

Atka Mackerel Test Fishery

F/V Taurus & F/V Half Moon Bay

August 2nd – August 24th

Castle Cape Fisheries & Icicle Seafoods

F/V Taurus

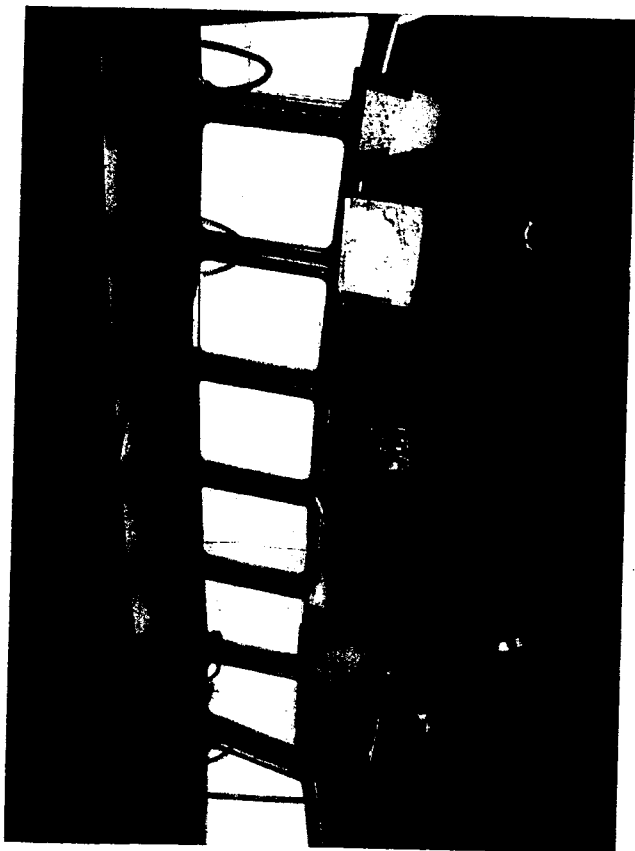
