

M E M O R A N D U M

TO: Council, SSC and AP Members

FROM: Jim H. Branson *Clam*  
Executive Director

DATE: May 15, 1985

SUBJECT: Bering Sea FMP: Salmon Bycatch

ACTION REQUIRED

Emergency rule to minimize joint venture salmon interception.

BACKGROUND

The Council has expressed concern over the rapidly increasing catch of chum salmon by joint ventures in the Bering Sea. This bycatch has occurred almost entirely just north of Unimak Pass during July and August. The Council included this issue in BSAI Amendment 9, but any regulations will not be implemented until after the 1985 summer fishery. If the Council wishes to have an interim regulation to control the chum salmon bycatch in 1985, an emergency rule must be approved at this meeting. The background material can be reviewed under item D-3(a) which includes the RIR and EA. The options discussed in the amendment package include:

- (1) a time/area closure
- (2) a time/area closure triggered by a PSC limit
- (3) PSC limits for individual joint venture companies
- (4) bycatch fees (currently, MFCMA prohibits bycatch fees)
- (5) status quo (no action)

During the public comment period a suggestion was made to set up an industry workgroup which would recommend voluntary interim bycatch rate limits.



# Alaska Contact Ltd.

May 20, 1985

Council members and industry representatives,

At the 1985 March council meeting, ACL was asked to develop a procedure which would minimize the bycatch of salmon in the GOA fall pelagic pollock joint venture fishery. This document is in response to that request.

The figures and numbers in the attached paper are made available to stimulate discussion and hopefully encourage implementation by other ventures of the proposed program to ensure minimal salmon bycatch in pelagic fisheries. Any feedback or response will be greatly appreciated.

We request at this time to be included in any industry group which might form to address this question.

Alaska Contact, Ltd.

bycatch

BYCATCH IN THE GULF OF ALASKA POLLOCK FISHERY  
FOCUSING ON SALMON BYCATCH IN FALL POLLOCK JOINT VENTURES

prepared for Alaska Contact, Ltd

by S. M. Kaimmer

INTRODUCTION:

In 1984 a total of 71,000 salmon (193.7 mt) were caught as a bycatch incidental to the directed harvest of 343,200 mt of groundfish in the GOA by both foreign directed and U.S.-foreign joint venture trawling activity. Foreign directed fishing effort took 36 percent of the total groundfish harvest while taking 12,100 of the incidental salmon. The foreign incidental salmon bycatch rate was 0.01 salmon per metric ton of groundfish. U.S. fishermen delivering to joint venture processors took 64 percent of the groundfish and 58,900 of the incidental salmon. The incidental salmon bycatch rate overall for joint ventures in 1984 was 0.3 salmon per metric ton of j/v groundfish harvest.

The ACL-RYBEX Polish joint venture harvested just over 4 percent of the groundfish total and had an incidental salmon bycatch of 22,920 animals. These were primarily King salmon 3 to 5 years old. The overall incidental salmon rate for this venture was 1.5 salmon/mt, six times the overall average for joint ventures in the GOA.

The purpose of this report is threefold:

1. to review the occurrence of the 1984 incidental catch of salmon in light of foreign fishing, joint venture fishing, area and seasonal trends,
2. to discuss specifically the options available to late summer and fall pollock joint ventures in the Gulf of Alaska, and
3. to propose industry standards for the self regulation and avoidance of incidental salmon bycatch.

1. INCIDENTAL CATCHES OF SALMON DURING 1984 IN THE GULF OF ALASKA, SPECIFICALLY FOCUSING ON CATCHES DURING THE FALL JOINT VENTURES TARGETTING ON POLLOCK.

There are currently two pollock joint venture periods in the Gulf of Alaska. From February through March pre-spawning pollock stocks are harvested in Shelikof Straits, primarily for the roe pollock. The spawning populations reschool months later to be targeted on by fleets interested in whole fish or more usually fillet production. The fillet fleets operate in the Central and Western Gulf from Kodiak Island to the east, to Unimak Pass to the west. This joint venture activity is relatively new, 1984 being the first year that pelagic gear has been used during the late fall season in this area.

The harvest trend seasonally for all groundfish is shown in figure 1. Of the 219,500 mt of groundfish harvested in joint venture fisheries, 79 percent or 173,900 mt was taken during February and March. 18,200 salmon were taken incidental to this catch. Figure 2 shows joint venture salmon catches by month.

