may be a commercial carrier who would desire the space.

Our recommendation is that the Legislature and Governor instruct the AMHS to consider methods of maximizing revenues from commercial freight users through adjustments in scheduling or lay-up schedules so as to "cater" to commercial clients during periods of high freight volume, such as those noted in the community sections of this report.

(6) Promotion and Marketing

The AMHS is the largest public water transportation system in the United States. Southeast Alaska is one of the nation's major tourist destinations. In a recent survey, 58 percent

of all respondents identified the ferry system as their preferred method of travel to Alaska. Yet until just four months ago, very little effort was made at promoting the system "outside", and even less within Alaska. If the AMHS is to survive without dramatic reductions in services, major sources of revenue have to be identified. There is very nearly unlimited potential for "selling" the system, but several changes do need to occur to realize its tourism potential. We believe this can occur in concert with private enterprise, particularly during the winter months.

Our recommendation is that the Legislature and Governor instruct the AMHS to actively pursue changes within the reservation system that will expedite that system. Areas to be considered should include contracting out the reservation function or the training of the staff to experienced professionals within the travel industry; transferring reservations onto one of the major airlines computer systems so that no extra equipment would be needed by travel agents to write tickets for the ferry system; increase the commissions on tickets to at least minimum industry standards; actively recruit and pursue private/public partnerships in the marketing of the system; work closely with the State Division of Tourism for promotional purposes; initiate efforts to improve the impression the system presents at its Seattle and Prince Rupert terminals; provide training to employees in public contact positions, both on-shore and on-ship. Finally, the Legislature and Governor should urge the management and employees to help realize its potential.

(7) Operations

This brings us to our final "operational" recommendation, and the most common issue we found among systems users. We recommend that the AMHS conduct a thorough, comparative review of all contract provisions with organizations representing employees of the system. Further, that special attention be paid to provisions relating to manning requirements, seniority, training programs, assignment of duties, annual leave, sick leave, penalty and overtime compensation, ship-based versus shore-based compensation and benefits, call-out practices, and residency requirements. The various contracts should be consistent in the different provisions. In addition, a similar review should be conducted of the cost of administering the system, and appropriate recommendations made. The findings and recommendations of this contract review and the administrative review should be implemented at the earliest opportunity, in order to help stabilize the system's operating expenses at a level that will assure continued Legislative support. The labor forces of the AMHS are the element primarily responsible for the successes of the system and

maintaining its effectiveness through recent turmoil. They must be full partners in meeting the current challenges.

The conclusions reached by our research lead us to believe that much of the expense in operating the AMHS is not inherent in the ferry service itself. It appears rather to be entrenched in the delivery of that service by the AMHS. Ferry loads are adequate and the system is being used. For that reason, every effort should be made to avoid a reduction in actual service. By the same token, it is imperative that every effort be taken to encourage the system to streamline its delivery of service in an effort to increase revenue, without sacrificing its committment to basic transportation needs of all Southeast residents. It would be truly unfortunate if any reduction in funding should result strictly in a commensurate reduction in service without regard to other areas of the system. We see the decisions made this session as decisions affecting the entire future of the AMHS.

We feel strongly that there are quantifiable ways of both reducing the cost of operation, and at the same time increasing revenues. We urge your support of funding levels that will guarantee the continuation of the essential service level currently being provided by the AHMS. By the same token, we implore you to adopt an aggressive handling of the system's managerial and operational deficiencies. <u>On no level of management theory have we found justification for allowing a billion dollar infrastructure to sit idle</u>. It would be a questionable business decision to do so, and absolutely unacceptable as a matter of public policy. We urge the legislature and governor to fund the AMHS for FY 88 at a level of 62.6 million, and to adopt intent language that service levels be maintained. Since this is the first year of the session, we would also encourage the governor and the legislature to set some General Fund net operating goals for the AMHS for FY 88. A report from management on the status of that effort, with specific citations, should be requested for delivery to the Legislature by the first day of April, 1988.

Thank you for your consideration. We believe that a strong directive from the legislature and Governor to the management of the AMHS, combined with a maintenance level appropriation for FY 88, can assist the AMHS to make great strides toward ensuring that the system will continue to provide adequate levels of service to the State in the future. We do not pretend or suggest that all of our recommendations are absolutes. There is no claim that we have all the answers, but we believe in the viability and future of the ferry system.

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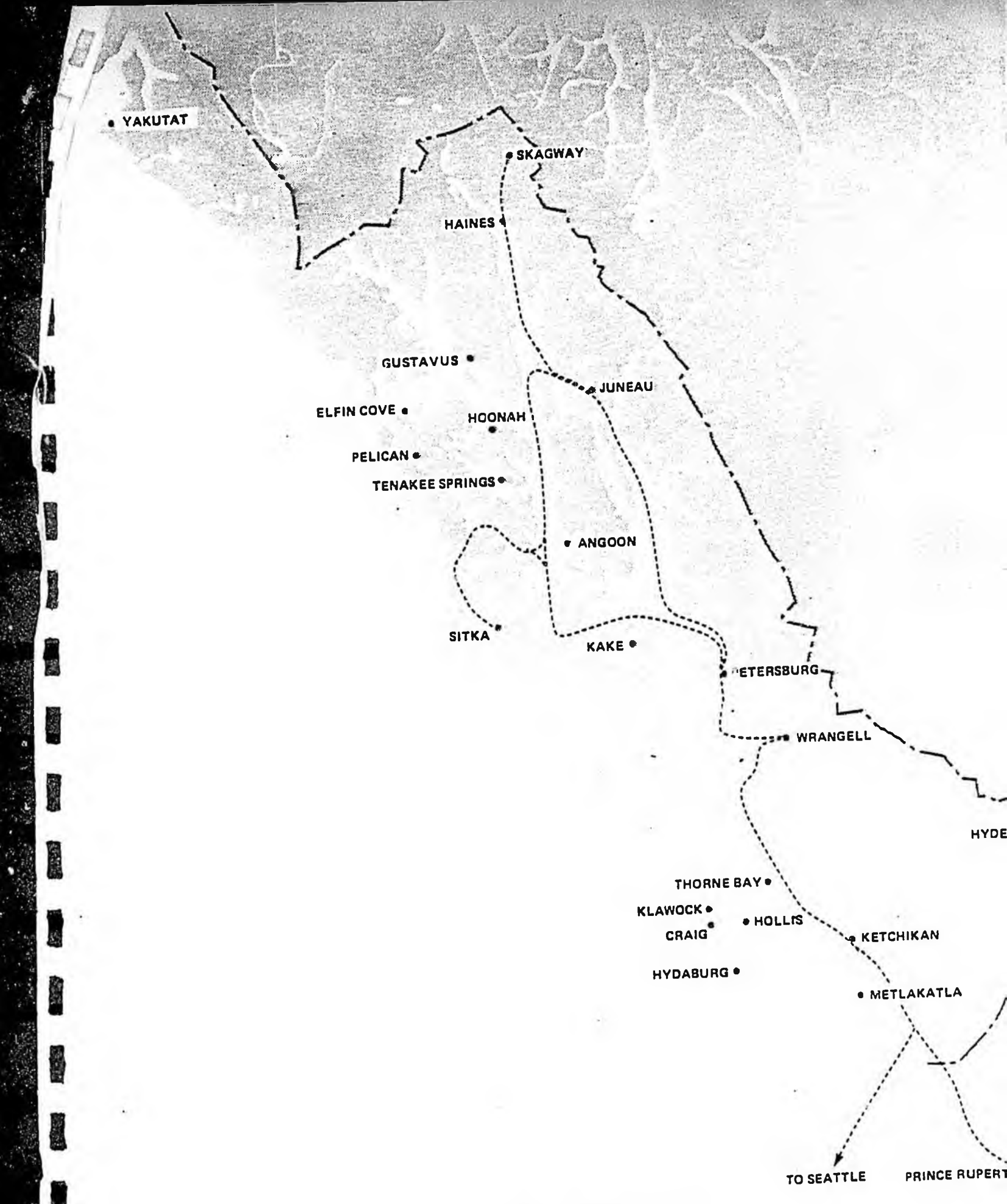
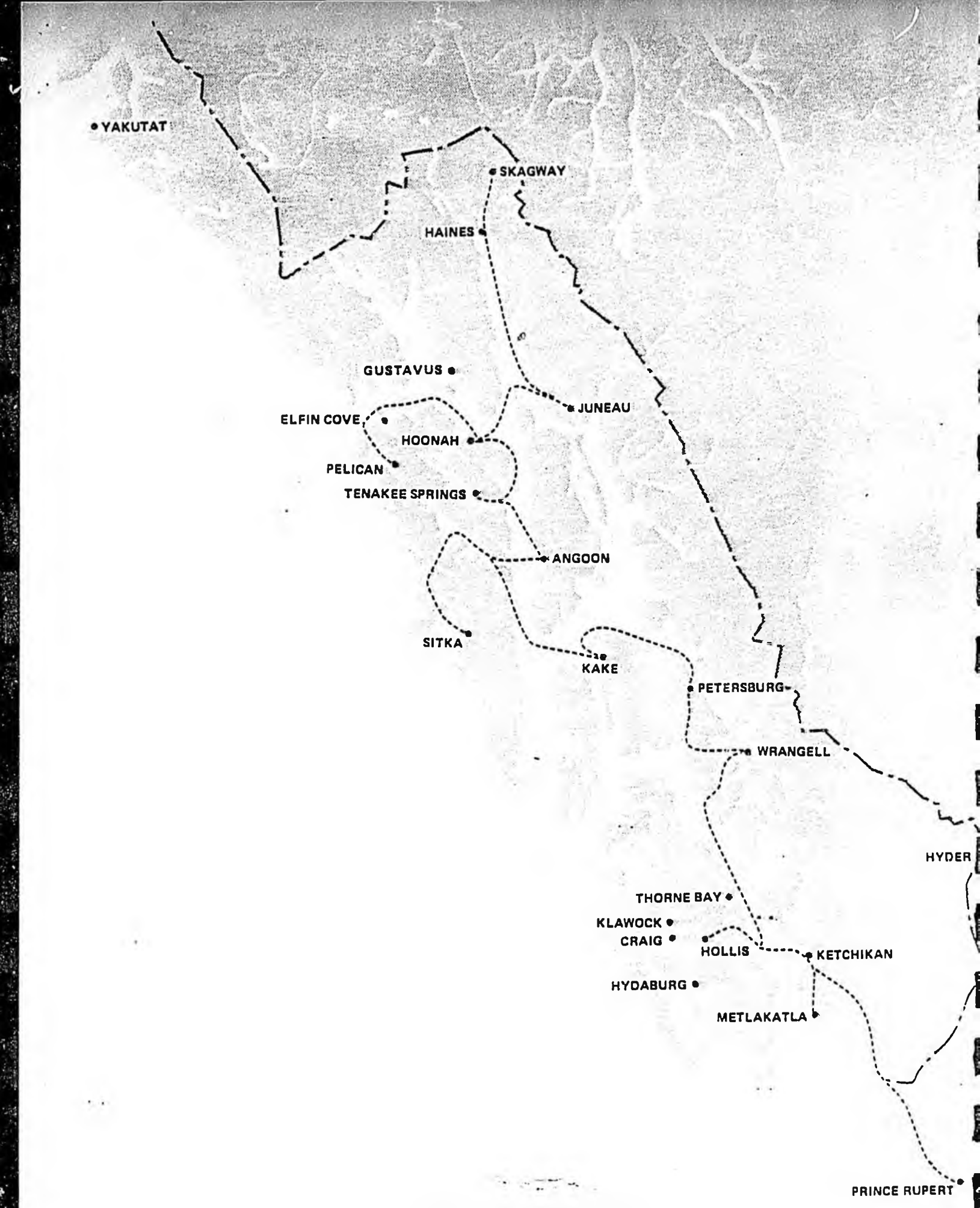
VI.

APPENDICES



MAINLINE FERRY ROUTES



FEEDER FERRY ROUTES

TABLE 1

FERRY SERVICE FOR SOUTHEAST ALASKA
MARCH 1987

	Mainline		Secondary	
	Northbound Stops	Southbound Stops	Northbound Stops	Southbound Stops
KETCHIKAN	14	13	21	23
WRANGELL	14	13	0	1
PETERSBURG	13	13	6	7
SITKA	5	5	12	14
JUNEAU	14	14	17	18
HAINES	14	14	5	5
SKAGWAY	14	14	5	5
METLAKATLA			26	27
HOLLIS			22	22
KAKE			6	10
ANGOON			10	12
TENAKEE			9	9
HOONAH			9	12
PELICAN			3	3

Note: Hyder does not receive service during the period of the winter schedule.

TABLE 2

AVERAGE WEEKLY SERVICE FOR SOUTHEAST ALASKA

MARCH 1987

	Mainline		Secondary	
	Northbound Stops	Southbound Stops	Northbound Stops	Southbound Stops
KETCHIKAN	3.16	2.93	4.74	5.19
WRANGELL	3.16	2.93	0	.23
PETERSBURG	2.93	2.93	1.35	1.58
SITKA	1.13	1.13	2.71	3.16
JUNEAU	3.16	3.16	3.84	4.06
HAINES	3.16	3.16	1.13	1.13
SKAGWAY	3.16	3.16	1.13	1.13
METLAKATLA			5.87	6.09
HOLLIS			4.97	4.97
KAKE			1.35	2.26
ANGOON			2.26	2.71
TENAKEE			2.03	2.03
HOONAH			2.03	2.03
PELICAN			.68	.68

Note: Hyder does not receive service during the period of the Winter schedule.

TABLE 3

FERRY SERVICE FOR SOUTHEAST ALASKA
JULY 1987

	Mainline		Secondary	
	Northbound Stops	Southbound Stops	Northbound Stops	Southbound Stops
KETCHIKAN	26	27	36	34
WRANGELL	26	29	0	0
PETERSBURG	27	29	4	4
SITKA	11	9	8	[illegible]
JUNEAU	28	26	14	[illegible]
HAINES	26	25	10	[illegible]
SKAGWAY	26	26	10	[illegible]
METLAKATLA			26	25
HOLLIS			30	30
KAKE			4	4
ANGOON			8	9
TENAKEE			8	5
HOONAH			14	10
PELICAN			2	2
HYDER			5	5

TABLE 4

AVERAGE WEEKLY SERVICE FOR SOUTHEAST ALASKA

JULY 1987

	Mainline		Secondary	
	Northbound Stops	Southbound Stops	Northbound Stops	Southbound Stops
KETCHIKAN	5.87	6.09	8.13	7.67
WRANGELL	5.87	6.54	0	0
PETERSBURG	6.09	6.54	.90	.90
SITKA	2.48	2.03	1.81	1.81
JUNEAU	6.32	5.87	3.16	3.16
HAINES	5.87	5.64	2.26	2.26
SKAGWAY	5.87	5.87	2.26	2.26
METLAKATLA			5.87	5.64
HOLLIS			6.77	6.77
KAKE			.90	.90
ANGOON			1.81	2.03
TENAKEE			1.81	1.13
HOONAH			3.16	2.26
PELICAN			.45	.45
HYDER			1.13	1.13

TABLE 5

ALASKA MARINE HIGHWAY SYSTEM PERSONNEL BY COMMUNITY
(Also showing onboard personnel by union membership)*

	ONBOARD				
	IBU	MM&P	MEBA	SHORESIDE	TOTAL
JUNEAU	158	9	8	101	276
KETCHIKAN	245	19	19	11	294
HAINES	17	1	2	7	27
SKAGWAY	3	1	1	5	10
PETERSBURG	7	1	1	2	11
WRANGELL	2	0	0	2	4
SITKA	5	0	0	2	7
CRAIG	4	0	0	0	4
HOLLIS	0	0	0	2	2
HYDABURG	1	0	0	0	1
THORNE BAY	1	0	0	0	1
HOONAH	0	0	0	1	1
ANGOON	1	0	0	0	1
HYDER	1	0	0	0	1
AK NOT SE	71	10	8	15	104
NON-RESIDENTS	39	27	52	16	134
	555	68	91	165	878

Note: Figures include seasonal and part-time employees

* IBU = Inland Boatmen Union
MM&P = Marine Mates & Pilots
MEBA = Marine Engineer Beneficial Association

TABLE 6

PORT TRAFFIC SUMMARY FOR SOUTHEAST ANNUAL 1985

PASSENGERS EMBARKING

MON	SEA	KTN	WRG	PSG	JNU	HNS	SGY	SIT	YPR	PEL	HOL	KAE	ANG	TKE	HNH	MJF	MET	TOT
JAN	1006	2859	410	715	1977	1341	396	768	673	25	727	210	366	84	292	0	740	12589
FEB	973	2225	330	786	2256	1253	397	1167	530	29	746	464	497	86	382	0	402	12523
MAR	1532	3162	345	751	3483	1550	546	1079	1052	59	1172	220	336	105	318	0	636	16346
APR	1567	2658	367	804	3758	1811	912	1051	1459	63	1098	208	288	120	319	0	0	16483
MAY	2108	3834	450	1219	5201	2862	2146	1463	2260	70	1214	352	488	109	421	240	475	24912
JUN	2623	6385	910	2040	7508	5293	4565	2460	6150	70	1775	408	497	130	561	240	697	42312
JUL	2097	7576	1210	2627	11060	9049	8137	3247	7977	166	1731	337	326	167	522	0	486	56715
AUG	2331	8068	1395	2577	11011	9949	6899	2904	5761	79	2355	350	486	202	576	0	538	55481
SEP	1267	4952	706	1634	4828	4379	3273	1425	1674	159	1614	238	306	66	343	0	394	27258
OCT	1135	3317	476	879	3474	2528	1477	1109	864	22	904	208	257	99	482	0	527	17758
NOV	876	2804	437	730	2816	1647	418	728	645	36	1134	223	453	157	678	0	404	14186
DEC	856	3410	534	888	3267	1872	391	980	522	47	1411	272	534	159	690	0	675	16508
TOT	18371	51250	7570	15650	60639	43534	29557	18381	29567	825	15881	3490	4834	1484	5584	480	5974	313071

VEHICLES EMBARKING

MON	SEA	KTN	WRG	PSG	JNU	HNS	SGY	SIT	YPR	PEL	HOL	KAE	ANG	TKE	HNH	MJF	MET	TOT
JAN	384	645	90	138	509	423	103	130	302	2	175	44	38	0	33	0	153	3169
FEB	490	595	80	128	508	363	101	131	270	6	198	68	40	0	41	0	115	3134
MAR	638	916	100	174	768	447	120	212	547	6	342	43	42	0	68	0	195	4618
APR	549	747	103	193	793	590	145	199	662	10	340	83	33	0	60	0	0	4507
MAY	591	1090	143	306	1283	886	419	266	898	5	370	63	36	0	106	0	131	6593
JUN	566	1632	284	510	1763	1548	881	506	1681	4	529	86	35	0	97	0	163	10285
JUL	438	1991	297	678	2341	2678	1457	639	1913	15	530	80	26	0	105	0	148	13336
AUG	519	2121	278	582	2259	2786	1216	551	1423	5	692	76	46	0	101	0	146	12801
SEP	338	1449	156	352	1333	1516	691	321	571	10	552	62	36	0	83	0	154	7624
OCT	436	1117	142	251	966	1028	370	230	389	2	347	79	41	0	134	0	176	5708
NOV	457	750	122	190	731	599	116	179	307	4	386	82	47	1	127	0	93	4191
DEC	368	768	99	148	723	560	112	172	231	5	278	54	38	4	96	0	158	3814
TOT	5774	13821	1894	3650	13977	13424	5731	3536	9194	74	4739	820	458	5	1051	0	1632	79780