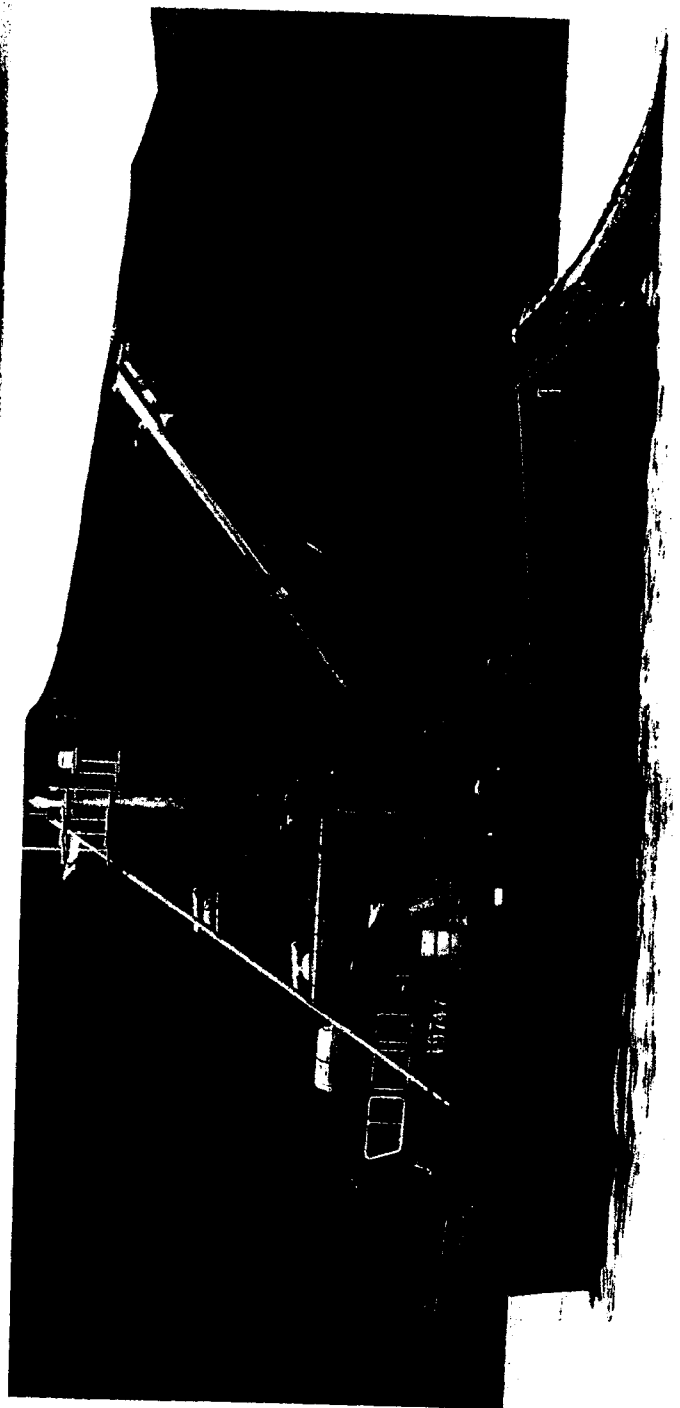
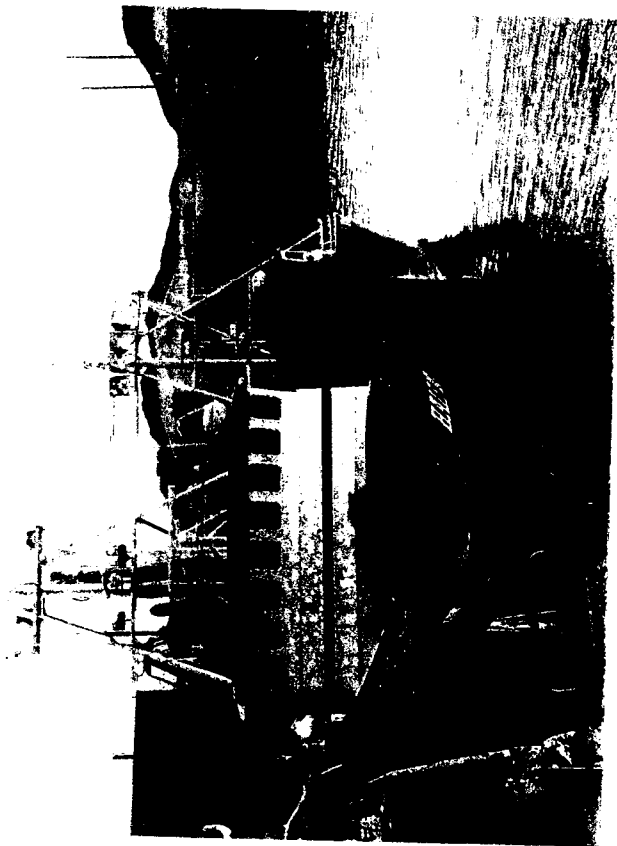
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Atka Mackerel Test Fishery Summary

