TINY TUG MUSCLES A TOWERING TRAILER SHIP OUT OF ITS BERTH AFTER LOADING

Guided by Capt. Carl Anderson, the diminutive tugboat Pacific Wind gently nudges The Great Land, owned by Totem Ocean Trailer Express, out to sea. The 790-foot trailer ship is capable of carrying the equivalent of 390 trailers 40 feet long, plus 126 automobiles. It was built at the Sun Ship Building and Drydock Co. yard in Chester, Pa., and launched in late June of 1975.

Pilot Guides Ships Through The Inlet

When an ocean-going vessel traverses the Cook Inlet, a skipper who knows the local waters is always at the helm.

If its skipper doesn't have Inlet experience, he turns the controls over to a man who does.

This means that shipping companies nearly always hire an Inlet pilot. This ordinarily costs between $1,000 and $1,500 a trip, with tariffs set by a state board.

All but four of the Inlet pilots are members of the Southwest Pilots' Association at Homer, which serves as a dispatching agency. O.K. Collar, the only pilot living in Anchorage, works independently. He handles all piloting chores for Sea-Land Service Co. on its runs up the Inlet and over to Kodiak.

This means he's frequently flying between Anchorage and Kenai, standing by to board Sea-Land vessels via helicopter. In October 1966 he suffered a broken back when a helicopter he was riding out to the ship crashed not far from the Kenai airport.

Another well-known Inlet pilot, Jack Hopkins of Seldovia, was killed a few months ago in a helicopter crash which also occured on a flight to his assigned ship.

Collar was formerly a captain for Sea-Land. He pioneered that company's service to Anchorage, bringing the first ships here in 1964.

The other three independent pilots all live Outside, flying up for trips. Occasionally they may board a ship at Seattle or Tacoma and just ride it up.

Anchorage is a busy port, with its own set of problems, Collar said. "But you can't do anything about the current and the ice and the tidal range, so you live with that."

However, he would like to see that half-mile long shoal in the shipping lanes just outside the harbor dredged down some more. When an incoming vessel hit it back in 1975, it was just 19 feet below sea level at mean low tide.

Since most ocean-going vessels need a minimum of 32 feet, this has always meant that ships have to hold off and wait for flood tide when they arrive and depart.

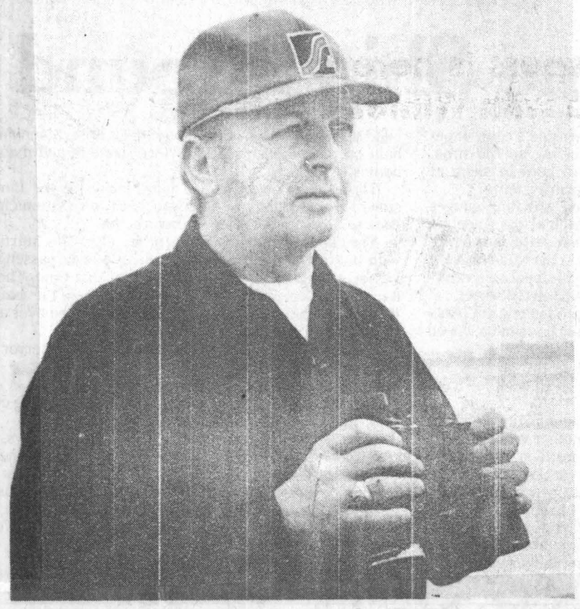
In 1975, the U.S. Army Corps of Engineers ripped off the top of the shoal, taking it down enough to give ships 28 feet of water at low water.

Collar would like to see it taken down a few more feet and sees no reason why it shouldn't be done.

"Right now, it's still causing us delay," he said.

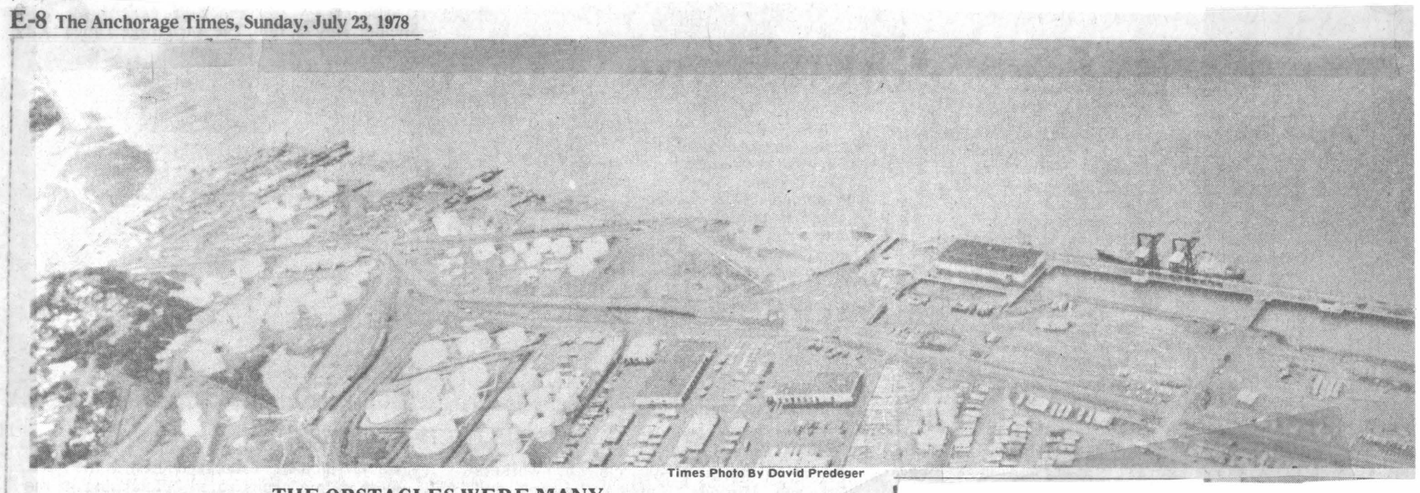
The National Oceanic and Atmospheric Administration announced in 1975 that this shoal was a previously unknown underwater peak that a survey just discovered.