PASSENGERS DISEMBARKING

MON	SEA	KTN	WRG	PSG	JNU	HNS	SGY	SIT	YPR	PEL	HOL	KAE	ANG	TKE	HNH	MJF	MET	TOT
JAN	598	3179	456	784	2472	1134	365	741	405	24	818	282	293	87	269	0	682	12589
FEB	587	2166	334	874	2919	1282	440	958	399	55	911	333	390	77	414	0	384	12523
MAR	741	3184	350	961	3091	2128	543	1158	567	71	1445	345	582	108	490	0	582	16346
APR	1147	2585	442	791	3677	2435	1034	1064	849	84	1267	195	355	130	428	0	0	16483
MAY	816	3985	536	1274	5062	3748	2706	1641	1566	94	1364	330	476	196	518	240	360	24912
JUN	1300	6594	1056	2200	7863	6405	5362	2385	4730	98	1804	417	540	117	577	240	624	42312
JUL	2175	7678	1276	2724	11318	7945	8611	3284	7605	187	2025	320	367	135	581	0	484	56715
AUG	2004	7952	1362	2425	10437	8058	7632	3019	8029	96	2317	382	516	171	517	0	564	55481
SEP	2264	4383	789	1333	4932	2662	2764	1410	3755	127	1540	241	311	74	339	0	334	27258
OCT	1495	3156	443	826	3393	2021	1224	1087	1567	56	898	139	362	101	464	0	526	17758
NOV	927	2787	459	759	2761	1630	462	806	827	24	996	154	384	175	642	0	393	14186
DEC	1431	3264	541	769	3160	1419	379	910	874	27	1206	283	636	183	708	0	718	16508
TOT	15485	50913	8044	15720	61085	40867	31522	18463	31173	943	16591	3421	5212	1554	5947	480	5651	313071

VEHICLES DISEMBARKING

MON	SEA	KTN	WRG	PSG	JNU	HNS	SGY	SIT	YPR	PEL	HOL	KAE	ANG	TKE	HNH	MJF	MET	TOT
JAN	226	651	103	132	627	395	91	181	209	2	258	58	36	0	40	0	160	3169
FEB	212	629	93	162	593	432	100	184	183	5	289	50	29	0	47	0	126	3134
MAR	215	957	125	235	765	752	125	249	270	10	480	92	60	0	102	0	181	4618
APR	296	782	130	190	851	880	183	228	330	10	445	62	33	0	87	0	0	4507
MAY	177	1119	183	306	1216	1331	522	361	501	4	471	79	37	0	137	0	149	6593
JUN	268	1750	301	537	1842	1902	1011	519	1220	7	518	88	40	0	119	0	163	10285
JUL	468	2076	329	688	2361	2108	1666	679	1962	17	621	80	28	0	103	0	150	13336
AUG	371	2080	289	558	2101	2055	1548	590	2110	6	688	97	45	0	102	0	161	12801
SEP	529	1321	184	310	1292	862	620	327	1357	11	465	61	33	1	106	0	145	7624
OCT	531	1009	136	243	1030	707	284	255	738	0	353	63	45	1	123	0	190	5708
NOV	361	815	127	193	739	579	130	239	379	5	303	56	41	5	101	0	118	4191
DEC	439	776	105	163	657	421	122	190	356	2	225	52	38	0	105	0	163	3814
TOT	4093	13965	2105	3717	14074	12424	6402	4002	9615	79	5116	838	465	7	1172	0	1706	79780

A RESOLUTION BY THE SOUTHEAST CONFERENCE
RESOLUTION #87-1

WHEREAS, the Southeast Conference has completed a comprehensive review of the Alaska Marine Highway System's critical importance to Alaska communities; and,

WHEREAS, Alaska's rugged coastline prohibits road access to all but two of Southeast Alaska's twenty-four municipalities and boroughs; and,

WHEREAS, Southeast Alaska's severe and unpredictable weather frequently prohibits air access to those municipalities; and,

WHEREAS, the Alaska Marine Highway System is the foundation of Southeast Alaska's economy; and,

WHEREAS, the Alaska Marine Highway System is the primary and only dependable mode of transportation in Southeast Alaska; and,

WHEREAS, the Alaska Marine Highway System also provides a significant means of transportation to Southcentral and Interior Alaska that effects their economy; and,

WHEREAS, the Alaska Marine Highway System is critical to Southeast Alaska's fishing, timber, tourism, and retail industries; and,

WHEREAS, the Alaska Marine Highway System is also critical to the delivery of human services, such as health care and education; and,

WHEREAS, any reduction in the level of service in Southeast Alaska would have a dramatic affect on day-to-day life in Southeast;

THEREFORE, BE IT RESOLVED that the Southeast Conference respectfully urges Governor Cowper and the Fifteenth Alaska State Legislature to accept and implement to the maximum extent practical the recommendations presented by the Southeast Conference in the report entitled "The Alaska Marine Highway System: The Community Perspective;" and,

BE IT FURTHER RESOLVED that the Alaska Marine Highway System maintain its current level of service and be funded by an authorization of $62.6 million for fiscal year 1988.

Adopted by the Southeast Conference on the 7th day of April, 1987.

Ernest Polley, President

PUBLICATIONS CONSULTED IN THE PREPARATION OF THIS REPORT:

Alaska Marine Highway Draft System Plan, AMHS, November 1986.

Alaska Marine Highway Schedules, Alaska Marine Highway System, Fall/Winter/Spring/Summer, 1986-1987.

Alaska Tourism Handbook, A Guide to Community Tourism Development, State of Alaska, Division of Tourism, September 1985.

Alaska Visitors Statistics Program; Alaska Visitor Arrivals, Summer Season 1985, Data Decisions Group, February 1986.

Alaska Visitors Statistics Program; Patterns, Opinions, and Planning, Summer Season 1985, Data Decisions Group, April 1986.

Alaska Visitors Statistics Program; Alaska Visitor Arrivals, Fall/Winter/Spring 1985-86, Data Decisions Group, September 1986.

Economic Indicators, Ketchikan Gateway Borough, March 1987.

Governors Revised FY 88 Operating Budget for the Alaska Marine Highway System, AMHS, March 1987.

1985 Annual Traffic Report, AMHS, May 1986.

Report and Recommendations of the Alaska Marine Highway Task Force, Prepared for Governor Sheffield, April, 1984.

Southeast Community Profiles, Department of Community and Regional Affairs, Dates vary by community: 1982-1984.

A Study of the Feasibility of Converting the Haines Tank Farm to a Maintenance, Refueling, and Watering Facility for the Alaska Marine Highway System, Homan-McDowell Associates, April 1979.

SOUTHEAST ALASKA TOURISM COUNCIL
SOUTHEAST ALASKA MARKETING COUNCIL

OUR PURPOSE:
To Promote Southeast Alaska To Visitors

Kelly K. Follis
ADMINISTRATOR

P.O. Box 20710
Juneau, Alaska 99802
(907) 586-4777

SOUTHEAST ALASKA MARKETING COUNCIL

1987-88 PROGRAM EVALUATION and RECOMMENDATIONS

Data Decisions Group, Inc.

Juneau • Seattle • Portland

SOUTHEAST ALASKA MARKETING COUNCIL
1987-88 Program Evaluation & Recommendations

Table of Contents

INTRODUCTION

The Southeast Alaska Marketing Council (SAMC) is closing its first year of promotion specifically for the Southeast area of Alaska. SAMC was able to organize a full promotion program within a very short timespan since its inception in December, 1986. The funding and expertise for the program comes from both public and private sources and thus is called a cooperative marketing program.

Cooperative programs require a high degree of accountability in terms of program results, both measurable and unmeasurable. The return on investment must be sufficient to warrant future involvement of both public and private members, guaranteeing results in an environment where no one member has total control. To this end, the Southeast Alaska Marketing Council contracted with Data Decisions Group, Inc. (DDG) of Juneau, Seattle and Portland to evaluate the results of the 1987 Program and make recommendations for 1988 and beyond.

In the absence of primary research conducted specifically on the SAMC Program, DDG based its evaluation on extrapolated results from the State AVAMC Program (discussed at length in Chapter II), on a special analysis of Southeast Independent Visitors from the Alaska Visitor Statistics Program and on its 35 combined years of studying tourism in Alaska and worldwide. It is DDG's hope that this document will be of assistance to SAMC members and program planners.

Chapter I
DESCRIPTION OF SAMC PROGRAM

CHAPTER I: DESCRIPTION OF SOUTHEAST ALASKA MARKETING COUNCIL PROGRAM

In November of 1986 a group of representatives from both public and private sector organizations met officially for the first time as the Southeast Alaska Marketing Council (SAMC). The formation of the SAMC was prompted by a noticeable decrease in hotel room nights in Southeast despite an overall increase in visitors throughout the state. While all visitor sectors have gained substantially in Southcentral and Interior/Northern regions, only cruise traffic has seen major increases in Southeast.

SAMC members were reacting to statistics such as the following:

- Only 35% of Independent Pleasure visitors to Alaska visited Southeast in Summer 1985 compared to 78% visiting Southcentral and 57% visiting Interior/Northern.
- No Southeast land-based attractions make the top five state attractions list -- the first SE attraction on the list is Mendenhall Glacier visited by only 20% of independent visitors.
- The first SE community on the top ten most visited community list ranks No. 7 (Juneau drawing 27% of Independent Pleasure visitors). (see Appendix for details)

The function of the SAMC, as the marketing arm of the Southeast Alaska Tourism Council (SATC), is to develop and implement marketing plans to attract more independent travelers in Southeast. **Specific goals are:**

- **To increase hotel visitation**
- **To increase point of purchase activity among regional businesses**
- **To increase the visitor length of stay**
- **To increase number of points visited in Southeast**

To accomplish these goals, the SAMC was organized along the same cooperative lines as the statewide Alaska Visitors Association Marketing Council (AVAMC) with 13 members, including the nine largest financial contributors and three regional SATC representatives, and an unlimited number of expert advisors. The AVAMC is recognized as an enviable model for other states and destinations due to its successful blending of public and private marketing expertise and dollars.

The SAMC Cooperative Marketing Program was funded at $446,000 in 1987 and is projected at $400,000 for 1988. Public sector contributors in 1987 included the communities of Juneau, Ketchikan, Sitka, Skagway, Prince Rupert, Haines, Whitehorse, Petersburg and Wrangell plus the Alaska Marine Highway System. Public sector contributions are determined from a formula based on percent of population and percent of beds. Private sector contributors were Alaska Airlines, Glacier Bay Yacht Tours, Sheffield Hotels, Grayline of Alaska, Alaska Travel Adventures, Prewitt-Sitka, Temsco, Ingersoll Hotel/Waterfall Group, Baranof Lodge and AlaskaBound.

The Three-Year Goal of the SAMC Marketing Program is to

- increase overnight visitation to Southeast Alaska by 300,000 room nights.

The Target Audience of the SAMC Marketing Program is

- independent travelers using air, ferry and highway as their transportation modes.

The Focus of the SAMC Marketing Program is on

- increasing awareness of the Southeast region overall and of the air, ferry, and highway access to the region specifically.

The SAMC Program has been implemented for 1987 and is on the drawing boards for 1988. Eight components comprise the program for each year. The following list itemizes each component, its objectives, its elements and its allocation levels for 1987 and projected for 1988.

PROGRAM COMPONENTS

1. Participation in State of Alaska AVAMC Cooperative Marketing Program

Objectives: To obtain qualified Alaska prospect names/labels for Southeast brochure distribution. To establish Southeast as a recognized marketing entity in the statewide AVAMC cooperative marketing program. To gain exposure as an advertised marketing entity in the state Official Alaska & Canada's Yukon Vacation Planner Directory distributed to over 400,000 qualified potential visitors per year.

Elements: Purchase of 172,000 labels of respondents to national state advertising, most qualified as interested in visiting Alaska but not by cruiseship or package tour.

Purchase of AVAMC Marketing Partner status with option to purchase respondent labels.

1988 planned addition: Small (2") advertisement in the Official Alaska & Canada's Yukon Vacation Planner Directory which reaches over 400,000 qualified Alaska prospects each year.

Allocation: 1987: $17,000 (including $5000 retirement of SATC 1983 Travel Planner ad debt).

1988: $14,000

2. Consumer Advertising

Objectives: To establish consumer awareness of Southeast Alaska as a travel destination among prime travel markets for Alaska to reverse the declining trend of independent travel to Southeast.

To generate advertising responses for purpose of converting interested inquirers into Southeast visitors.

Elements: Full page color advertisements with response cards in two of Alaska's premium travel market consumer publications during the travel planning period:

- Sunset Magazine -- February, 1987
- National Geographic Western edition -- March, 1987

1988 planned addition: Alaska Magazine insertion

Allocation: 1987: $160,000 including $88,000 National Geographic insertion, $59,000 Sunset insertion and $13,000 photo usage, color production, misc.

1988: $160,000 (using same ad and adding Alaska Magazine insertion)

3. Collateral

Objectives: To increase consumer awareness of Southeast Alaska.

To increase consumer awareness of independent travel options in Southeast Alaska.

To produce a fulfillment piece to mail to potential visitors generated by Components 1 and 2 above.

Elements: Develop and produce colorful, glossy, high quality 16-page brochure including a response card directing prospects to SAMC member firms and communities.

The 1988 program may include an additional eight pages of directory. If so, the 1988 budget will increase beyond $70,000.

Print 200,000 copies of brochure.

Allocation: 1987: $95,000

1988: $70,000 (using same brochure as 1987, more if eight additional directory pages are added)

4. Mail Fulfillment

Objectives: Place Southeast brochure into the hands of AVAMC advertising respondents and SAMC advertising respondents.

Elements: Mail out of 200,000 brochures by Media Services, the state's mail fulfillment house.

Allocation: 1987: $50,000

1988: $50,000

5. Public Relations

Objectives: To enhance the effectiveness of advertising and direct mail programs by increasing awareness of and enhancing the image of Southeast Alaska by generating press coverage in prime national and regional markets and to special targeted audiences.

Elements: Retained national and state public relations professionals

Press Kit, including Southeast stories, photos and contacts, distributed to over 100 travel trade publications and newspaper travel editors throughout the U.S. and Canada.

Monthly stories and news releases in major U.S. markets and in Alaska.

An instate regional awareness element informs SAMC participants and Southeast residents on the use and effectiveness of the program.

1988 planned additions: Purchase of quality stories from freelance writers for the Press Kit, purchase of quality photos, retaining a clipping service, expanded Press Kit distribution, travel writer familiarization trips, special newspaper section advertising to obtain editorial space.

Allocation: 1987: $25,000

1988: $50,000

6. Research

Objectives: To measure effectiveness of SAMC Marketing Program components.

To profile the Southeast independent pleasure traveler to better market to that visitor and to enhance facility/attraction delivery.

To identify best media choices and advertising vehicles.

To determine best AVAMC list criteria for widest effective brochure distribution.

Elements: 1987: 1987/1988 Program Evaluation (this document)

AVSP Special Independent Pleasure Visitor Analysis

1988 planned: Conversion Study

Allocation: 1987: $13,000

1988: $20,000

7. Administration

Objectives: To provide an efficient implementation of the Southeast Alaska Marketing Council Marketing Programs.

Elements: Daily administrative functions

Preparation and production of annual report including funds spent, projects undertaken and, when available, an indication of results of the program.

Allocation: 1987: $21,000

1988: $28,000

8. Contingency

Objectives: To provide contingency funds for investment in program components determined to provide the greatest returns.

To provide for absorption of shortfalls in expected revenue, if any.

Allocation: 1987: $79,000

1988: $17,000

Chapter II
THE SAMC PROGRAM MODEL: STATE OF ALASKA COOPERATIVE MARKETING PROGRAM

CHAPTER II: THE SAMC PROGRAM MODEL: STATE OF ALASKA COOPERATIVE MARKETING PROGRAM
An Historical and Performance Review

1. Description and History

The Southeast Alaska Marketing Council Program is based on the State of Alaska's AVAMC Cooperative Marketing Program. The AVAMC Program has been hailed by destinations throughout the world for its successful blending of public and private sector funding and marketing expertise. The Travel Industry Association of America named Alaska's Cooperative Marketing Program the Number 1 marketing program of all 50 states in 1985.

The organizational structure of the AVAMC consists of a chairman plus fifteen members including the seven largest contributors to the program and a minimum of four members from instate, plus advisors. Currently, seven committees are functional: Advertising, Collateral, Fall/Winter/Spring, Overseas, Planning, Public Relations and Research. Each committee is chaired by a council member and is composed of two to four other council members.

The AVAMC Program is now in its 11th year. It has grown from a $793,000 program in FY 1976 to a $6.2 million program in FY 1987. **Its primary goals have been two-fold:**

- **To enhance the image of Alaska as an attractive vacation destination.**
- **To generate inquiries about Alaska so as to place in qualified prospects' hands the motivational and educational information necessary for conversion.**

The AVAMC annual program is composed of advertising primarily in consumer magazine publications and also in newspapers, television and trade publications. Other program components include a sizeable public relations effort, trade and consumer shows, travel agent direct mail and a consumer direct mail program in recent years. Rack brochures, posters, maps, Alaska films, slides and print photography for editorial use are also products of the AVAMC program.

The main annual program collateral piece is **The Alaska and Canada's Yukon Official Vacation Planner**, a 100+ page full color dual-purpose booklet. Its purposes are to motivate prospects to decide to visit Alaska and to educate those prospects on the variety of ways to plan an Alaska trip. The Vacation Planner includes over 1,200 free directory listings of visitor-related businesses in Alaska plus advertisements purchased by "marketing partners". Occasionally, the program also produces a travel agent sales manual edition of the Vacation Planner and a few times has split the contents of the Vacation Planner into smaller sized brochures each addressing itself to one of the two Vacation Planner purposes.

An immediate program benefit to individual "marketing partners" (those who purchase an advertisement in the **Vacation Planner** or contribute an equivalent amount) is the ability

to purchase mailing labels of consumer advertising respondents. These respondents qualify themselves on BRCs attached to the advertising as potential visitors interested in specific types of Alaska travel, accommodations and activities and state their year and season of intended visit, their past travel habits and their age.