- ❑ The Atka Mackerel are extremely fast fish that swim in small to medium sized schools (3 – 50 ton) that have highest populations between 25 through 13 fathoms of water.
- ❑ The mackerel live in areas where lots of current is present and generally harsh, rocky bottoms.
- ❑ The F/V Taurus observed the most mackerel near the ocean's surface during a full moon.
- ❑ The F/V Taurus made more than 20 sets during a three week period in August and traveled to/from Dutch Harbor and Atka Island two times, and Adak once. Mackerel were spotted numerously between Atka and Adak Islands.



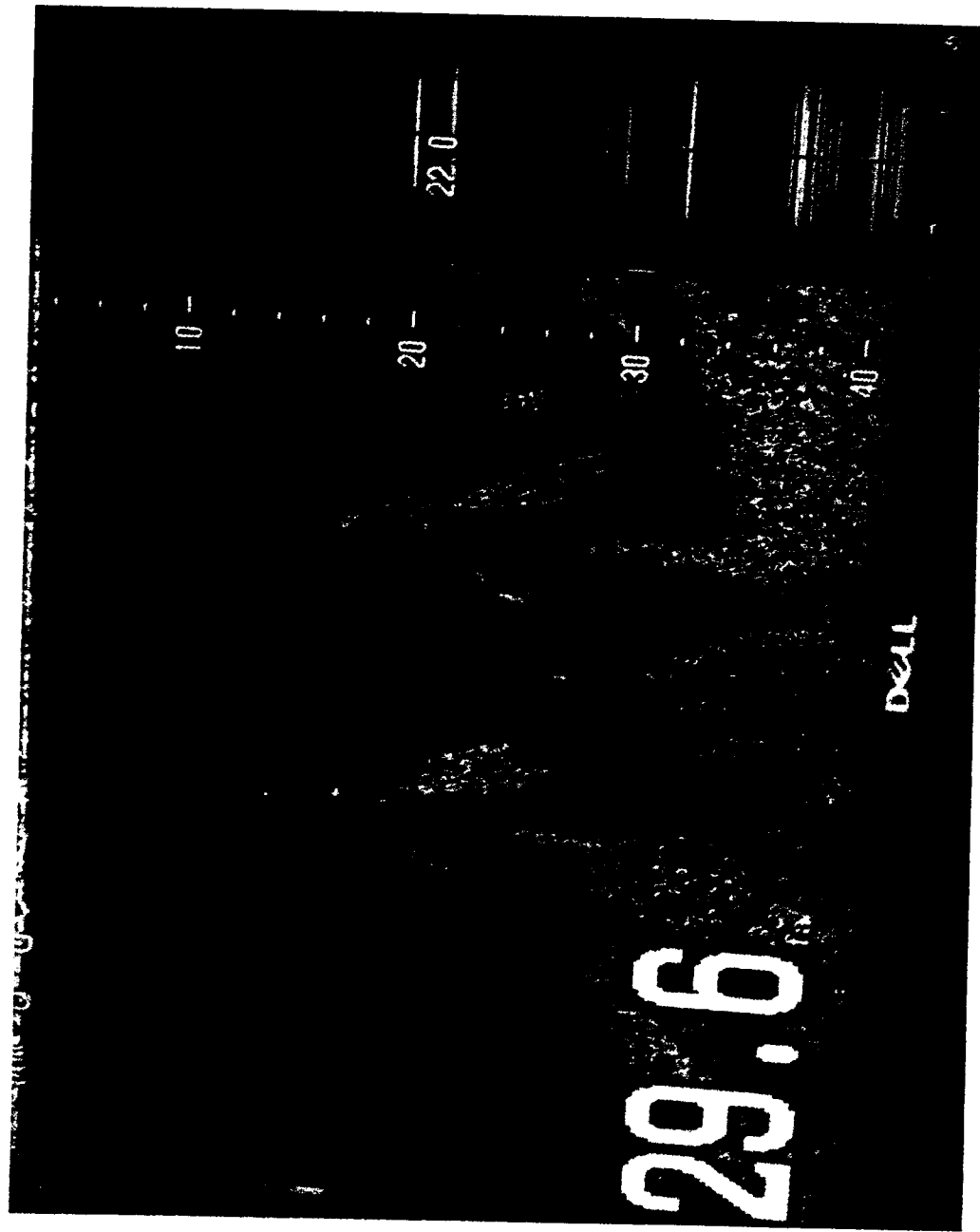
Atka Mackerel behavior

- ▣ In each location between Amilia/Atka Islands and Adak the crew of the F/V Taurus jigged mackerel to test size and for sign of spawn.
- ▣ The largest mackerel were on Amilia/Atka Islands, averaging 2 to 2 ½ pounds. Mackerel near Adak Island averaged 1 ½ pounds.
- ▣ The mackerel on Amilia/Atka Islands showed more sign of spawn and the roe in some of the females looked riper; however, the fish were not close to being ready to spawn at the time.
- ▣ The largest and best sign of mackerel near the surface was closest to the full moon in early August. Also, mackerel seem to come to the surface when the weather is calm and sunny.

Atka Mackerel behavior cont.

- ❑ Atka Mackerel live near rocky bottoms and next to pinnacles, making them difficult to catch with a traditional seine.
- ❑ The mackerel were plentiful in passes with strong currents especially Amliia Pass. However, a traditional seining operation like for salmon or herring would not be able to set in currents of 3-4 knots and difficult bottom.
- ❑ When closing a set, the mackerel would almost immediately try to sound, driving them out of the net entirely. They are built for speed. Also, the mackerel were easily frightened by boat noise.