But Collar said that Inlet boat people always had known about the shoal.



SCANS THE INLET

Veteran Inlet pilot Keith Collar, also known by his initials, "O.K.." stands on the bridge of the Sea-Land vessel Philadelphia preparing to bring it in to dock. Ocean going vessels whose captains are unacquainted with local waters are required to hire pilots when docking at local ports. Collar is the captain who brought Sea-Land's first vessels up through the Inlet in 1964, the first time a major carrier had attempted wintertime operations into Anchorage. Now an independent pilot, he has a contract to take all of the Sea-Land vessels through the Inlet waters between here and Kenai, as well as on their runs between here and Kodiak. An Anchorage resident, he boards the vessels at Kenai via helicopter from the Kenai airport. Most Inlet pilots live in Homer and are dispatched by a pilots' association there. It usually costs a shipping company between $1,000 and $1,500 a trip to hire a pilot for the Inlet.



Times Photo By David Predeger

THE OBSTACLES WERE MANY

In 1976, the American Consulting Engineers' Council picked the Port of Anchorage as the nation's top engineering project of the year. The award was well earned. There were big problems in designing a port for Anchorage — problems like heavy ice, strong winds, insecure foundation materials, extreme and rapid tidal changes and swift currents. It's also in an earthquake zone.

Underneath The Orphan Look There's A Prize-Winning Port

The Anchorage waterfront, gray and silty with that everlasting Cook Inlet mud, looks somewhat like an orphan.

All the same, it includes a prize-winning dock.

In 1976, the Port of Anchorage was picked as the nation's top engineering project of the year.

The selection was made by the national American Consulting Engineers' Council from a total of 82 national entries.

This was not just an empty or routine award.

There were big problems in designing a port for Anchorage.

Problems like heavy ice, strong winds, insecure foundation materials, extreme and rapid tidal changes and swift currents. It's also in an earthquake zone.

When the professional engineers saw what had been accomplished in the face of all this, they were impressed.

The council gave its Grand Conceptor Award to Tippetts-Abbett-McCarthy-Stratton, the municipality's consulting engineer on the job.

Port director Bill McKinney, who was born here and has been in waterfront transportation here for many years, said the design credit basically should go to the late George Treadwell, engineer for TAMS.

Earlier, in 1952 when he was consulting engineer with the Seattle Port Authority, Anchorage city fathers had contracted with Treadwell for a port study. He had reported that the engineering was feasible and that it would probably pay for itself.

In 1955, TAMS started engineering plans for the dock, and the first ship docked in April 1961.

Except for one disastrous experience in the early '60s when a newly built section fell apart, the port has worked very well.

However, Treadwell and his firm had nothing to do with that failure, McKinney said.

The city at one point had changed engineering firms, and the new outfit had departed from Treadwell's design when they added on.

The new addition couldn't stand the winter ice and it simply fell apart.

After much confusion and some law suits, the city returned to Treadwell and TAMS and stayed with them.

This firm, represented locally for some years by Bill Bunselmeier, has been designing improvements and additions to the Anchorage port since 1955.

Anchorage's waterfronts problems are on an Alaska scale. The tidal range is 42 feet, with changes up to 12 feet an hour. The wintertime ice builds up to around 20 feet underneath structures, causing tremendous downward loads at low tide and upward forces at high tide. And tidal five-knot currents often carry four-feet thick ice floes.

Winds have been known to hit a maximum force of 70 mph on ships and 100 mph on structures, blowing in either direction, the citation said.

It notes that foundation materials are poor, consisting of low strength clay overlain by 20 feet of dense silt and gravel requiring bearing poles with three-foot shoes to provide support.

In the face of all this, the dock had to be built to withstand docking forces from vessels of the 35,000-ton class. It had to carry at least 650 pounds per square inch from trucks and railroad loads, as well as crane loads of 71,000 pounds per wheel in six-wheel groups.

Retired Ships Are Used As Docks

Three companies bring cement to bulk plants in the waterfront area.

Ideal Cement Company, with Paul Minor in charge, has its product delivered in barges calling at the Port of Anchorage. The cement is sucked off the ships and into pipelines that run to a nearby plant.

Kaiser Cement Company brings up its own barges, ties them up at its own dock, a retired military ship known as "the 205," now past its prime and tied up at the waterfront. Earlier the company had used it as a cement barge. Cement is blown from the barge to nearby storage towers. Al Kravits is manager for Alaska, with Gene Coder as office manager.

Pacific Western Lines does the same thing. Its barges tie up at the Limestone, a surplus military supply ship that now serves as both dock and bulk storage plant. D.C. (Bud) Firestone is in charge.