Each year's AVAMC program has a **unique theme** which is reflected in all advertising and in most collateral. Some representative themes have been:

1977: America's New Frontier of Travel
1979: Alaska - America's Greatest Travel Adventure
1980: Alaska - The Travel Destination of the 80's
1981: Alaska! America's Biggest Travel Adventure
1982: Alaska - Spectacular Scenery is Just the Beginning
1983: Once You've Gone to Alaska, You Never Come All the Way Back
1984: Alaska Keeps Coming Back To Me / "100 Pages of Free Advice..."
1985: Alaska - "100 Pages of Free Advice..."
1986: "100 Pages of Free Advice for Anyone Wishing to Experience the Vacation of a Lifetime"
1987: "100 Pages of Free Advice..." / Alaska is the Mystery that I Will Never Tame (con't. television theme from 1983)

The AVAMC Program also responds to special interests of its members and conditions of the marketplace on an "as needed" basis. The **Fall/Winter/Spring market development campaign of 1986-87** is a prime example. The campaign consists of in-state advertising aimed at encouraging residents to invite their friends and relatives to vacation in Alaska during the off-season months. The F/W/S campaign also includes activity fairs, brochures and a product booklet sampling Alaska's various F/W/S attractions and activities.

Residents were asked in the advertising to send in a coupon with their friends' and relatives' names and addresses and the Division of Tourism would then mail out the F/W/S brochure and product booklet to them. The DOT also mailed these collateral pieces to a select list of winter travelers and to AVAMC advertising respondents who stated an interest in visiting in the fall, winter or spring months. The final program element, a companion to the advertising, was a direct mailing to Alaskans to get names of friends and relatives in the Lower 48 who are potential fall/winter/spring visitors. To date, the Fall/Winter/Spring campaign has generated 4,000 names of potential visitors. A conversion study to measure actual visitors generated will be performed during the summer.

Other special campaigns have addressed the potential Winter traveler and the Overseas market. A major campaign for the Overseas market is currently being researched and may be operational by FY 88. The second year of the F/W/S campaign will include a 24 page brochure and special mailings to *Alaska* magazine gift subscribers in the Lower 48 in addition to last year's efforts.

In summary, the major activities of the AVAMC Marketing Program are:

- Consumer magazine advertising which places the Vacation Planner in the hands of over 400,000 interested and qualified potential visitors, and generates names and addresses and phone numbers which can be used by marketing partners in their own individual sales efforts.

- Television commercials reaching millions of U.S. consumers with the Alaska travel message.

- Newspaper Sunday Supplement Travel Sections on Alaska nationwide.
- Extensive publicity and public relations.
- Distribution of over 700,000 Alaska Vacation Planners, the State's official travel brochure containing over 100 pages of photos and copy about Alaska, including over 1,200 free directory listings of visitor-related businesses in Alaska, plus marketing partner advertisements. The Planner also contains Reply Cards for readers to send for information from individual listings/advertisements.
- Rack brochures, posters, maps, travel agent manuals and other trade sales literature; Alaska films, slides and print photography for editorial use.
- Special marketing campaigns such as Fall/Winter/Spring promotions.
- Foreign marketing promotion in Canada, Germany, Great Britain and Japan.
- Long-term and short-term market planning
- Marketing research

The average industry member, whether in the public or private sector, has access to all AVAMC products listed above. The most used AVAMC products by industry members for their own sales efforts are:

- **listing or advertising in the Vacation Planner, and**
- **purchasing consumer advertising respondent mailing labels that can be selected for their own target audience's characteristics.**

2. Performance of AVAMC Program

Performance of a program with as many diverse components as the AVAMC program is difficult to measure. It is impossible to measure image enhancement efforts since their payoff is usually delayed in terms of actual visitation. The rationale behind image enhancement has always been, and is for all destinations, that such advertising is a long haul effort to familiarize and, in many cases, to rebuild the destination in the consumer's mind. When it has been sufficiently "rebuilt", the consumer is likely then and only then to respond to advertising which requires a call for action, such as a request for information. **Therefore, image (awareness) advertising enlarges the pool of potential visitors while response-oriented advertising provides the vehicle for that pool to take the first steps toward conversion to visitor status.**

The only part of the AVAMC program which can be quantifiably measured is direct response advertising. Since this part of the program generally accounts for the majority of program expenditures, measurement of this part is considered a good indication of the overall success of the program.

The effectiveness of direct response advertising has been measured every year except one since 1980 with Conversion Studies. The studies have measured the cost per inquiry, conversion rate, cost per conversion and return on investment for a variety of advertising vehicles. The number of inquiries is another indicator of success, albeit not as conclusive as actual conversion rates.

a. Number of Inquiries

NUMBER OF INQUIRIES (BRCs)

FY 1980	445,000
FY 1981	412,000
FY 1982	445,000
FY 1983	432,000
FY 1984	632,000
FY 1985	451,000
FY 1986	450,000
FY 1987	400,000

Response rates for the entire program appear to be declining somewhat as are response rates for individual consumer publications. This, however, reflects considerably lower media budgets as well as lower response goals.

NUMBER OF INQUIRIES FROM SELECTED PUBLICATIONS (thousands)

Magazine	1986 (1 p)	1985 (1 p)	1984 (1 p)	1983 (sprd)	1982 (sprd)	1981 (1 p)	1980 (1 p)	1978 (sprd)
Alaska	5.0	4.0	3.0	2.7	6.3	7.5	6.8	11.1[3]
Modern Maturity	92.5[1] 109.1	109.5	97.9	9.0[2]	16.0[2]	8.4[2]	-	-
National Geographic	55.9	72.7	94.8	33.0[1] 34.1	124.0[4]	84.0	157.4	130.6
Smithsonian	17.2	24.3	20.5	5.6	19.2	-	-	-
Southern Living	16.5	21.2	-	-	4.1	-	14.2	8.0
Sunset	13.9[1] 9.6	17.6	19.1	6.1	14.6	25.0	21.9	-

1 Two separate insertions of Image ads
2 Regional issues
3 Split-BRC 6190, without prepaid postage 4,941
4 Three pages and gatefold

Note: Image ads with BRCs were run in all 1983 insertions.
Source: "Analysis of the Alaska BRC Response Program: Fiscal years 1980-84" and "1986 Alaska Conversion Study".

The actual number of inquiries from publications used consistently in the last several years has declined recently (last two years). This is especially the case for *National Geographic, Smithsonian* and *Southern Living*. If *Modern Maturity* and *Sunset* had not had two insertions rather than the single insertion of previous years, their responses would also have declined. Only *Alaska* magazine of these consistently used publications shows not only stability but also an increase in responses.

b. Conversion Rates

CONVERSION RATES

FY 1980	10.5%
FY 1981	9.1%
FY 1982	7.7%
FY 1983	11.9%
FY 1984	9.3%
FY 1986	13.0%
Average	**10.3%**

Conversion rates show no real pattern from year to year overall. Specific publications, however, tend to have their own patterns.

CONVERSION RATES OF SELECTED PUBLICATIONS 1980-1986

Magazines	1986	1984	1983	1982	1981	1980
Modern Maturity	14	11	-	-	-	18
National Geographic	10	-	18	6	10	7
Smithsonian	11	7	-	6	-	-
Sunset	17	-	-	15	10	13
In-Flight Magazines	10	9	-	9	-	-
Travel Holiday	-	9	-	-	-	12
Alaska	24	-	-	-	-	-

Source: "Analysis of the Alaska BRC Response Program: Fiscal years 1980-84" and "1986 Alaska Conversion Study"

Although never measured before 1986, *Alaska* magazine registers the highest conversion rate this year and probably the highest in the program's history (24%). *Sunset* scores the next highest rate this year with 17%, continuing its consistent increases in effectiveness each year since 1981. *Modern Maturity* ranks third in conversion rates at 14%, also an increase over its last measurement in 1984. *Smithsonian* is fourth with 11%, also an increase over previous years. *National Geographic's* conversion rate of 10% is a decline from its last measurement of 18% but consistent with previous measurements before that.

c. Cost-Efficiency

The overall cost per inquiry, cost per conversion and return on investment of the AVAMC Cooperative Marketing Program for magazines shows a decline in cost-efficiency from 1980 to 1983, then an increase in 1984 declining again to 1986. Primary reasons for the variation are the use of spreads rather than one page ads for BRC response, and the inflationary cost increases of magazines from year to year. Cost per inquiry has increased from $1.56 in 1980 to $4.03 in 1986. Cost per conversion has increased from $14.83 in 1980 to $30.98 by last year. Not surprisingly, then, the actual return on investment (ROI) without including transportation to/from Alaska of these advertising buys decreased from $153.00 in 1981 to $106.51 in 1986. **This means that for every $1 spent in media space and card printing expenses to place an ad in an AVAMC-selected publication, the State of Alaska realized over $100 in direct visitor expenses -- a ratio of 1 to 100.**

This of course does not count the industry expenses such as fuel for the motorcoaches or food supplies for the cruiseships nor does it count the indirect expenses such as labor costs and taxes accrued. On the other half of the equation, though, it does not count the ad production costs nor the brochures sent to advertising respondents. In any event, the total economic impact of this visitor spending far exceeds the basic 1 to 100 ratio.

Specific publications vary in their cost-efficiency. In 1986, *Alaska* magazine was by far the most efficient with a cost per inquiry of $1.92, cost per conversion of $8.01 and ROI of $325 -- or a 1 to 300 return ratio. *Sunset* ranked third in efficiency with $5.48 cpi, $32.21 cpc and an ROI of $78. *National Geographic* trailed at #6 place (out of 8) with $5.98 cpi, $59.75 cpc and $60 ROI.

The following tables show the cost-efficiency of consistently used publications over time, in real dollars and, separately, adjusted for inflation. Adjustments for inflation show a definitely increased cost-efficiency for *Sunset* and *National Geographic* since their last readings in 1983/1984.

AVAMC PROGRAM COST-EFFICIENCY

	1986[3] (1 pg)	1984[1] (1 pg)	1983[2] (Spread)	1982[2] (Spread)	1981[2] (1 pg)	1980[2] (1 pg)
Magazines Overall						
Cost Per Inquiry	$4.03	$2.46	$9.99	$3.64	$2.70	$1.56
Cost Per Conversion	30.98	26.43	63.23	47.27	29.70	14.83
ROI - Without Transp.	106.51	97.27	34.39	64.00	153.00	NA
ROI - With Transp.	200.11	NA	77.77	119.00	313.00	460.00
Alaska						
Cost Per Inquiry	$1.92	NA	NA	NA	NA	NA
Cost Per Conversion	8.01	NA	NA	NA	NA	NA
ROI - Without Transp.	324.80	NA	NA	NA	NA	NA
ROI - With Transp.	574.64	NA	NA	NA	NA	NA
Modern Maturity						
Cost Per Inquiry	$2.75	$1.67	NA	NA	$6.35	NA
Cost Per Conversion	19.67	15.36	NA	NA	29.22	NA
ROI - Without Transp.	177.91	136.74	NA	NA	193.00	NA
ROI - With Transp.	345.66	NA	NA	NA	425.00	NA
Sunset						
Cost Per Inquiry	$5.48	NA	NA	$5.37	$1.68	$1.66
Cost Per Conversion	32.21	NA	NA	35.09	16.80	13.27
ROI - Without Transp.	77.62	NA	NA	61.00	221.00	NA
ROI - With Transp.	173.87	NA	NA	131.00	484.00	434.00
Smithsonian						
Cost Per Inquiry	$4.98	$2.58	NA	$4.60	NA	NA
Cost Per Conversion	45.28	37.41	NA	76.67	NA	NA
ROI - Without Transp.	72.88	151.21	NA	60.00	NA	NA
ROI - With Transp.	123.67	NA	NA	82.00	NA	NA
National Geographic						
Cost Per Inquiry	$5.98	NA	$9.14	$2.66	$2.61	$1.10
Cost Per Conversion	59.75	NA	51.92	47.43	25.37	15.65
ROI - Without Transp.	60.25	NA	34.44	71.00	131.00	NA
ROI - With Transp.	97.16	NA	72.36	145.00	295.00	525.00
In-Flight Magazines						
Cost Per Inquiry	$6.82	$1.34	NA	$7.57	NA	NA
Cost Per Conversion	68.20	14.44	NA	81.43	NA	NA
ROI - Without Transp.	43.99	127.45	NA	40.00	NA	NA
ROI - With Transp.	76.24	NA	NA	71.00	NA	NA
Newspapers						
Cost Per Inquiry	$19.46	NA	$7.79	NA	NA	NA
Cost Per Conversion	121.61	NA	46.72	NA	NA	NA
ROI - Without Transp.	19.74	NA	31.76	NA	NA	NA
ROI - With Transp.	45.11	NA	70.28	NA	NA	NA

[1]Source: "1984 Conversion Study Key Findings."
[2]Source: "Analysis of the Alaska BRC Response Program: Fiscal years 1980-84."
[3]Source: "1986 Alaska Conversion Study."

AVAMC PROGRAM -- ADJUSTED COST-EFFICIENCY[1]

	1986 (1 pg)	1984 (1 pg)	1983 (Spread)	1982 (Spread)	1981 (1 pg)	1980 (1 pg)
Magazines Overall						
Cost Per Inquiry	$4.03	$2.84	$12.60	$5.01	$4.07	$2.59
Cost Per Conversion	30.98	30.54	79.72	65.08	44.77	24.59
Modern Maturity						
Cost Per Inquiry	$2.75	$1.93	NA	NA	$9.57	NA
Cost Per Conversion	19.67	17.75	NA	NA	44.05	NA
Sunset						
Cost Per Inquiry	$5.48	NA	NA	$7.39	$2.53	$2.75
Cost Per Conversion	32.21	NA	NA	48.31	25.33	22.01
Smithsonian						
Cost Per Inquiry	$4.98	$2.98	NA	$6.33	NA	NA
Cost Per Conversion	45.28	43.23	NA	105.56	NA	NA
National Geographic						
Cost Per Inquiry	$5.98	NA	$11.52	$3.66	$3.94	$1.82
Cost Per Conversion	59.75	NA	65.46	65.30	38.25	25.95
In-Flight Magazines						
Cost Per Inquiry	$6.82	$1.55	NA	$10.42	NA	NA
Cost Per Conversion	68.20	16.69	NA	112.11	NA	NA
Newspapers						
Cost Per Inquiry	$19.46	NA	$9.82	NA	NA	NA
Cost Per Conversion	121.61	NA	58.90	NA	NA	NA

[1] Inflation rates: 1986 7.0%, 1985 8.0%, 1984 9.1%, 1983 9.2%, 1982 9.5%, 1981 10.0%

Source: "1986 Alaska Conversion Study".

Chapter III
1987 SAMC PROGRAM EVALUATION

CHAPTER III: 1987 SAMC PROGRAM EVALUATION

This chapter will assess the **1987 SAMC Marketing Program** component by component. The assessment is based on Data Decisions Group's professional judgment grounded in 35 combined years of experience studying the visitor industry in Alaska and worldwide. Estimated numbers of visitors and economic impact data are based on the Alaska Visitor Statistics Program database and on extrapolations from AVAMC Marketing Program evaluations in the absence of primary research on the effectiveness of the SAMC Program specifically.

Overall, the 1987 SAMC Program is estimated to deliver 15,000 more visitors, 48,000 more room nights and $4.1 million more visitor dollars to Southeast Alaska in 1987 than would otherwise have occured. These estimates do not include future economic benefits to be reaped from the long-term awareness-building process of advertising. The estimates are the cumulative effect of the following program components.

One example of early impacts of the SAMC program is the record rate of bookings experienced by a major SAMC participant, the Alaska Marine Highway. Officials attribute part of their success to SAMC participation as well as an improved reservation system and more aggressive marketing.

1. Participation in AVAMC Cooperative Marketing Program

A $12,000 investment in 1987 purchased Marketing Partner status in the AVAMC program for SAMC which allowed purchase of 172,000 names and addresses of state advertising respondents. These respondents are Alaska prospects qualified by their committment to visit by requesting information and filling out a BRC card with pertinent information about themselves.

SAMC ordered 142,000 names of prospects who specified an interest in traveling to Alaska by means exclusive of package tours and/or cruiseships on their BRC interest/information card. SAMC also ordered another 30,000 names of state advertising respondents who did not specify any travel mode interest including package tours or cruiseships. These 172,000 qualified Alaska prospects were then mailed the 16-page Southeast Alaska brochure which included a response card directing prospects to SAMC member firms and communities.

To determine the effectiveness of this SAMC investment, we must look at the expected conversion rate of these prospects, at their length of stay in Southeast and at the amount of visitor dollars they spent in Southeast. We must estimate these impacts as additional impacts beyond the standard impact of the AVAMC program itself. In other words, how many **additional** dollars (visitors, room nights, etc.) did the SAMC program effect in Southeast?

The overall conversion rate of the 1986 AVAMC Program was 13%, that is, 13% of all 1985-86 advertising respondents actually visited Alaska in 1986. More of them will visit in 1987, 1988 and beyond but only the current year conversion rate is scientifically established. We know that package tour visitors convert at a much higher rate in the AVAMC program -- over 20%. Therefore, to allow the average to be 13%, independent visitors must convert at a lower than average rate. DDG estimates approximately an 8%

independent visitor conversion rate based on AVSP data and industry knowledge. This conversion rate means that **the 1987 SAMC message reached a total of 13,800 actual independent visitor parties, or 30,300 visitors due to its AVAMC investment.**

As a result of receiving the SAMC message and follow-up marketing from member firms and communities, it is conservatively expected that 40% of these visitors (12,100) will include Southeast in their plans if they were not intending a Southeast visit OR will extend their already planned stay. An average additional stay of an estimated 2 nights each would result in the following benefits:

SAMC 1987 AVAMC PROGRAM RESULTS
(Estimated)

Visitors	Room Nights	Visitor Dollars
12,100	24,200	$2,060,000[1]

Further economic benefits will be realized from two other sources: the indirect expenditures deriving from these direct expenditures, i.e. employee wages, instate operations costs and capital investment by transportation and tour companies, and both the direct and indirect expenses of those on the AVAMC lists who will visit in 1988 and beyond.

2. Consumer Advertising

The SAMC 1987 Program invested $88,000 in National Geographic (West Edition) advertising insertion costs, $59,000 in Sunset advertising insertion costs and approximately $13,000 in ad production costs. These dollars bought full page color advertising with response cards in two of Alaska's premium travel market consumer publications. The **primary purpose** of the advertising was to establish/increase consumer awareness of Southeast Alaska as a travel destination among prime travel markets for Alaska to reverse the declining trend of independent travel to Southeast. The **secondary purpose** was to generate advertising responses for the purpose of educating and converting interested inquirers into Southeast visitors.

As discussed in Chapter II (Performance of AVAMC Program), **it is impossible to measure awareness/image advertising efforts since their payoff is usually delayed in terms of actual visitation.** The rationale behind image enhancement has always been, and is for all "emerging" destinations, that such advertising is a long haul effort to familiarize and, in many cases, to rebuild the destination in the consumer's mind. When it has been sufficiently "rebuilt", the consumer is likely then and only then to respond to advertising which requires a call for action, such as a request for information.

Therefore, image (awareness) advertising enlarges the pool of potential visitors while response-oriented advertising provides the vehicle for that pool to take the first steps toward conversion to visitor status. Awareness advertising is essential to the success of later response-oriented

[1] Based on $85 per person per night Independent visitor expenditure figures, preliminary estimates from Alaska Visitor Statistics Program Visitor Expenditure Survey.

advertising. All destinations and nearly all products accept and work with this two-part promotion process.