Typical bottom with sign of mackerel
next to pinnacles



Birds and whales often near schools of mackerel

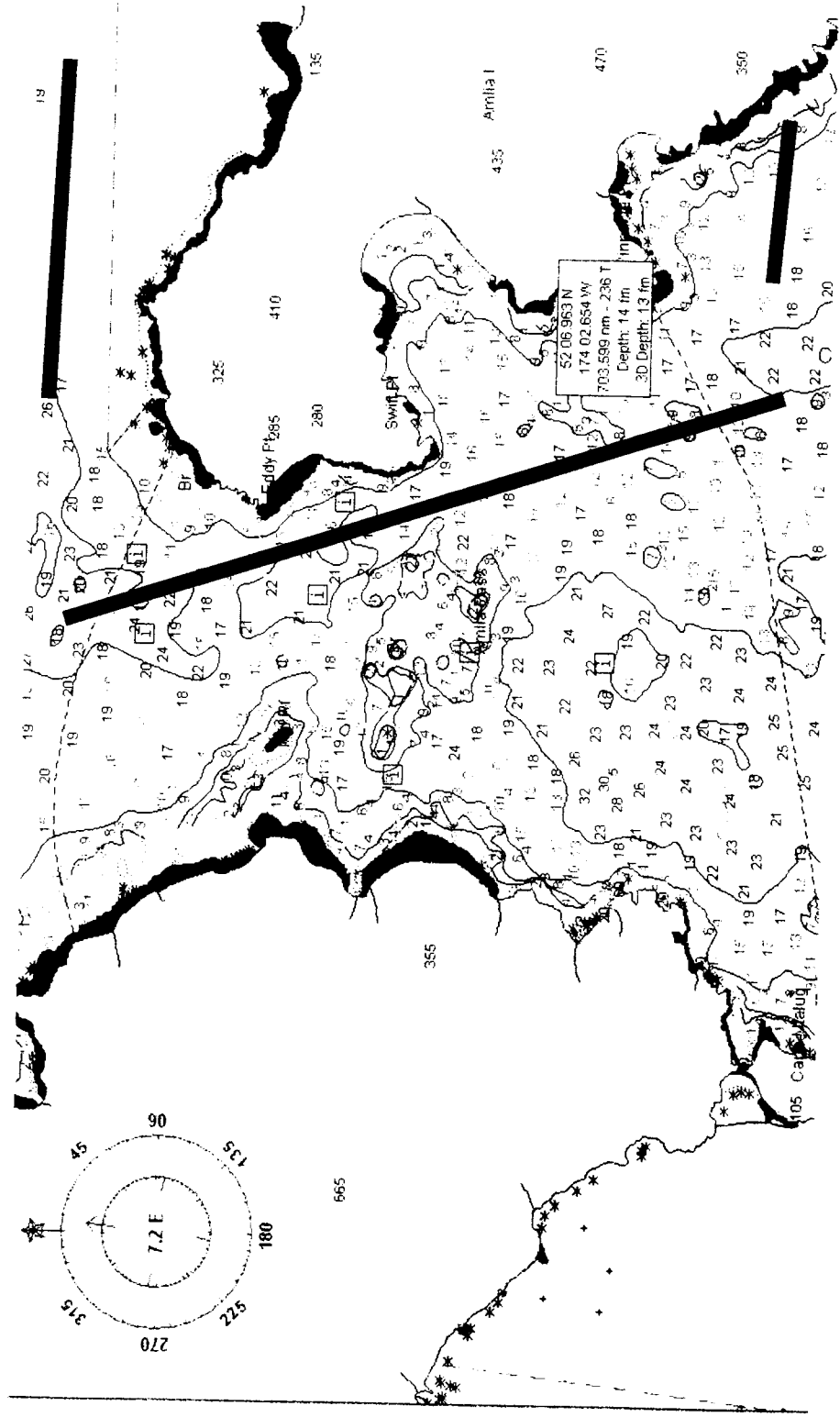


Area and observations

- ☐ The area between Amlia and Atka Islands, including Amlia Pass, Nazan Bay and each side of the pass had the best sign of fish that also offered protection from most wind directions.
- ☐ The ocean bottom at the NE corner of Atka and NW corner of Amlia was very fishable with very good sign of mackerel above 20 fathoms.
- ☐ The ocean bottom at the SW corner of Amlia was more difficult to fish, but still possible with the right net. Sharp pinnacles make this area challenging.
- ☐ Small but numerous schools (3 – 20 tons) were spotted in Atka Pass, but no sets were made due to very strong currents. It seemed possible with the right gear to make a tow between the surface and 20 fathoms and scoop numerous schools up.