We can measure the response-oriented aspect of the SAMC National Geographic and Sunset advertising, realizing that eliciting responses was not the primary purpose of the ads. It should also be noted that each of these issues was replete with Alaska cruise and tour advertising as well, all offering vehicles for response.

The ads generated approximately 11,500 inquiries, 6,500 from National Geographic and 4,700 from Sunset (and 250 publication-unspecified written responses). While not as high as expected, the response rate is roughly proportional to that generated by the State AVAMC program in those publications. Alaska inquiries are down this year and have been for many publications for the last few years (see Chapter II Performance of AVAMC Program). This is especially the case for National Geographic. Alaska placed two insertions in Sunset last year; otherwise its totals would also be down. The cause of such performance has not yet been determined. Theories run the gamut of reaching an Alaska plateau of awareness to having plumbed the existing "pool" created by initial image/awareness advertising. In the latter case, new image enhancement advertising would have to be placed to create a new "pool" of interested Alaska prospects.

The economic impact of the 11,500 responses can be calculated to give an immediate benefit picture of the SAMC 1987 Consumer Advertising component. These 11,500 responses represent 25,300 potential visitors, assuming the 2.2 Independent Pleasure party size identified in the AVSP. These potential visitors will probably convert at a higher rate than the generic statewide program because of the specific nature of the SAMC advertising - they are qualified **independent** Alaska prospects rather than just qualified Alaska prospects. Some, however, would probably have visited Alaska regardless of the SAMC advertising/brochure. An estimated conversion rate, therefore, would be 10% for National Geographic respondents and 17% for Sunset respondents -- the actual AVAMC conversion rates for these publications in 1986 (see Chapter II). This would produce the following number of visitors, additional room nights and additional visitor dollars based on the 8.2 night average stay of the Independent Pleasure visitor in Southeast[1] and the assumed $85 per person per night expenditure quoted under section 1 above.

SAMC 1987 CONSUMER ADVERTISING
MEASURABLE RESULTS
(Estimated)

	Visitors	Room Nights	Visitor Dollars
National Geographic	1,300	10,700	$ 906,000
Sunset	1,600	13,100	$1,115,000
TOTAL	**2,900**	**23,800**	**$2,021,000**

This high rate of impact for relatively few visitors stems from the above average length of stay of Southeast Independent Visitors. While the average Southeast visitor spends 5.6 nights in the region, the average Independent Southeast visitor spends 8.2 nights there.

[1] Number of nights based on Alaska Visitor Statistics Program Visitor Opinion Survey special analysis.

It should be noted that this $2,021,000 does not include any eventual economic impact of the awareness-building aspect of these advertisements or any indirect economic impacts.

3. Public Relations

In 1987 SAMC spent $25,000 on retaining national and state public relations firms to prepare and implement a first-year awareness-building effort. California-based Ginny Rodin Public Relations and Sharon Gaiptman Public Relations of Juneau developed a press kit sent to over 100 travel trade publications and newspaper travel editors. They also released news and human interest stories in major U.S. markets and in Alaska.

The majority of public relations efforts are not immediately measurable in quantifiable terms. They are aimed at image enhancement and awareness-building which results in enlarging the pool of interested prospects who will at some point down the line respond to a direct response program and will then be quantified. This stage of the process is, however, critical as has been pointed out several times in this document. Without "prepping" -- the purpose of image/awareness building -- no other steps in the conversion process can occur.

Public relations efforts provide the greatest possible reach of your message for the smallest possible expense. Stories and editorial in newspapers and on radio and even in magazines and on television are often zero cost ways to spread the message. The key to obtaining the best possible reach with the right messages is retaining the right public relations people with the proper skills and contacts. The second key is funding your public relations people well enough to allow them to accomplish your goal and not hamstring their efforts. The third key is monitoring your public relations people so that they are held accountable for implementing your goals. This is especially critical since vacation planning has a regular timeline to it and pr efforts must be sensitive to this.

The 1987 SAMC Public Relations component seems to have targeted the most critical initial audiences for this first year -- government, the trade, regional media, and mass newspaper readership. The Information Presentation will be valuable for community support. The Press Kit is a good basic packet, although additional contents would be helpful. The newsletter UPDATE will keep the tourism community apprised of program events and results.

Approximately 400 inquiries have been generated by the Public Relations component as of May 5, 1987. Since generating inquiries is not the goal of a public relations program, these 400 inquiries should be considered a bonus. Conversions and visitor expenditures will come from these inquiries in approximately the same proportions as for the other SAMC program components.

4. Research

Research provides direction for future program elements, allocations and overall strategy. It can analyze existing information or collect new information to monitor program effectiveness or to refine target markets and media choices.

The 1987 SAMC Program invested $8,200 in research to evaluate the 1987 Program and make recommendations for future programs based on existing information. The results of this research are in this document. Another $5,000 has been appropriated for a special analysis of the Southeast independent visitor in terms of travel patterns, party

characteristics, opinions about their Alaska trip and their Southeast trip in particular, trip planning information and demographics. Some of this information has been used on a preliminary basis in this document.

In light of the timing situation, an estimated evaluation of the SAMC Program is a good, adequate alternative to an official Conversion Study which would reliably quantify the measurable results of the program. The Independent Visitor Analysis should be invaluable in providing direction for future campaigns. No other community or private firm has requested a similar analysis, insuring Southeast's gameplan will be at least one step ahead of any other body catering to this audience.

5. Analysis of Measurable Impacts of Major SAMC Programs

The following is a tabular analysis of important economic impacts of the two major SAMC 1987 investments, the participation in the AVAMC Cooperative Marketing Program to obtain names of their advertising respondents to whom to mail SAMC brochures and SAMC's own consumer advertising program in National Geographic and Sunset. Due to the very different investments that National Geographic and Sunset represent, they are analyzed separately for cost-effectiveness.

The reader should note that, in slashed (/) entries in the table, the number before the slash shows the "cost per" based on total component costs while the number after the slash shows the same "cost per" based only on advertising insertion and card printing expenses. The cost-effectiveness of the AVAMC Program is always calculated by the latter method, as shown in Chapter II.

The analysis demonstrates several significant features of the 1987 SAMC program:

- The total cost of implementing the AVAMC program participation was higher than either *National Geographic* or *Sunset* total costs due to the large volume of brochures and mailing costs, even though no direct advertising costs were incurred.

- The AVAMC program component scores much higher on total cost per inquiry than either of the SAMC advertising placements because of zero advertising costs in spite of high fulfillment costs.

- The AVAMC program component also runs away with the honors on cost per conversion, 5 times as efficient as *Sunset* and 8 times as efficient as *National Geographic*.

- *Sunset* does nearly as well as the AVAMC component on cost per room night and even slightly better on final return on investment due to the long stays estimated for SAMC advertising-inspired visitors vs. the shorter add-on stay estimated for AVAMC-induced visitors.

- National Geographic simply did not generate as well as either of the other two components in terms of any cost-efficiency measure.

Measurable return on investment for the 1987 SAMC Program is an estimated $14 for every dollar spent. The AVAMC program component is estimated to add $16 to the Southeast economy for every $1 spent. *Sunset* is also estimated to add $16 for every $1. *National Geographic* is estimated at $9 for every $1 spent.

This is not a high return on investment as compared to the AVAMC Program which traditionally gets ROIs of about 100 to 1 (see Chapter II) but it must be remembered that the objectives of the two programs in the past several years are significantly different. The objective of the AVAMC Program has been to generate responses rather than increase the pool of awareness *from which* to generate responses. And, in fact, the response rate of the AVAMC Program is suffering now from what some think is an exhaustion of the established pool of aware and interested respondents without a replenishment of the pool itself.

In any case, the SAMC Program has generated an estimated $14 for every dollar spent that would not have entered the Southeast economy had the program not been in existence. This translates to an estimated $3,786,000 in new monies for regional coffers in 1987 alone. Again, this does not include any indirect visitor expenditures or future visitor expenditures based on the eventual payoff of image/awareness building.

ANALYSIS OF MEASURABLE IMPACTS OF MAJOR SAMC PROGRAMS
(Estimated)

	AVAMC	SAMC Advertising Component	
	Component	Sunset	National Geographic
Ad Insertion/Cost	$12,000	$59,000	$88,000
Ad Production	-	6,000	7,000
Brochures	76,000	2,200	3,100
Mail Fulfillment	40,000	1,200	1,600
TOTAL COST	**$128,000**	**$68,400**	**$99,700**
# Inquiries/Names	172,000	4,700	6,500
# Visitors	12,100	1,600	1,300
# Room Nights	24,200	13,100	10,700
Visitor Dollars	**$2,060,000**	**$1,115,000**	**$906,000**
Cost per Inquiry	$0.74 / 0.07	$14.55 / 12.55	$15.34 / 13.54
Cost per Conversion	10.58 / 0.99	42.75 / 36.88	76.70 / 67.70
Cost per Room Night	5.29 / 0.50	5.22 / 4.50	9.32 / 8.22
Return on Investment	16.09 / 17.17	16.30 / 18.90	9.09 / 10.30

TOTAL MEASURABLE PROGRAM:	$4,081,000.00	Visitor Dollars Income
	295,100.00	Program Expenditures
	$3,786,000.00	Program ROI (total)
	$13.83	Program ROI (per dollar)

Chapter IV
RECOMMENDATIONS FOR FY 1988 AND FUTURE YEAR SAMC PROGRAMS

CHAPTER IV: RECOMMENDATIONS FOR FY 1988 AND FUTURE YEAR SAMC PROGRAMS

The evaluation of the FY 1987 Southeast Alaska Marketing Council Program and the review of the AVAMC Cooperative Marketing Program provides the consulting team with a selection of suggestions for increasing the effectiveness of future year SAMC programs. Given the budget considerations in the public sector, as well as in the private sector, a productive and efficient program is essential. Following are specific component recommendations developed by Data Decisions Group for further enhancing the effectiveness of this pioneering regional economic development program.

1. Participation in AVAMC Cooperative Marketing Program

The evaluation of the measurable benefits of the AVAMC participation show this SAMC program to be highly productive. Screening of the labels for independents makes the mailout efficient and minimizes the amount of competition for these names. Package inquirers are heavily solicited as are some specific categories of independents. But few if any other entities blanket the independent inquirers. This means that for those who do convert to visitors, SAMC has the only message or at least the most comprehensive and attractive one. Since most independents had not intended to visit Southeast, the AVAMC program is an excellent means to expand the pool of Southeast visitors by getting their message to the existing pool of potential Alaska visitors.

Participation in the AVAMC is estimated to produce as much in direct results as the consumer advertising program and yet costs significantly less. However, the comparison is not exactly valid since the primary purpose of the advertising is image, not immediate response and conversion. The AVAMC program also achieves the image objective to the prime market of qualified Alaska prospects. This market, though, has already been primed to Alaska and is in the response stage of the conversion process. They are, therefore, further ahead, at least in the decision to visit the "generic" Alaska. The total cost of AVAMC participation will fall next year because the basic brochure production costs are already borne by the FY 1987 program.

AVAMC participation should be continued and the purchase of all available qualified names/labels should be the policy. Research should be conducted to determine the most effective breadth of label criteria. It may be that independent visitor conversions occur just as easily among those who have just not checked interest in package tour on their BRC as for those who have not checked either package tour or cruiseship travel or just not cruiseship travel. See section 6. Research in this chapter for recommendations.

SAMC should also consider participation in another phase of the AVAMC Program for 1988. The **State's F/W/S campaign** this next year will be soliciting names of residents' friends and relatives to whom to mail F/W/S brochures and will also be mailing to the Lower 48 gift subscription list of Alaska magazine. SAMC may want to take advantage of both lists to serve as a second tier for SAMC direct mail, especially since 37% of all Summer Southeast Independent Pleasure Visitors came because of friends and relatives instate.

The purchase of major advertising space in the Official Vacation Planner is of debatable value. First, the cost of a full or even half page is quite high. Second, the competition among advertisers in the book may detract from the overall impact of a Southeast ad. Also, the region receives some editorial coverage and the incremental impact of a large ad is questionable. Some presence in the Planner is necessary for participation and this presence should be more than a directory listing of the magnitude of those of small operators.

2. Consumer Advertising

Appealing to the potential Alaska visitor through advertising is a rapidly changing science and art. Responses to one of the most effective programs in the country -- the AVAMC Program -- are declining alarmingly in spite of the best travel marketing expertise on the West Coast. The SAMC is entering the market when some tried and true Alaska advertising vehicles are not producing at historical levels.

Two major factors have been identified which contribute to the State's advertising response decline. One reason is the increasing volume of brand advertising for Alaska travel products in recent years. The tens of millions of dolla· spent, primarily by cruise and tour companies, dilutes the pool responding directly to t' ·te's ads because they are aimed at roughly the same group of people. In reaction t· the SAMC is cautioned to consider timing and placement carefully to avoid excessiv· ·ge and response dilution.

The second theory for declining responses is the strong emphasis in the last few years on maximizing BRC responses from the known pool of Alaska visitor prospects. The same message to the same people in the same publications over several years was an effective way to maximize responses (and therefore conversions) among a limited, known group of people. In hindsight, this strategy seems to have maximized responses but has not replenished the pool of potential visitors who responded and/or converted. Now the AVAMC must look to new prospects or else remain dependent on a dwindling supply of known prospects who have Alaska at the top of their destination priority ladder. They must consider creating another pool, similar to the pool they created in the first several years of the AVAMC Program.

The lesson for SAMC programs, especially at this stage of introducing a "new" product, is to **first build a pool** through image and awareness advertising. Then and **only then** after a significant pool has been established can SAMC concentrate on maximizing direct responses. In other words, the original SAMC priorities -- awareness and image first -- were in the correct order and should be for some time. This is not to say that some SAMC component(s) cannot have direct response as an objective -- it is only to say that image and awareness-building must be priorities. As the SAMC program matures, a **healthy combination of awareness-building and direct response must be maintained.**

Information for the following recommendations came from the evaluation of the AVAMC and SAMC advertising placements, conversion study data, a review of travel planning habits of Southeast Independent Visitors and the professional background of the evaluation team.

- **Timing**

The prime travel magazines are heavy with Alaska advertising from October through March. Dilution can be minimized, especially for image advertising, by placement at the **front end (September/October) and the tail end (March/April)** of this period. Interestingly, SE Independent Visitors have rather lengthy planning periods compared to other Independent Visitors (average: 8.1 months from Alaska season/year decision, 3.7 months for trip planning). These lead times also tend to support beginning and end of planning period ad placements.

- **Advertising Placement**

Sunset and *Alaska* Magazine are considered excellent Alaska buys in general as they are by far the leaders in actual conversion to visitors, 17% for ***Sunset*** and a record 24% for ***Alaska*** Magazine. They are especially good for the Independent market because of the nature of their editorial content. *Sunset* is packed with do-it-yourself material for the middle to high-end Westerner. It also contains a plethora of mail order ads, another characteristic of readers who like to do it on their own.

Alaska is likewise full of special topic information for the independent planner. Further, *Alaska* has recently recruited a large number of new subscribers in regions which are good generators of independent Alaska travelers (The West and the Northern Tier Snowbelt). Placement in *Alaska* would mean excellent and economical exposure to new Alaska enthusiasts who are presumably new entries into the potential visitor pool. *Sunset*, given judicious timing of placement, should provide a good image base as well as generate quality inquiries for conversion.

National Geographic, though prestigious, may be perhaps too broad a vehicle for the target prospect market. The combination of very high cost for a very limited advertising budget coupled with low response and conversion even at the State level are factors which prevent recommending repeating in this publication. Long a staple of the DOT program and the package tour industry, its effectiveness may be on the decline at least for response generation purposes.

Though this report does not propose a media plan, there are some obvious publications worthy of consideration. In addition to *Sunset* and *Alaska* , the ***Milepost*** guidebook is another clear choice. Many more visitors than just highway travelers use this publication. Twenty-two percent of Southeast Independents in Summer 1985 used the *Milepost* as a source of trip planning information before leaving home. This is nearly double the percentage who said they used the State's Vacation Planner. Also, a surprising 28% of Southeast Independents were highway entries and 20% exited by highway. A publication such as the *Milepost* aimed directly at them puts the SAMC message on target.

Vertical interest publications are another cost-efficient vehicle for building awareness and generating recruits. Independents, not package visitors, are **sportfishing** participants. Thirty-six percent (36%) of Southeast Independents participate. Even higher percentages participate to some extent in **other outdoor activities**--hiking and wildlife and bird watching. Except for individual businesses, sportfishing is not heavily marketed either by the State or major tour companies. Yet a major element in the Alaska mystique is sportfishing. Were SAMC to position the region as the place for Alaska sportfishing at reasonable cost, an appeal to this vertical market may be effective.

National awareness coverage should be considered by SAMC under certain conditions. Media selected must provide a vertical interest group relevant to Alaska, cost of national coverage must be considered and impacts of ad sizes evaluated.

The highway entry and exit numbers also show that many Southeast Independents are in personal vehicles -- often RVs or campers. Placement in RV industry magazines could be productive for SAMC. In terms of response volume, the State has generated exceptionally heavy responses from occasional insertions in *Motorland.*

Finally, an asset of the region is the ferry system which is utilized by a majority of Southeast Independents. This use is in spite of virtually nonexistent marketing, a poor reservation system and service problems. Cruising the Inside Passage has almost universal appeal for packaged and independents alike. One way to take advantage of this asset but avoid dilution from package tours is the sell concept of the Inside Passage cruise ferry-style. Joint advertising efforts with the ferry system could generate more image and response mileage for both SAMC and the ferry system. The possibility of cooperative marketing also exists with the vehicle carrying cruiseship Stardancer provided Admiral Cruises would be willing to sell partial cruises so visitors could take their vehicles off the ship at locations other than the ends of the line.

- Advertising Copy

The advertisement in *Sunset* and *National Geographic* had several strong points for accomplishing its primary purposes of image and awareness. The subject matter was excellent. Glaciers/Scenic Beauty are invariably at the top of list in visitor studies of what people want to see in Alaska and in subject matter which they associate with the Alaska travel destination. Showing that Southeast has these attractions in spectacular fashion is a strong message. Showing people and activities lend emotion and fun to the image. An earlier State of Alaska study[1] established that people and activities had high motivational appeal in ads. The overall feeling of the ad was warm (both climatic and emotional) and inviting. The BRCs were convenient and readable. The up front position in *National Geographic* was excellent. The *Sunset* position was not as good but still fine. However, placement in an issue with fewer other BRCs would be preferable.

Suggestions for improving the ad's effectiveness include the following. The appearance of specific mode type equipment (helicopter) may cause some misinterpretation of the ad's sponsor. In any case the ad should show the sponsor (SAMC) prominently and in an official-appearing way. This will establish additional credibility with the result being to encourage the requesting of information plus establish the ad clearly as a destination ad. Southeast Alaska needs to become apparent immediately and it is not really noticeable until the reader is into the copy at the bottom right of the page.

The Seattle address detracts from the Alaska mystique. This is permissible for magazine subscriptions or cruise brochures but not for destination advertising. The Seattle address also adds to existing confusion over sponsor. A postage paid BRC would increase response provided the SAMC felt the additional postage dollars are worth the investment. The word "FREE" needs to be larger and more striking and needs to clearly designate specifically what it is that is free.

[1] Image/Season Expansion Advertising Focus Group Research, 1980.

If the sponsor, destination and what is free is clearly established, the confusion from the presence of the equipment is minimized. These improvements should increase the response production of the ad as well as its image and awareness appeal for Southeast as a destination.

3. Collateral

The collateral piece used for all fulfillment and for the AVAMC mail-out is an extremely attractive 16-page color piece. In our opinion it **achieves its primary purpose and has outstanding image impact.** Further, the reproduction quality of most photos is high. Photo selection is superb -- both in color and topic choice and variety. In short, the collateral piece is one of the highest quality seen in the promotion of Alaska tourism.

Suggestions for improvement center primarily around mechanics and content. We suggest the brochure be made to appear **more "official"** than it does. An extensive focus group research project for the Alaska Travel Planner found that, without the official aura, recipients tended to view it as a commercial mailing and not take it to heart as a destination promotional piece. Thus, "official" means the recipient will give it more credibility and correctly interpret the purpose of the piece. The **postcard** is somewhat incongruous but not particularly distracting. We suggest the **opening inside photo** be more spectacular than mood setting. The contents might also include a listing of the region's **top attractions,** since some of them may have more existing market presence than the region as a whole.

The white background for the **bingo card/postcard back** is the one detraction from the highly appealing mood of the piece. A toned background would make it more compatible. The content of the bingo card is informative and varied insuring wide distribution of benefits among communities and participants.

A consideration for the future may be inclusion of a **Southeast Travel Planning brochure** in the fulfillment package. The brochure would be similar in purpose to the SATC Travel Planner and would provide specific tools for trip planning. The most effective effort would be to coordinate this piece with the SATC effort as much as possible. Such a brochure might only be included in fulfillments of prospects who say they'll be coming in the next year or two, rather than a blanketing of all inquirers, some of whom will not be at the planning stage yet.

4. Mail Fulfillment

The only suggestion here is to listen to what those who have been dealing with your list management/fulfillment house for years have to say about Media Services' record on responsiveness and efficiency.

5. Public Relations

As discussed in Chapter III, there are three keys to a successful public relations effort. First, retain the right people with the proper skills and contacts. Second, fund them well enough to allow them to accomplish your goal and not hamstring their efforts. Third,

monitor them so they are held accountable for implementing your goals on the timeline needed for effective message communication.

The long distance relationship of SAMC's two public relations firms cannot help but be subject to occasional communications problems regardless of who the two firms are. It is, however, important to have both an Alaskan and Lower 48 presence. The 1988 effort, also, will not be hampered by the time constraints of 1987 which should also be avoided if at all possible in the future. Press kits should be distributed by end-October or to coincide with consumer advertising insertions, which means **planning must begin during the summer months of 1987.**

New stories for the press kits might be generated by travel writers invited to Southeast this summer as part of the first official Southeast **travel writer familiarization trip(s).** This is encouraged, especially since private member firms can be asked to provide air, lodging and hospitality for these influential people.

Another way to accomplish the goal of good public relations efforts -- providing the greatest possible reach of your message for the smallest possible expense -- is to take advantage of special newspaper travel sections where placing at least a small ad guarantees editorial space. This PR method is probably not particularly cost-effective if the ad package does not include editorial space.

The instate regional awareness element is a positive feature of the PR program. It contributes to an informed and supportive constituency.

All the above enhancements require additional dollars which SAMC has already budgeted for this component in 1988.

6. Research

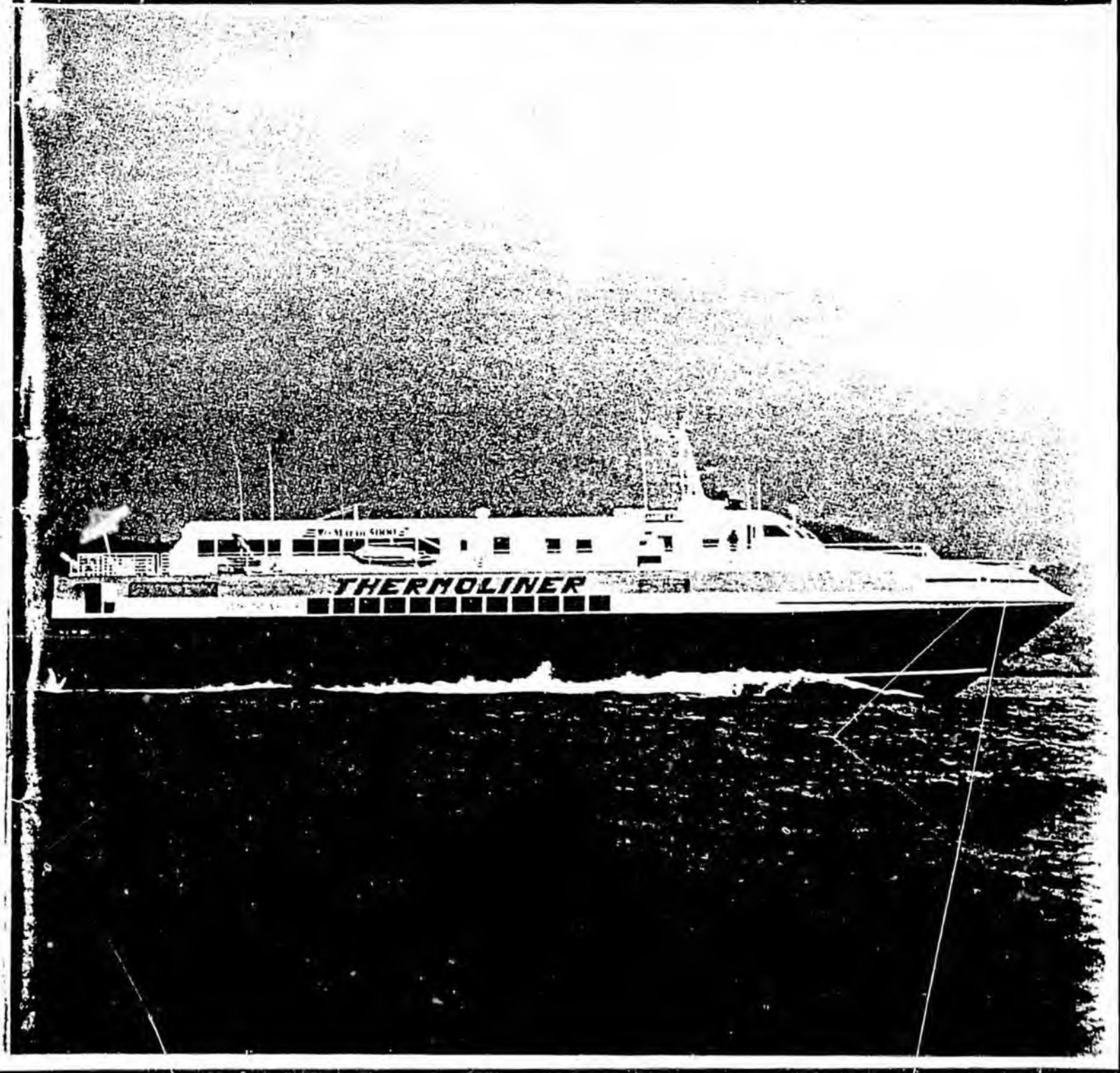
The Number One priority for the SAMC research budget should be an annual **Conversion Study** to quantify the measurable results of the program. Conversion studies can serve a number of purposes, especially in the case of SAMC. They can identify the conversion rates among various target audience lists, the costs per inquiry and conversion for each and the actual return on investment for every dollar of advertising or program cost. These studies can also profile the converted visitor in terms of their demographics, their travel habits both outside and inside Alaska, their lifestyles and their trip planning steps.

Perhaps of even greater importance is the ability of an SAMC Conversion Study to **identify the broadest but most effective BRC criteria.** The study will cross-check what prospects say they are interested in on their BRC (travel mode, accommodations, activities, time of travel) against what they actually did as visitors. This will enable precise pinpointing of the criteria guaranteed to predict conversion. SAMC will not spend dollars blanketing a population not given to conversion to Alaska visitorship and will instead be able to concentrate their investment on nearly-sure bets. This, of course, will reflect only conversion likelihood that year and will not predict the effects of image/awareness building, so that program will need to be considered separately. The Conversion Study, however, will be able to tell SAMC whether the literature has made an impact on inquirers in terms of image/awareness building.

Other research to consider in 1988 and beyond includes **talking with Southeast visitors** in person or by telephone to determine what prompted them to visit Southeast in particular as well as how they first became aware of Southeast as a vacation destination. This would provide key input for advertising message content and placement.

Another project which would provide strategic planning information on the most effective ways to build awareness among prospective travelers would be a series of **focus groups with prospective travelers.** These groups would be held in major West Coast communities with people of the demographic and travel backgrounds shown to be typical of the Southeast visitor through the special AVSP analysis. Topics would include level of awareness of Southeast as a specific destination, image associations with Southeast, ways to encourage image enhancement among frequent travelers, identification of persuasive advertising copy and more. Two wonderful aspects of focus groups are the ability to show and hear tangible objects like ad boards or radio tapes and the ability for clients to sit behind a one-way mirror and view the entire proceedings. Clients can also have direct input into discussions through notes sent in to the moderator.

High-Speed Surface Craft



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High-Speed Surface Craft

July-August 1987 Vol 26 No 4

Cover photograph: The first Westamaran 5000L cargo catamaran delivered to Gods-Trans at the beginning of August and due to enter service, carrying fresh cod from Iceland to the Netherlands, at the end of the month

PROGRAMME ANNOUNCEMENT
PLUS EXHIBITION BOOKING DETAILS

SIXTH
HIGH SPEED SURFACE CRAFT CONFERENCE & EXHIBITION

High-Speed Surface Craft

14-15 January 1988
Heathrow Penta, London

PROVISIONAL PROGRAMME

Organisers of the Sixth High Speed Surface Craft International Conference are pleased to announce the provisional programme of contributions for this unique forum devoted to discussion of latest developments in fast ferries and other rapid marine transport. The conference is designed to cover operations in a highly competitive market, as well as key topics in the design and building of new craft, with particular emphasis on assessing construction materials.

DAY 1

Operator's viewpoint: Red and White, USA, and Thames Line, UK
Construction and operation of a high speed passenger ferry: Stolkraft International, Australia
High performance propulsion: Servo Gear, Norway
Influence of shaft inclination on relative merits of propellers and water jets: A G Blyth, Naval Architect, UK
Design, development and testing of SES Jet Rider: Karlskronavarvet, Sweden, and SSPA Maritime Consulting, Sweden
Evaluation of a ride control system for SES: University College, London.

DAY 2

Role for composites in future marine transportation: Marchant Filer, UK
Fatigue properties of advanced laminated composites: Lloyds Register of Shipping, UK
High performance composites in sandwich panels: University of Southampton, UK
Advance material for high speed craft: Cougar Holdings, UK
Powering characteristics of hydrofoil craft: Maritime Research Institute, Netherlands
Case Studies in high speed surface craft: International Catamarans, Australia, and Marinteknik, Hong Kong.

DISPLAY SPACE

Companies are invited to take advantage of the exhibition area at the conference as an excellent opportunity to display equipment and services available to this rapidly expanding market. Such is the demand for the limited space available, that early bookings are advised.

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Following the conference a special bound volume will be published to include the papers presented plus others accepted but not read. Delegates will receive this volume as part of their registration.

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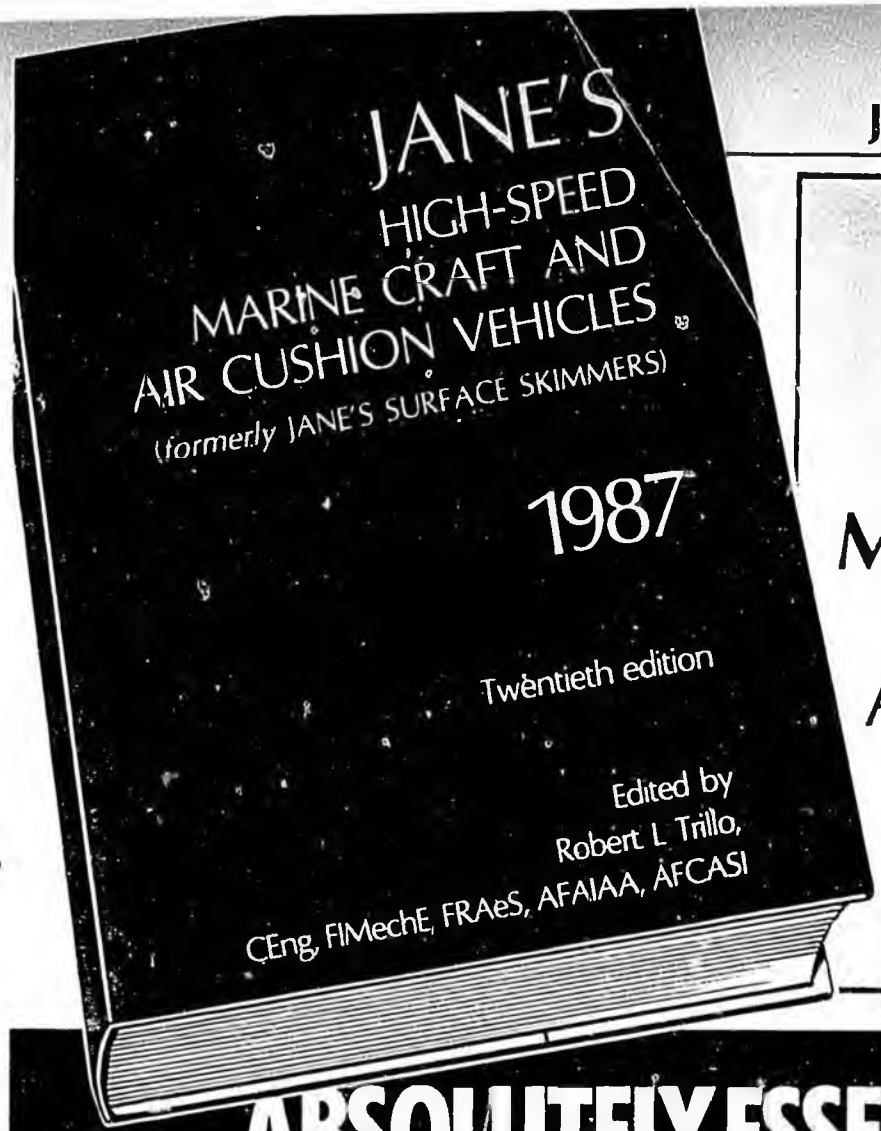

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THE 1987 EDITION OF JANE'S HIGH-SPEED MARINE CRAFT AND AIR CUSHION VEHICLES IS NOW AVAILABLE.

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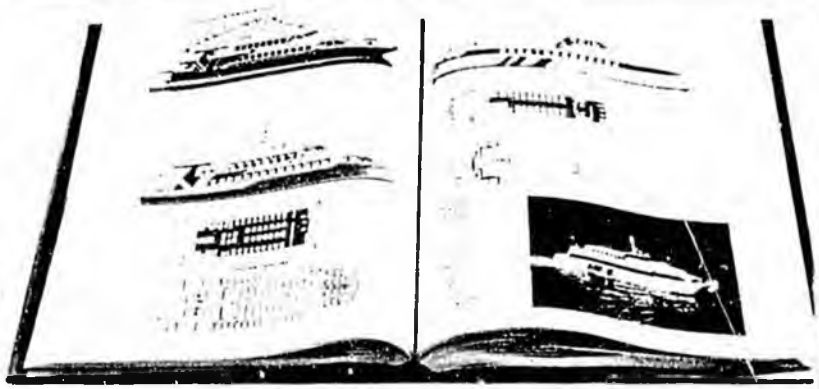
This latest edition of Jane's High-Speed Marine Craft and Air Cushion Vehicles (formerly Jane's Surface Skimmers) containing 506 pages is more than 20% larger than the 1986 edition, which is a reflection of both the growth and speed of change within the high-speed marine industries.

Comprehensive sections on operator information giving full details of craft, contact names and addresses are a key feature of the work. However, the description of types both in service and in production occupies over 60% of the book.

Significant new developments in high-speed craft, particularly in the field of SES, Catamaran and monohull vessels, are covered. Jane's High-Speed Marine Craft and Air Cushion Vehicles continues to provide industry with the only up-to-date reference source available.



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SYMPOSIUM ON SMALL FAST WARSHIPS AND SECURITY VESSELS

United States Coast Guard Operational Evaluation of the Bell-Halter 110 Foot Surface Effect Ship

by Lieutenant Commander Kurt G. Zimmerman*

SUMMARY. After more than a year as a demonstrator crew boat, the Bell-Halter 110 Foot Surface Effect Ship (BH-110) was sold to the US Navy Surface Effect Ship Project Office (PMS-304) in October 1980. The Coast Guard provided supplemental funding to have certain modifications incorporated into the craft to convert it from a crew boat to a patrol boat. Following modification, the BH-110 SES was delivered to the Navy in May 1981 and subsequently transferred to the Coast Guard. The vessel was painted in Coast Guard colours and on 18 June 1981 it was placed into commissioned service for an operational evaluation of six months duration.

The vessel operated both singly and in conjunction with other vessels and aircraft in a variety of Coast Guard mission areas. Armed with 0·50 calibre machine guns, it was used to enforce both fishing and drug laws. Other mission operations included search and rescue, pollution control and enforcement, the servicing of aids-of-navigation, and military preparedness.

The conventional diesel power, the ship type handling characteristics, and the speed and seaworthiness of the craft all implied a potentially desirable craft. Although some specific vessel problems were identified as a result of the evaluation, the concept proved valuable in conducting US Coast Guard missions.

1. INTRODUCTION

The United States Coast Guard (USCG), an agency of the Department of Transportation, is responsible for enforcing government policies and providing humanitarian services on and near the territorial and contiguous zone waters of the United States. Although quite independent of the US Navy which is under the Department of Defense, the two agencies often work in close cooperation.

The United States Coast Guard utilises marine vehicles, ships and boats, to conduct its many missions. Although varied, the missions can be simplistically portrayed as a four sided figure. Side one is the enforcement of laws and treaties. This implements the Coast Guard's role as the government's marine police force. These missions include enforcing fishing rules and regulations, enforcing drug smuggling laws and the prevention of illegal alien immigration. Side two represents the humanitarian aspect of the service. These missions include searching for and rescuing people lost at sea from small boats, yachts, merchant ships, and aircraft. Towing disabled craft, and providing fire fighting and dewatering assistance to ships in need also fall within this category. The Coast Guard also places and repairs some 44,000 navigational buoys and other aids to navigation. The third side of the Coast Guard endeavours to protect natural resources. This field includes monitoring, containing, and assisting in cleaning up oil and hazardous substance spills. Oceanographic research and water quality monitoring are also included among the missions in this area. The fourth side of Coast Guard missions is military readiness. In time of war, the US Coast Guard joins the US Navy and carries out military operations.