Amlia Pass (limited soundings available)

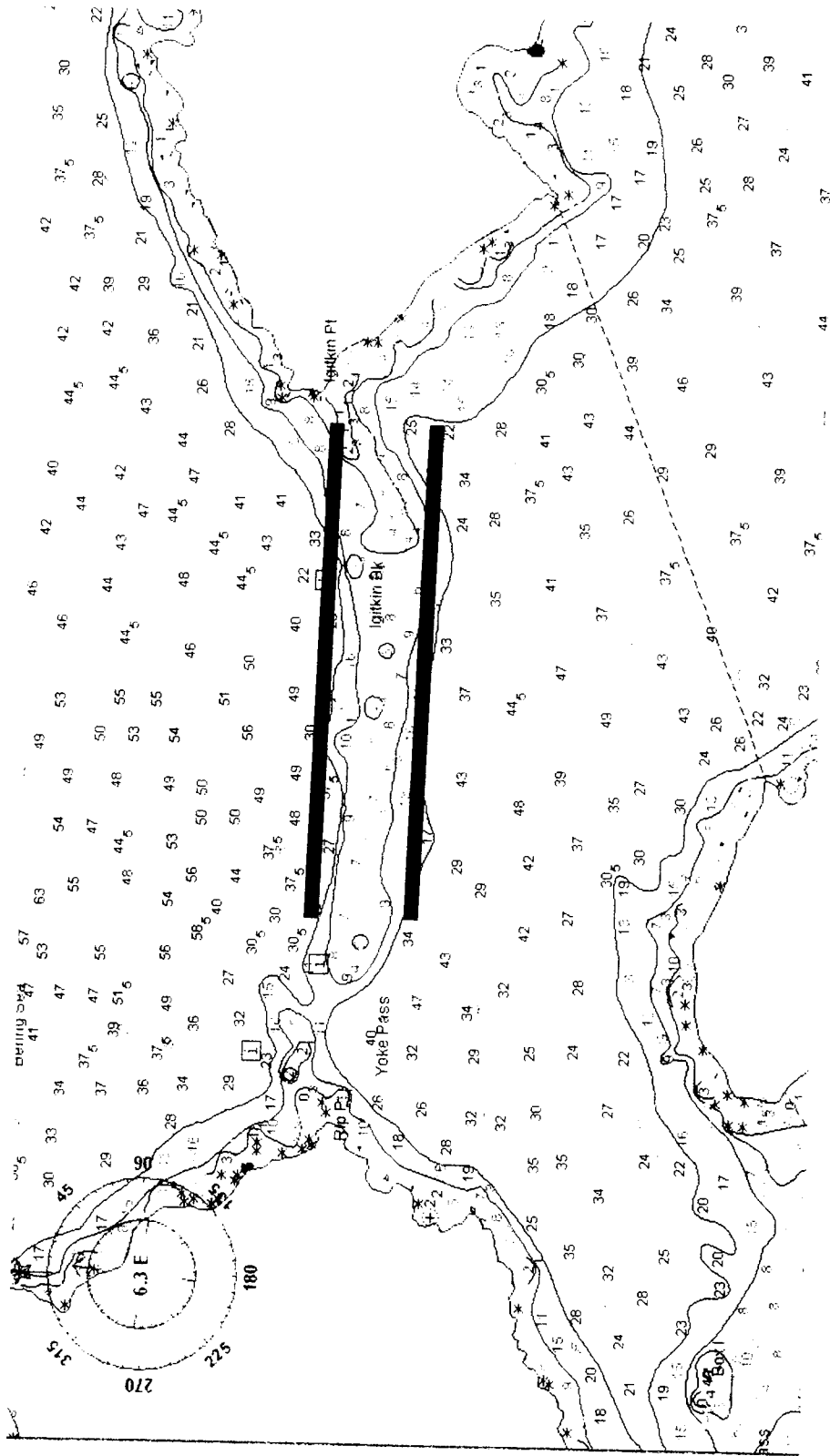
Example of strong mackerel populations



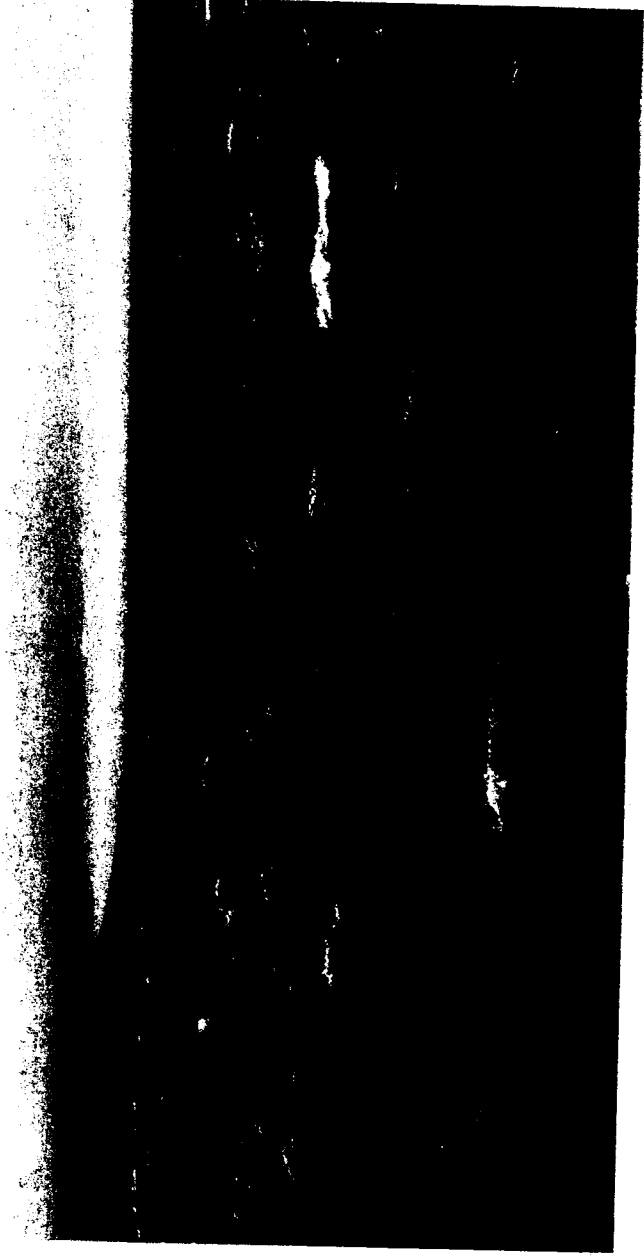
Area and observations cont.

- ☐ Schools of mackerel spotted at Seguam Island near Lava Cove and Lava Point.
- ☐ Bechevin Bay on Amlia Island had good sign of fish on August 9th, however these fish were around 18 fathoms.
- ☐ The islands and passes around Adak had good sign of catchable mackerel above 18 fathoms including: Umak Island (Umak Bight), Igitkin Bank, Takalak Pass, Southern end of Takalaska Island & Adak Pass.

Igitkin Bank



Strong tidal currents in Amlia Pass



Gear recommendations

- ▣ Typical salmon and herring seines are insufficient to successfully catch Atka mackerel.
- ▣ Due to the mackerel's size, a mesh size between herring and salmon is optimal.
- ▣ Many schools are in very tidal areas, therefore a specially designed seine that can be towed in the passes and "cut" the water would be best.
- ▣ Since the mackerel can also live near pinnacles, a seine whose depth can be adjusted to catch the mackerel right next to the top of the pinnacle without touching it seems necessary.

Gear recommendations cont

- ❑ A very powerful skiff would be needed to offer extra towing capabilities of the specially designed seine in the passes and areas with strong currents.
- ❑ Since the mackerel sound, a seine with a bottom layer that can easily “scoop” the mackerel when the headline is not next to the bottom would help catch the fish. The bottom of the seine should be made of the strongest material available so it won't rip if caught on a pinnacle.
- ❑ The scooping bottom layer will also trap the mackerel during a tow haul, helping better trap the mackerel within the seine.
- ❑ The seine itself needs to be made of the lightest and strongest material so that it can be towed through the water at a speed between 2 – 4 knots, or hold steady against strong currents in passes.