It is against this background of Coast Guard multiple mission requirements that potential replacement vessels are tested. Vessels are sought which are capable of executing these multimission aspects. To that end, the Bell Halter Surface Effect Ship (SES) was evaluated.

2. VESSEL DESCRIPTION

The vessel ultimately used in the operational evaluation was constructed in 1978 by Bell Halter of New Orleans, Louisiana, as a demonstrator craft. Their purpose was to prove the concept that a surface effect ship could be built and operated effectively in the competitive arena of offshore oil field operations in the Gulf of Mexico. The technical characteristics of the demonstrator craft are shown in Table I.

TABLE I. Physical Characteristics of the Bell Halter 110 Foot SES Demonstration Craft

DIMENSIONS		
Length	110 ft	33·5 m
Beam	39 ft	11·9 m
Height (on cushion)	28 ft	8·5 m
Draught (on cushion)	4·6 ft	1·4 m
Height (off cushion)	22·6 ft	6·9 m
Draught (off cushion—normal)	7·7 ft	2·3 m
Draught (off cushion—maximum)	8·2 ft	2·5 m
WEIGHTS, ETC.		
Maximum displacement	150 LT	152·4 t
Normal displacement	125 LT	127 t
Light ship displacement	98·3 LT	100 t
Maximum deck load	37·5 LT	50 t
Cargo deck area	1672 ft²	155 m²
Fuel capacity	3100 gal	11733 l
Water capacity	384 gal	1453 l
Crew	4	

*United States Coast Guard

MACHINERY

Propulsion — Two 16v-149TI Detroit D l Marine Engines
— Two 42 × 50·86 Gawn-Burrill subcavitating fixed pitch propellers

Lift System — Two 8v-92TI Detroit Diesel Marine Engines
— Two Double Inlet 42 inch diameter centrifugal fans

Generators — One 3-71 General Motors Diesel Generator (55 kw)
— One KATO KAMAG 14 generator driven from lift engine (40 kw)

PERFORMANCE

Maximum Cruise Speed	SS0	SS3
On Cushion	34 kts	28 kts
Off Cushion	19 kts	15 kts

Range at maximum speed — Sea State 3 — 500 n.m.

After launching, the craft was employed by Bell Halter in a series of demonstrations to the offshore petroleum industry, ferry boat operators, military organizations and representatives of foreign countries. The craft, a 110 foot (33·5 m) surface effect ship, alternatively called a rigid side wall hovercraft, was constructed of welded marine aluminium. It uses conventional diesel machinery and submerged marine propellers and rudders for high reliability and low fuel consumption. The vessel has a catamaran style hull form, with flexible skirts at the bow and stern to contain the air cushion (Fig. 1). The hull form is such that when off cushion, the waterline is well below the between hull cross structure, (see Fig. 2). Air is supplied to the cushion at three points along the hull from diesel driven lift fans supplying pressure at about 1·0 psi (703 kg/m^2). The bow seal system consists of eight finger-type segments. The stern seal is an arrangement of three horizontal tubular bags extending athwartships across the stern opening between the side hulls. Both sets of seals are supplied from the UK by Avon.

In the winter of 1979-1980 the vessel was used by Exxon in support of offshore oil rigs in the Gulf of Mexico. During this time it serviced rigs from 60 to 145 nautical miles from its home port in Louisiana, often carrying cargo up to 20,000 pounds.

3. INITIAL EVALUATION AND SUBSEQUENT MODIFICATIONS

Knowledge of the craft and its potential for service use generated interest in USCG circles and other governmental agencies. Although the US Navy was pursuing a large, high speed surface effect ship concept, the Bell Halter craft, with its diesel propulsion, seemed particularly suitable to Coast Guard needs.

In March 1980, a month long technical evaluation was conducted off Norfolk, Virginia, by the US Navy under the sponsorship of the US Coast Guard and the US Urban Mass

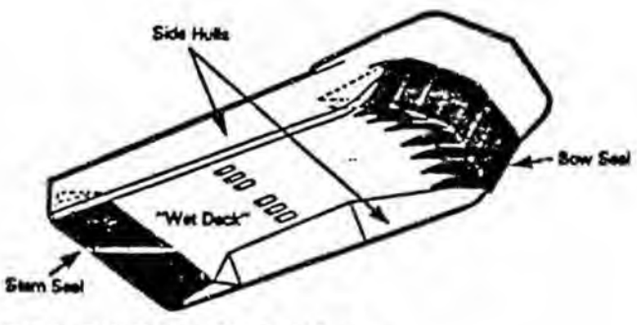


Fig. 1. Bell Halter SES Hull Form

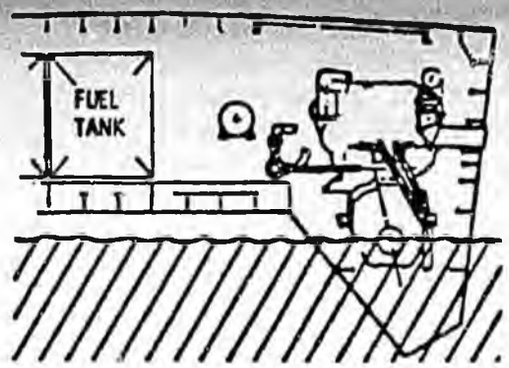


Fig. 2. Buoyant Sidehull Form

Transportation Administration. This test investigated technical performance of the craft and made direct comparisons to a Coast Guard 82 foot (25 m) patrol boat. It concluded 'the Bell Halter 110 foot SES is an effective and able marine vehicle that warrants consideration for varied future military and civilian applications'[1].

After the technical trials, the vessel was modified to satisfy the IMCO (International Governmental Maritime Consultative Organization) Resolution A. 373(x), Code of Safety for Dynamically Supported Craft. This was necessary before the craft was put into service for PEMEX in the Mexican oil industry in the Bay of Campeche.

In October, 1980, the US Navy Surface Effect Ship Project Office, with financial participation from the US Coast Guard Office of Research and Development, purchased the demonstrator vessel from Bell Halter. Under the terms of the procurement, certain modifications were to be made to the craft before delivery for a six month evaluation by the Coast Guard. At the completion of the USCG evaluation, the vessel would be lengthened by installation of a 50 foot (15·2 m) hull extension amidships. The US Navy would then take over the craft and test it in the new length-to-beam ratio configuration.

TABLE II. BH-110 SES Contract Modifications for Conversion to Cutter Use

1. Berthing for 14.
2. Additional heads and showers.
3. Install office space.
4. Add 400 gallon per day desalinator.
5. Add Food Stowage—freezer, refrigerator, dry food storeroom.
6. Add ice machine, mess deck tables.
7. Add supplemental fuel and water tanks.
8. Add ammunition stowage.
9. Provide Rigid Hull Inflatable ship's boat with hoist.
10. Install additional engineroom instrumentation.
11. Add towing bitt.
12. Add dedicated fire pump.
13. Add machine gun foundations and mounts.
14. Add anchors and anchor winch.
15. Paint boat to USCG standard colours.
16. Install transformer to allow connection to shore source of electrical power.
17. Install washing machine and clothes dryer.

These modifications to the craft before evaluation were made to change the configuration from a civilian passenger carrying crew boat to a craft capable of functioning as a Coast Guard patrol boat. The modifications are summarised in Table II.

In addition to these modifications, supplemental modifications were made in order to make the craft capable of conducting operations with other USCG vessels. These additional modi-

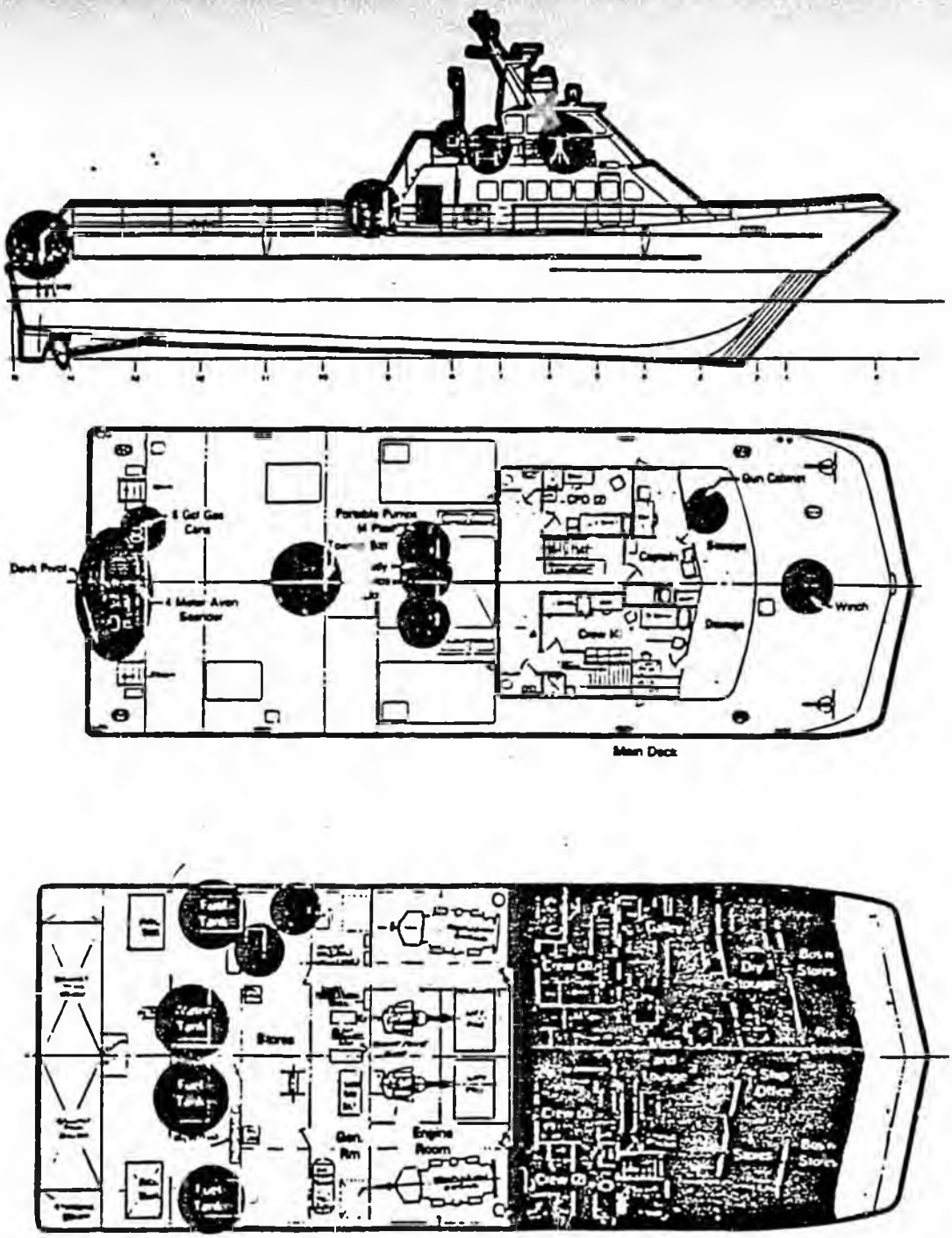


Fig. 3. USCGC DORADO Arrangements: Modifications shown highlighted

fications are shown in Table III. Fig. 3 shows the deck plan arrangements of the vessel as it was when placed into Coast Guard service.

The vessel was formally turned over to the US Coast Guard from the US Navy on June 12, 1981, and placed in commission on June 18, 1981, as the US Coast Guard Cutter DORADO (WSES-1). The crew personnel for CGC DORADO were taken directly from the USCGC POINT SPENCER, an 82 foot (25 m) patrol boat based in New Orleans.

The spirit of USN/USCG cooperation was continued with the assignment of two US Navy personnel to the crew for the duration of the Coast Guard trials. A US Navy senior petty officer was assigned as chief engineer, and the first assistant engineer was also a Navy petty officer. The crew personnel varied somewhat during the six months, depending on what

TABLE III. CG Installed Modifications to BH-110 SES

1. Provide secure weapons stowage.
2. Install telephone and interior communication circuits.
3. Install gyrocompass and gyro repeater units.
4. Install foundations for gasoline cans and portable pumps.
5. Install racks for firefighting foam.
6. Install electronics equipment.

missions were planned, but the typical composition of the eleven man crew is shown in Table IV. Special ratings were assigned when required to supplement operations of limited duration.

After commissioning, the DORADO was loaded with CG mission related equipment borrowed from POINT SPENCER,

TABLE IV. Typical Crew for USCGC DC)O (WSES-1)

Lieutenant (junior grade) — Commanding Officer*

Boatswains' Mate — 1st Class — Executive Petty Officer*

Quartermaster — 3rd Class*

(*Deck Watch Officers)

Engineering Department	Deck Department
Senior Chief Machinist Mate (USN) — Engineer Chief Petty Officer	Subsistence Specialist (Cook) 1st Class
Gas Turbine Technician — 1st Class (USN)	Seaman (non-rated)
Machinery Technician — 3rd Class	Seaman (non-rated)
Fireman (non-rated)	
Fireman (non-rated)	

VACANT BERTHS — Three — Temporary duty personnel as required.

and fully outfitted as a cutter. The loaded DORADO characteristics are shown in Table V. Performance of this configuration, as predicted by Bell Halter and as actually experienced, is shown in Fig. 4.

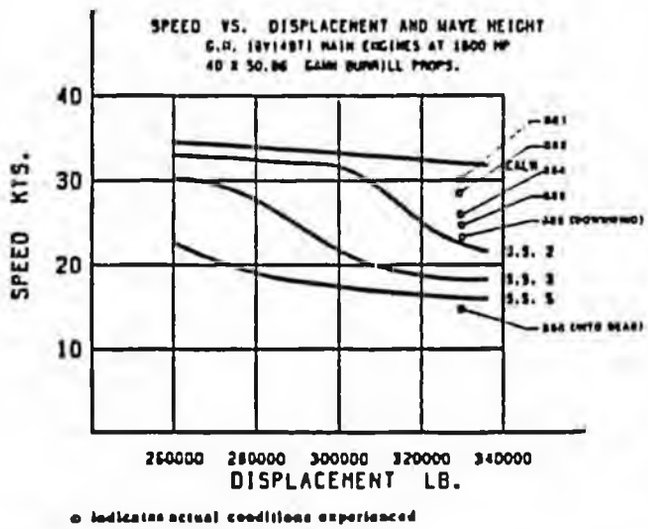
On June 20, 1981, the USCGC DORADO (WSES-1) departed on patrol and began the six month evaluation. During the evaluation, she participated in numerous missions demonstrating the usefulness of this craft concept for Coast Guard duties in the Gulf of Mexico.

On December 15, 1981, USCGC DORADO was decommissioned, Coast Guard peculiar equipment was removed, and the vessel was returned to US Navy custody. The craft is presently in New Orleans undergoing major structural modifications.

4. OPERATIONAL EVALUATION

The USCGC DORADO was in commissioned service for 181 days. The craft was underway 84 days; in a ready-for-sea standby status 47 days; and in a maintenance status 50 days during the trial period.

Maintenance requirements generally were similar or slightly less trouble than other Coast Guard cutters. The unpainted



● Indicates actual conditions experienced

Fig. 4. USCGC DORADO
Performance — Predicted and Actual

TABLE V. CGC DORADO Characteristics

DIMENSIONS		
Length	110 ft	33·5 m
Beam	39 ft	11·9 m
Height (off cushion)	22·6 ft	6·9 m
(on cushion)	28 ft	8·5 m
Draught (off cushion —maximum)	8·2 ft	2·5 m
(on cushion)	4·6 ft	1·4 m
WEIGHTS		
Maximum displacement	150 LT	152·4 t
Design displacement	125 LT	127 t
CG Operated displacement	147 LT	149·4 t
Fuel	6582 gal	24916 l
Water	1089 gal	4122 l
Lubricating Oil	174 gal	659 l
Crew	14	

MACHINERY

Propulsion — Two 16v-149TI Detroit Diesel Marine Engines
— Two 40 × 50·86 Gawn Burrill Subcavitating fixed pitch propellers

Lift System — Two 8v-92TI Detroit Diesel Marine Engines
— Two Double Sublet 42 inch diameter centrifugal fans

Generators — One 3-71 General Motors Diesel Generator (55 KW)
— One KATO KAMAG 14 generator (40 KW) driven from lift engine

PERFORMANCE

Maximum Cruise Speed	SS0	SS3
On Cushion	30 kts	25 kts
Off Cushion — fans on	19 kts	15 kts
Off Cushion — fans off	6 kts*	6 kts*

Range at maximum speed — Sea State 3 — 1000 n.m.

(*Speed limit to prevent damage to stern seal when water is not blown out by lift fan).

interior of the aluminium hull proved quite easy to maintain. Two major repair efforts were required however.

On September 10, 1981, the DORADO experienced an engine room fire. There were no serious injuries, but the incident necessitated a return to New Orleans for two weeks to repair the fire damage. The fire was caused by a cracked lubricating oil line on the reduction gear which failed through fatigue due to vibrations. The installed fixed flooding carbon dioxide fire extinguishing system in the engine room successfully extinguished the fire.

The other major repair effort was the replacement of all eight bow seal fingers. On August 28, it was discovered that a number of bow finger seals had ripped causing the cushion pressure to be vented through the bow. This necessitated a return to port for repairs. Investigation revealed that two seals had failed. They had been created along the vertical centre axis for shipment prior to initial delivery. It was along this crease that two of the eight seals had failed, ripping nearly the entire length. Failure of two of the seals was sufficient to vent the cushion severely enough to prevent normal operation. The seals had between 350 and 400 hours of operation on them when failure occurred. As a preventative maintenance measure, all eight seals were replaced, since all had been received at the same time.

Replacement of the bow seal was surprisingly quick and easy. Four personnel from the ship's crew replaced all eight seals in two days (24 hours effort) while DORADO remained in the water at pier side. The last seal took only one hour to remove and replace. The replacement cost for new bow finger seals was quoted as $5300 each.

Although not confirmed by this trial, the ected life of the seals is estimated to be between 1500 to 2000 hours of operation. This figure is based on US Navy operating experience with test air cushion vehicles (Jeff A and B) and surface effect ships (100A and 100B).

During the Operational Evaluation, CGC DORADO was assigned to various commands along the Gulf of Mexico, and employed in different missions. Fig. 5 shows areas of operation. In June and early July the vessel was operated out of Galveston, Texas in fisheries law enforcement duties. This included boarding vessels for inspection of catch and cargo as well as identification of vessels.

In mid-July, the craft was based at Corpus Christi, Texas, and employed in search and rescue duties and law enforcement patrols. The particular emphasis was on prevention of drug smuggling.

In August CGC DORADO conducted missions servicing aids-to-navigation while based out of New Orleans. This included minor repairs to buoys as well as fixed aids-to-navigation and transporting equipment. Late in August, the vessel was one of many employed in a pollution control drill in and around the Louisiana Offshore Oil Port, working in conjunction with the US Coast Guard Gulf Strike Team hazardous substance spill control specialists.

Much of the operational evaluation was spent on multi-unit law enforcement patrols, in the southern portion of the Gulf of Mexico. These patrols involved coordinated operations with other Coast Guard units working to prevent the smuggling of drugs. These operations were from 7 to 10 days in duration usually requiring continuous operation at sea. Resupply, including fuel, was from larger Coast Guard units. The seaworthiness characteristics of DORADO provided very habitable conditions for the crew. They were well rested and remained alert. This is in sharp contrast to the case on normal patrol boat sized craft, where the crew is usually exhausted from merely operating the craft in rough seas. During one extended patrol of this type, the seas were running up to 16 feet, and the DORADO, by drifting, was able to experience less than 18 degree rolls.

During the operational evaluation, methods of operation were developed to maximise the DORADO's unique capabilities, while bypassing its negative features. Due to the broad beam and wide set screws, manoeuvrability was very good. Such a good degree of control was afforded by this and the one set of controls looking aft that the crew often boarded vessels directly from DORADO without resorting to the small boat carried aboard.

In order to conserve fuel vessel would frequently sprint to a picket position then shut down and drift. While maintaining a radar guard, DORADO could take advantage of the improved seakeeping to rest the crew and still be ready to respond to an interception when required.

During the six month period, CGC DORADO proved to be a vehicle capable of performing Coast Guard duties in law enforcement, including fisheries patrol as well as coastal smuggling prevention and as a choke point patrol vessel. As a search and rescue craft, it responded to calls for assistance, conducted searches, salvage and firefighting duties as well as performed towing of disabled craft. Multi-ship and aircraft operations, medical evacuations, and cargo carrying capability were also satisfactorily performed.

The large deck aft and relatively high speed and resistance to roll made vertical lift operations with helicopters particularly easy. While not suitably sized nor strengthened to land or refuel a helicopter, the aforementioned characteristics afforded helicopter pilots significantly more control and margin for error than conventional slower speed vessels. On one occasion a medical patient was evacuated from a conventional Coast Guard cutter and transported quickly to within range of land based helicopters. The personnel transfer was accomplished successfully and resulted in the patient reaching medical facilities 6 to 8 hours sooner than would have been possible with conventional vessels.

Speed was one of the obvious advantages of CGC DORADO. The craft was able to transit in excess of 30 knots in low sea states in spite of the operating displacement of 147 long tons (149 metric tonnes) which was well in excess of the designed displacement of 125 long tons (127 metric tonnes). This advantage continued even with speeds of 28 knots in seas up to eight feet. During one patrol CGC DORADO encountered 12 to 14 foot (3·6 to 4·3 m) seas, and swells to 18 feet (5·5 m). The crew was able to make good 16 knots into the seas, and 25 knots when running with the seas. This range of relatively constant high speeds with increasing sea states was found to be a particularly desirable feature. Once DORADO, responding to a call for assistance, beat a helicopter to the scene of a burning yacht. Slow speed operations, however, use considerable fuel, hence normal operations were usually conducted at or near full speed. Fig. 6 shows fuel consumption plotted against speed. The transit speed of around 30 knots had positive effect on crew morale as well. When on patrol in the Yucatan region, CGC DORADO could be ordered home, and within 19 hours grant liberty. Conventional cutters would take two days or more to cover the same distances. The high level vibrations and rapid speed of advance made conventional navigation methods near obsolete however. Automatic position plotters, using

o indicates USCG Bases from which CGC DORADO operated June-December 1981

Fig. 5. USCGC DORADO
Areas of Operation

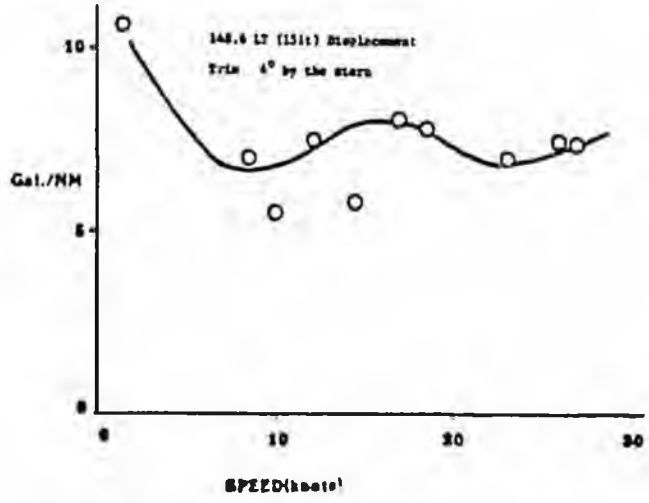


Fig. 6. Fuel Consumption versus Speed
Measured 2-3 December 1981

Loran-C, were utilised, and stabilised binoculars for bridge lookouts were a necessity.

Ship speed was found to be very sensitive to trim adjustment. At or near full load displacement, CGC DORADO was very sensitive to the position of its longitudinal centre of gravity. The crew had to become much more aware of trim than on a conventional ship, because improper trim would often prevent achievement of hump speed. Operations were then limited to between 18 to 22 knots until trim conditions were corrected.

The range for DORADO was about 1000 miles at a full speed of 30 knots. However, as sea state increased, fuel consumption remained almost constant at 160 gallons per hour according to the crew while transit speed decreased accordingly. Even with two ruptured bow seal fingers however, fuel consumption at full throttle was about the same rate of 160 gallons per hour while speed was only reduced to 18 knots.

The seaworthiness and habitability of CGC DORADO proved to be two particularly desirable features. With the broad beam, crew living conditions aboard compared more to shore side barracks than they did to shipboard conditions. Ship motions, particularly heaving and lurching, were rough during full speed operations and often prevented normal activities. However, due to the seaworthiness of the hull, either a course alteration, or a complete stop, would moderate motions to such a significant degree that activities approaching inport routine could be conducted. One method of operation that developed was to stop and drift once the operating area had been reached. This technique provided an extremely well rested and alert crew for when action was required, as well as a method to conserve fuel. This is in contrast to conventional vessels which would, of necessity, be steaming at slow speeds in their patrol areas.

Noise and vibration were two negative factors determined during the trial. The main engines were hard mounted to the aluminium hull structure, and as a result, transmitted engine noise throughout. The craft, being a prototype, has some insufficient propeller tip clearance induced vibrations. The propellers were turned down from 42 inch (1·06 m) to 40 inch (1·02 m) diameter before delivery to US Navy/US Coast Guard in a partially successful attempt to alleviate this source of vibration. The inherent pneumatic spring effect of the air cushion also contributed to the unusual motions. While the motions often seemed extreme to visitors, the fact remains the crew lived and functioned very well for the six month evaluation period.

The vibrations did contribute to numerous piping failures and hull cracks. These failures illustrate the need for care in designing aluminium craft. Flexible connections and more numerous pipe system supports would have reduced the occurrence of these failures. Strengthening of hull plating in discovered weak areas, as well as more use of continuous, rather than skip welding techniques would lessen the occurrence of hull cracks. Bell Halter has incorporated hull thickness changes on the next generation design of these vessels.

Operationally, the DORADO presented a small radar and visual target when viewed from a bow aspect. This was useful when coupled with the high speed of the vessel while the craft was being used in law enforcement missions.

The broad beam allowed large deck space aft, suitable for cargo. This area, however, was subjected to spray and was often quite wet when the craft was underway on cushion at high speeds. The widely separated propellers provided DORADO with excellent manoeuvrability at pier side and when alongside other vessels at sea. This feature, along with the stable ride was particularly useful when DORADO was resupplied by other Coast Guard cutters. The manoeuvrability, coupled with the variable deck height, due to lift engine throttle settings, was used to advantage by DORADO's crew during boardings and inspection of other vessels. DORADO would manoeuvre alongside, then adjust cushion height, to match deck levels, allowing the boarding crew to step directly from one ship to the other.

The broad beam, and shallow step aft also allowed easy boat launching and over the side operations. The crew reported a significantly improved sense of safety during these operations when compared to conventional patrol vessels. Items were easily launched and recovered off the stern platform. Small Coast Guard boats moored across the stern on occassion. Towing was likewise easy. The location of the tow bitt was found to be troublesome, as it rendered so much of the stern unusable (Fig. 2). The tow point could be moved further aft without detriment because of the wide set screws.

The crew learned to operate the craft quickly. The only controls beyond those found on a normal vessel were the lift engine controls. The large beam and draught, when off cushion, were factors the operators had to keep in mind when operating in restricted waters however.

The installed ground tackle proved inadequate. The two 90 pound Danforth type anchors, standard equipment aboard 95-foot patrol boats, proved inadequate to hold DORADO when trailing a pollution containment boom astern.

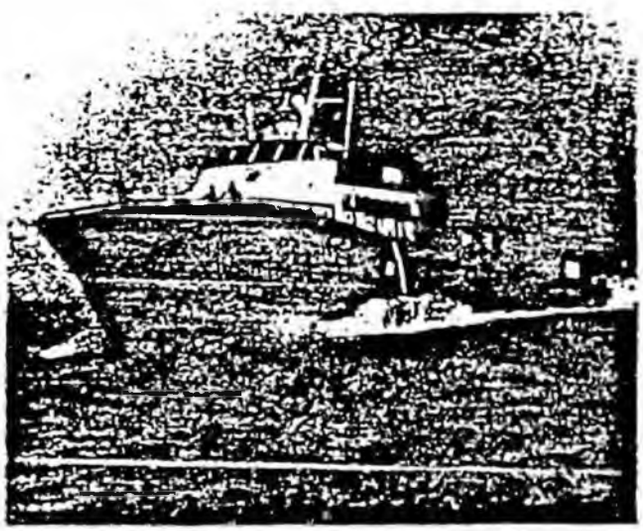


Fig. 7. USCGC DORADO in transition from hull borne to cushion borne mode of operation. Note eight bow finger seals.
Official US Coast Guard Photo.

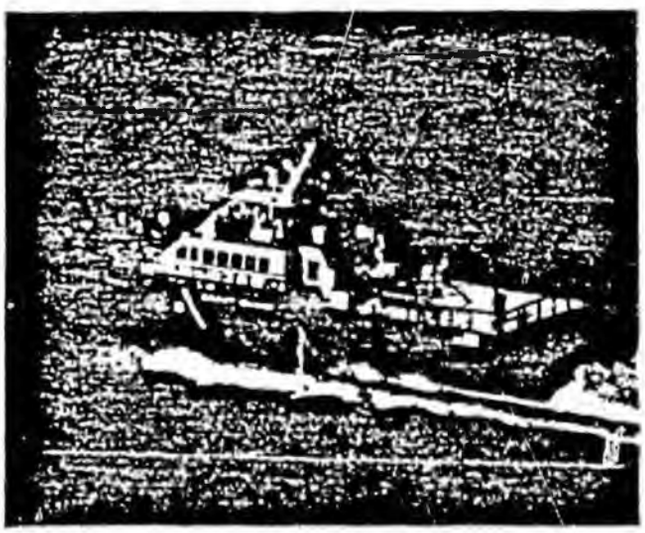


Fig. 8. USCGC DORADO aerial view from port quarter while operating on cushion.
Official US Coast Guard Photo.

The aluminium construction allowed f unpainted interior spaces, and hence reduced maintenance despite the increased area to be cleaned. The low melting point of aluminium requires adequate fire protection. The installed carbon dioxide fire extinguishing system and remote ventilation fan shut off switches proved vital during the evaluation of DORADO.

Engineering experience aboard CGC DORADO has shown the craft is within the scope of normal maintenance expertise found on other Coast Guard cutters. The diesel propulsion and conventional ship characteristics offered no problem for crew operations. The main diesel engines are common to those used on 95-foot Coast Guard patrol boats. The only feature unique to the DORADO are the bow and stern seals. There were no repairs made to the seal system, except direct replacement, so an assessment of the crew's capability to make repairs cannot be made.

The extensive use of aluminium pipe and the use of dissimilar metals in piping systems, such as brass valves, are a potential problem. The generous use of protective zincs is necessary for long term operation of craft similar to DORADO. Similarly, vibration mounts, flexible bulkhead penetrations, and more supports for pipes should be installed to reduce one of the major maintenance problems encountered on DORADO.

5. CONCLUSIONS

In summary, the six month operational evaluation of the USCGC DORADO proved that the SES concept can be valuably employed as a Coast Guard resource. The craft proved equal or more capable in conducting most of its missions than comparable Coast Guard cutters. While problems and limitations with the concept and this particular vessel exist, solutions are not beyond the reach of technology. On balance, the concept is valuable and useful in pursuit of many Coast Guard missions.

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File Name: [F0]<SeaHawkCo>FY87-Stats

USCGC SEA HAWK(WSES-2)
OPERATIONAL STATISTICS FY-87

MISSION SUMMARY

CATEGORY	MISSIONS	RES HRS	INPORT OPS HRS	HIGH READY HRS
SAR	19	156	0	0
ELT-DRUGS	19	2450	72	14
ELT-OTHER	3	55	0	0
OPTRA	12	23	106	0
PIA	6	11	10	0
MISC	12	66	18	0
TOTAL	71	2761	206	14

TOTAL MAINTENANCE HRS: 4424
TOTAL STANDBY HRS: 1355

EMPLOYMENT SUMMARY

CATEGORY	HOMEPORT	AWAY FROM HOMEPORT	TOTAL
U/W DAYS	33	122	155
INPORT OPS DAYS	15	0	15
HIGH READY DAYS	0	0	0
MAINTENANCE DAYS	157	2	159
STANDBY DAYS	36	0	36
TOTAL	241	124	365

MISCELLANEOUS INFORMATION

NR OF PATROLS: 21
FUEL CONSUMED: 193,636 GALS
MILES CRUISED: 21,121 NM
SIGHTINGS: 332
BOARDINGS: 59

SEIZURES: 3

DATE	VSL NAME	CONTRABAND	ARRESTS
05 MAY 87	F/V NATALIA DEL MAR(US)	4,000 LBS MJ	5
22 JUN 87	S/V ESMERALDA(US)	150 LBS MJ	3
01 SEP 87	M/V LUCELIA(HA)	2,055 LBS COKE	5

HMIO INTERDICTIONS: 2

DATE	VSL NAME	POB
30 MAR 87	M/V MARIE FLORE(HO)	140
21 JUL 87	S/V DIEU D'AMOUR(HA)	136

USCGC SHEARWATER (WSES-3)
OPERATIONAL STATISTICS FY-87

MISSION SUMMARY

CATEGORY	MISSIONS	RES HRS	INPORT OPS HRS	HIGH READY HRS
SAR	11	92	0	0
ELT-DRUGS	32	2516	109	23
ELT-OTHER	1	16	1	0
OPTRA	19	27	0	0
COOP-FED	2	60	0	0
PIA	6	66	0	0
MISC	14	142	24	0
TOTAL	85	2919	134	23

TOTAL MAINTENANCE HRS: 4022
TOTAL STANDBY HRS: 1662

EMPLOYMENT SUMMARY

CATEGORY	HOMEPORT	AWAY FROM HOMEPORT	TOTAL
U/W DAYS	10	158	168
INPORT OPS DAYS	0	0	0
HIGH READY DAYS	2	0	2
MAINTENANCE DAYS	78	69	147
STANDBY DAYS	48	0	48
TOTAL	138	227	365

MISCELLANEOUS INFORMATION

NR OF PATROLS: 31
FUEL CONSUMED: 231,178 GALS
MILES CRUISED: 28,833 NM
SIGHTINGS: 146
BOARDINGS: 49

SEIZURES: 3

DATE	VSL NAME	CONTRABAND	ARRESTS
08 OCT 86	S/V JOUER (UK)	400 LBS MJ	2
16 DEC 86	S/V CONQUEST(US)	1,851 LBS MJ	3
16 MAY 87	S/V ALGERNON (US)	1,000 LBS MJ	2

MIGRANT INTERDICTIONS: 1

DATE	VSL NAME	POB
01 MAY 87	M/V STONEINGTON(US)	18

USCGC PETREL (WSES-4)
OPERATIONAL STATISTICS FY-87

MISSION SUMMARY

CATEGORY	MISSIONS	RES HRS	INPORT OPS HRS	HIGH READY HRS
SAR	26	201	0	0
ELT-DRUGS	32	3623	20	2
ELT-OTHER	1	24	0	0
ELT-FISHDOM	1	1	0	0
OPTRA	29	109	10	0
PIA	3	7	0	0
ATON	1	3	0	0
MISC	8	25	0	0
TOTAL	101	3993	30	2

TOTAL MAINTENANCE HRS: 2778
TOTAL STANDBY HRS: 1957

EMPLOYMENT SUMMARY

CATEGORY	HOMEPORT	AWAY FROM HOMEPORT	TOTAL
U/W DAYS	27	182	209
INPORT OPS DAYS	2	0	2
HIGH READY DAYS	0	0	0
MAINTENANCE DAYS	101	0	101
STANDBY DAYS	53	0	53
TOTAL	183	182	365

MISCELLANEOUS INFORMATION

NR OF PATROLS: 36
FUEL CONSUMED: 362,323 GALS
MILES CRUISED: 36,472 NM
SIGHTINGS: 189
BOARDINGS: 105

SEIZURES: 8

DATE	VSL NAME	CONTRABAND	ARRESTS
07 OCT 86	F/V GUADELUPE	70 LBS MJ	4
12 OCT 86	S/V RAINBOW CHASER	3,400 LBS MJ	2
11 MAR 87	FL 5778 EY	RESIDUE	5
03 APR 87	FL 5334 SH	RESIDUE	5
06 JUN 87	FL 3804 EY	HIDDEN COMPT	2 DET
12 AUG 87	P/C REMAN	HIDDEN COMPT	3 DET
10 SEP 87	S/V WONTON	100 LBS MJ	4
25 SEP 87	P/C EXCALIBUR	ILL EXPORT ELECTRONIC EQUIPMENT	2

MIGRANT INTERDICTIONS: 0

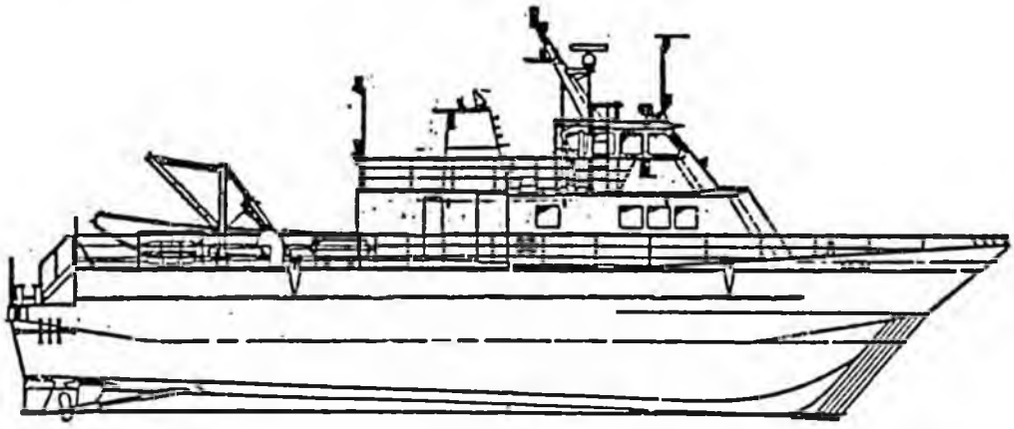
LACY ACT:

DATE	VSL NAME	VIOLATION
22 FEB 87	F/V LITTLE JOE	730 LBS SHRIMP SEIZED FOR FISHING IN MX WATERS

U.S. Department of Transportation **Fact Sheet**

United States Coast Guard

Public Affairs Office, 2100 2nd St. SW, Washington DC 20593-0001 — 202-267-2304



THE SURFACE EFFECT SHIPS (WSES)

The three U.S. Coast Guard Surface Effect Ships are a new concept in patrol craft. These rigid side wall hovercraft are used primarily for enforcement of laws and treaties, especially drug or illegal migrant interdiction and marine environmental protection.

With a maximum speed greater than 30 knots, the SESs assure rapid response for rescue cases, pollution containment and law enforcement while the thirty-nine foot beam provides a stable platform in most sea conditions. The ship is constructed of welded marine aluminum, has two 1800 horsepower diesel engines for propulsion, mounted in the side walls and two smaller diesels for lift.

The lift engines drive fans that create a pressurized air cushion under the vessel, which lifts the vessel, thus reducing drag and draft. The two solid side walls pierce the water surface, formimg a catamaran hull and the air cushion is sealed by flexible rubberized skirts at the bow and stern.

Because Surface Effect Ships are designed with low length to beam ratio they are stable at high speeds. When on cushion they have a shallow draft, which can still be maintained at low speeds. The large freeboard area can be adjusted by controlling the lift fans, a useful docking feature. Until wave height approaches the freeboard, speed and ride comfort are not reduced. SESs are highly maneuverable even at low speeds with propeller and rudder in each side hull.

The SESs were manufactured by Bell Halter Inc. in New Orleans, Louisiana. Detroit Diesel Division of General Motors built the 16V-149TIB marine engines in Detroit, Michigan.

SURFACE EFFECT SHIP SUMMARY

PRINCIPAL

Length Overall: 109 feet 3/4 inch

Beam: 39 feet

Full Draft: 8 feet 3 inches

On Cushion: 5 feet 6 inches

Hull Material: Aluminum Alloy
Super Structure: " "

Full Load Displacement: 150 tons

Maximum Operating Speed: 30+ knots

Best Economical Speed: 26 knots

Endurance: 7-10 days

Cruising Range: 1100 n.m.
@25 knots

MACHINERY

Lift: 2 Detroit Diesels
350 HP
2-two stage 40" diameter
lift fans

Main Engines: 2 General
Motors Diesels 1800HP
@1900 RPM

Generators: 2 GM Diesels
(55kw)

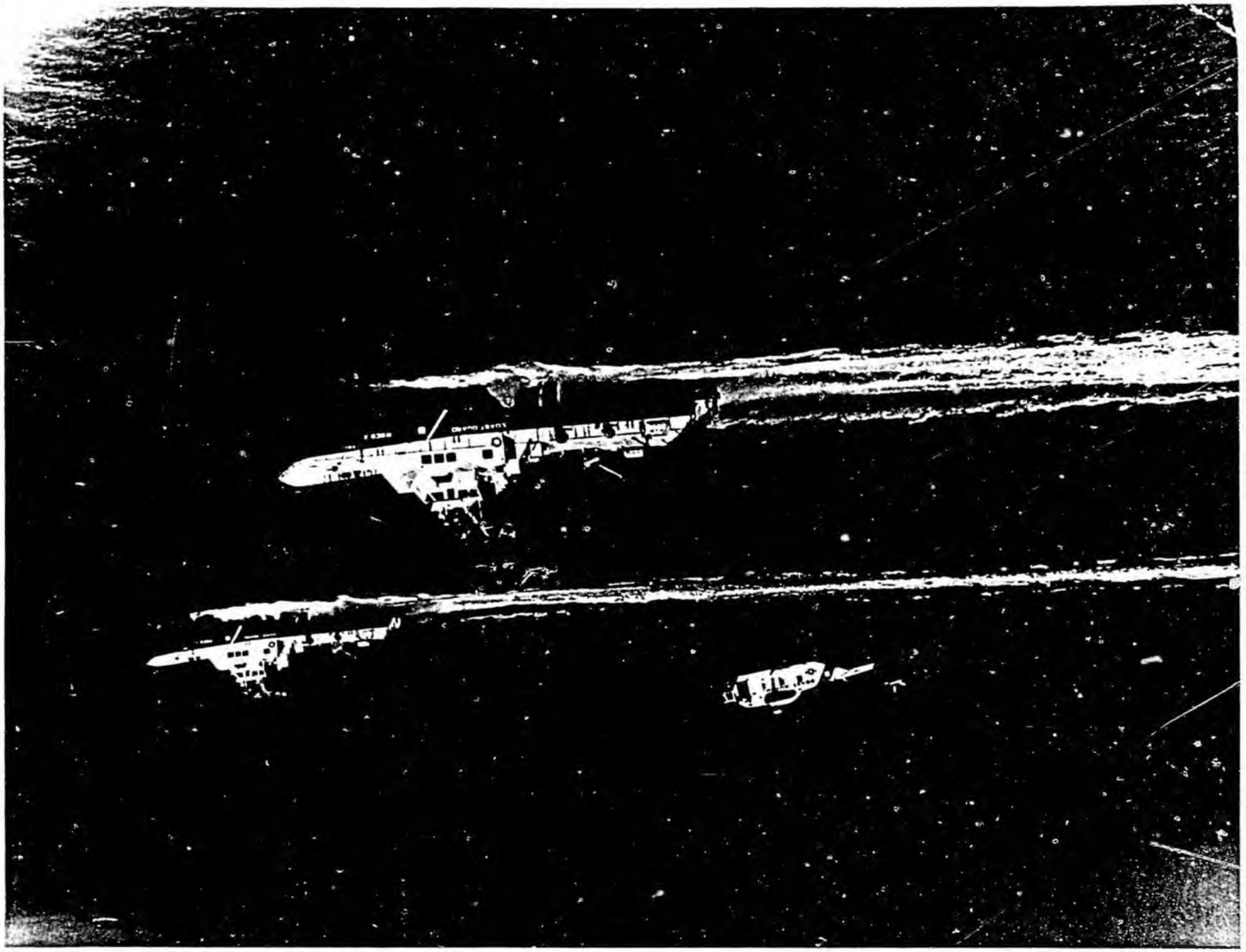
ACCOMMODATIONS

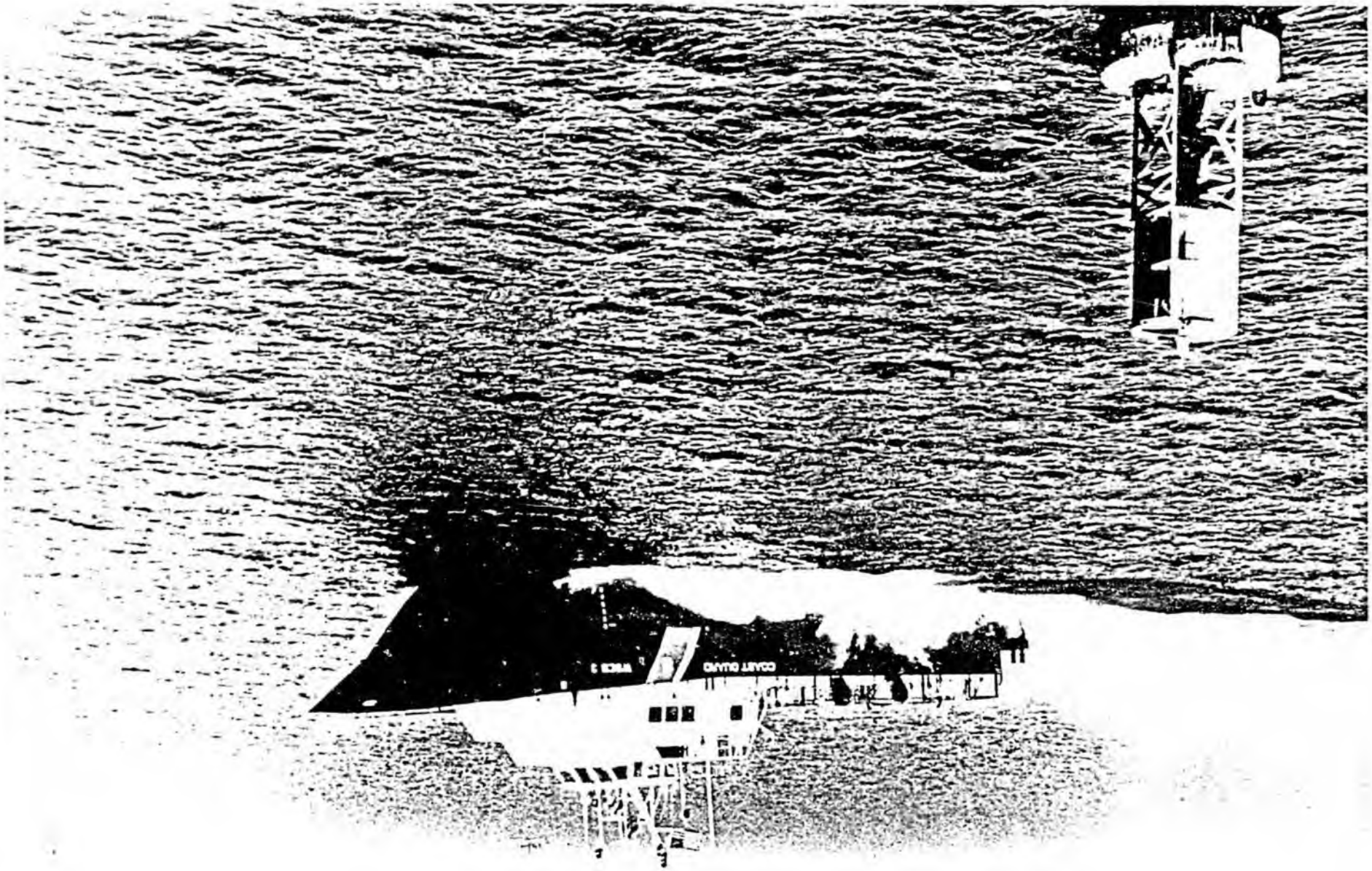
2	Officers
1	CPO
14	Crewmen
1	Spare
18	

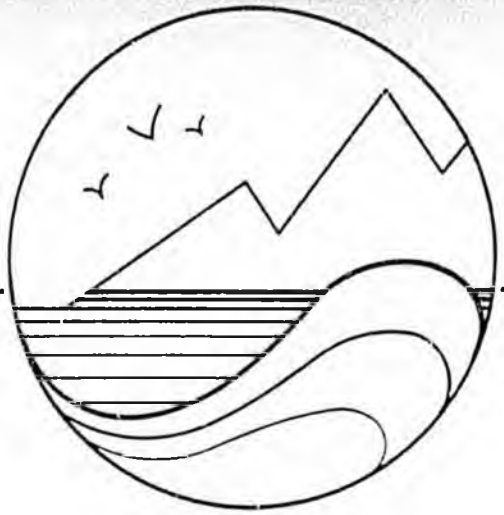
SURFACE EFFECT SHIPS

SEA HAWK	WSES-2
SHEARWATER	WSES-3
PETREL	WSES-4

Home Port: 7th. District
Key West, Florida




COAST GUARD



Southeast Alaska Transportation Plan

Evaluation of Corridor Alternatives

Juneau Access (Lynn/Taku Corridors)

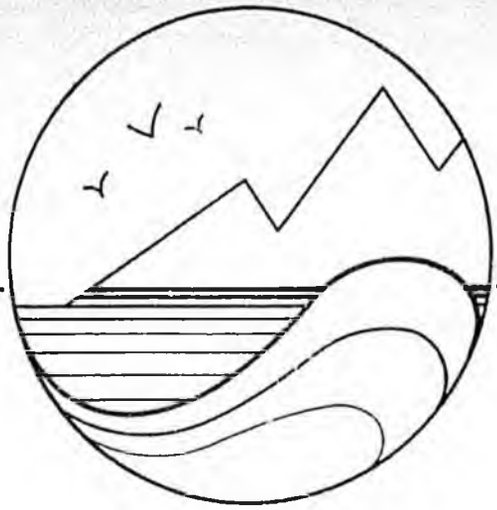
Prepared by

Acres International Corporation

for

Alaska Department of Transportation and Public Facilities

March 1986



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March 1986

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1 - INTRODUCTION

1.1 - General

As part of the update of the Southeast Alaska Transportation Plan, a number of studies were carried out relating to the provision of surface transportation services within subsections or corridors of the overall region. These subregional studies were used as a screening process, to examine a number of transportation options within a particular corridor in isolation from the balance of the system and to identify, at a restricted level of analysis, those options which seemed most promising and hence which warranted further consideration in the context of the total regional transportation system. In all, five corridor studies were carried out dealing with transportation issues and alternatives with regard to Juneau Access (Lynn/Taku Corridors), the Ketchikan-Southern Terminus Corridor, the Stikine Corridor, the Sitka Access Corridor, and the Prince of Wales Island Access Corridor.

This report describes the process and the findings of the corridor study relating to Juneau Access including the Lynn Canal and Taku River Corridors. It outlines the anticipated transportation requirements in the corridors, identifies the options which were considered, and describes the evaluation of the various options in terms of financial implications, user impacts and service/cost effectiveness.

1.2 - Description of Corridor

The Lynn Corridor analysis examined the provision of road and marine transportation services up and down the Lynn Canal, connecting the communities of Juneau, Haines and Skagway (see Figure 1). The corridor serves passenger and vehicle traffic between these three communities and also acts as the

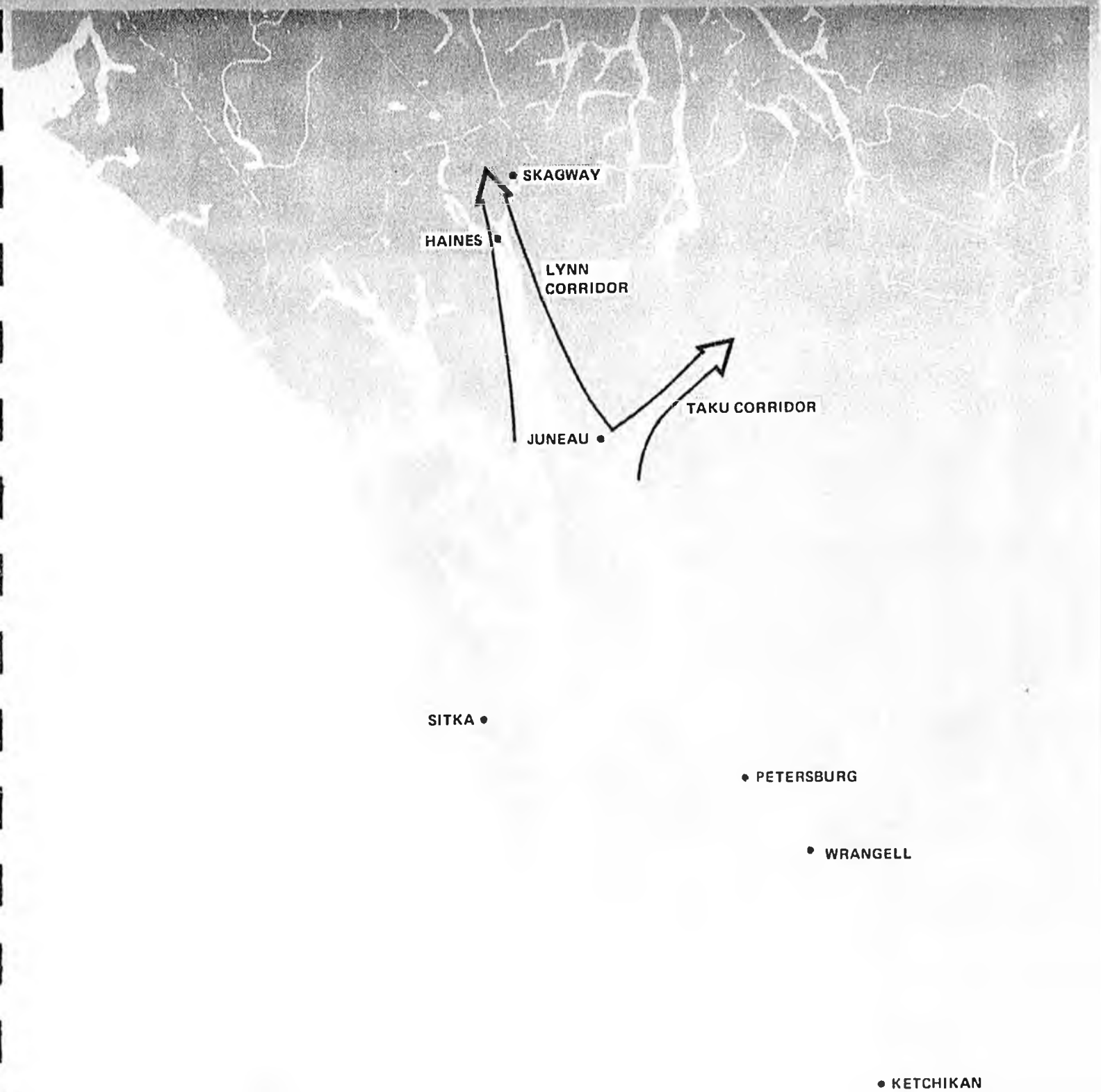

Figure 1

JUNEAU ACCESS CORRIDORS

northern terminus of the Southeast Marine Highway system. As such, it connects Haines, Skagway and points north with other southeast communities and with the Lower 48. The Taku Corridor analysis (see Figure 1) examined the possibility of utilizing the Taku River Valley as a means of connecting Juneau with the continental road system and hence, with other communities having access to the roads.

1.3 - Scope of Analysis

For the corridor analysis, the Lynn Canal was treated as a separate transportation system. The assessment of options considered only the provision of service within the Juneau-Haines-Skagway triangle without regard to connections required north and south of the corridor. Service options, financial implications and user impacts relate only to that portion of a trip which falls within the corridor boundaries. Impacts accruing outside the corridor as a result of different corridor options were included at the next stage of analysis as part of the assessment of regional systems.

Similarly, the Taku Corridor was regarded as a separate transportation system, primarily providing access between Juneau and the road systems of Yukon and Alaska. While the corridor could be used as a means of connecting with the Alcan Highway and hence, with the southbound Stewart-Cassiar Highway out of Watson Lake, this would involve a significant detour for traffic to and from the south and hence, was not considered to be a viable alternative for Marine Highway traffic to and from the Lower 48.

1.4 - Report Format

The balance of this report is divided into three sections. Section 2 discusses the key factors considered in defining corridor options and describes the physical and traffic components of the alternatives which were evaluated. Section 3 presents the findings of the financial analysis and user impact evaluations, and Section 4 provides a summary of conclusions and recommendations. Two Appendixes are also included which describe in detail