By the nature of the fishery and current market conditions, the large majority of the pollock harvest occurs early in the year. The pre-spawning populations are tightly schooled and bycatch is minimal. There is a much higher salmon bycatch associated with efforts later in the year. Rather than close this fishery completely and thus inhibit U.S. development, ACL suggests that appropriate industry standards regulating bycatch rate would reduce this incidental take to acceptable levels. Information for foreign directed fishing and all joint venture activity for 1984 is summarized in Table 1.

Table 1. Groundfish and salmon bycatch in the GOA in 1984 due to foreign direct fishing (TALFF) and all joint venture activity (JVP).

	TALFF	JVP
Groundfish (mt)	123,700	219,500
Salmon (number)	12,100	58,900
Salmon number/mt	0.10	0.27

In 1984, the Alaska Contact-Rybex operation lasted from early August to the end of the year. Operations in the Kodiak area began the first week in September. Total pollock catch, salmon bycatch and percent salmon bycatch are shown in figures 3, 4 and 5. During September and October there were as many as seven processors taking deliveries from ACL catchers. Figures 4 and 5 show the dramatic increase in salmon bycatch in the third week of October. The measures taken during 1984 to avoid or reduce the bycatch have already been presented to the NPFMC. They included tow by tow monitoring of by-catch; coordination and constant dialogue with NMFS, and exploration for alternate fishing areas that would not have the same problem.

One interesting point lies in comparing NMFS data with ACL's records. Using NMFS figures for all GOA Polish joint venture operations, the NMFS numbers indicate a total harvest of 18,094 mt of pollock with an incidental bycatch of 48,481 animals. ACL took 83 percent of the Polish allocation and 47 percent of the salmon bycatch. Alaska Contact kept detailed information on bycatch on a tow by tow basis and exchanged and cross-referenced data frequently with the NMFS observers. Assuming that the NMFS extrapolations from their subsampling data are correct, then it would appear that ACL's avoidance techniques had some effect.

Also from NMFS data, it appears that another nation joint venture working in the Shumagin area harvested almost 7000 mt of pollock during October with an incidental catch of only 0.5 mt salmon. This appears to have been a trade off because this effort did catch 107 mt of Pacific Cod, 108 mt of Sablefish and 134 mt of Pacific Ocean Perch. One could surmise that the results vary using bottom rather than pelagic gear.

## 2. OPTIONS AVAILABLE TO THE FALL POLLOCK JOINT VENTURES IN THE GOA

It is evident that salmon bycatch is a serious problem to fall ventures targeted on pollock with pelagic gear in the Kodiak area. ACL does not have experience fishing other areas at this time of the year with pelagic gear. Short of cancelling the fall venture entirely, some sort limit or self-imposed 'flag' must be put on j/v activities to create an ending point for operations in an area so that bycatch rates do not reach unacceptable levels. This is a relatively new fishery and it will take time to develop and refine the techniques and gear necessary to avoid unwanted species and yet not unreasonable inhibit development. Developing an acceptable solution to this problem will serve us doubly well as it will encourage year round operations. Industry imposed regulations and procedures will be far more effective than ones imposed by an outside entity.

3. PROPOSED STANDARDS FOR SALMON BYCATCH IN THE GOA DURING JOINT VENTURE ACTIVITIES.

We would like to propose that joint venture fleets police themselves in the following manner.

If, over any two week period, a salmon bycatch rate exceeding 2 animals per mt of target species is realized, a termination of activities and a substantive change in grounds shall be mandated. Given such circumstances, any return to the area producing excessive bycatch rates may not occur for at least two weeks.

On a tow by tow basis, a bycatch rate of 3 salmon/mt of target species require a modification of gear or local change of ground or strategy for the individual catcher.

Any catcher that continues with such bycatch rates when other vessels in the venture are successfully avoiding such quantities of unwanted species is subject to dismissal from the venture. nge of grounds shall



THE ACL-RYBEX 1984 JOINT VENTURE: THE EFFECT OF THE PROPOSED BYCATCH STRATEGY ON BYCATCH AND JOINT VENTURE PRODUCTION BASED ON THE 1984 SCHEDULE.

Had we followed the scheme proposed in section 3 during 1984, our joint venture operation would have terminated on or before the week ending October 21. The joint venture production of pollock would have been decreased by almost 5000 mt with an associated decrease in ex-vessel value to the joint venture in excess of \$450,000. The salmon bycatch associated with the total joint venture would have decreased from 22,920 to 8,813 for a total reduction of 14,107 salmon (approximate ex-vessel value of \$100,000). The incidental catch rate overall for the venture would have decreased from 1.5 to 0.6 salmon per mt.

EFFECT OF THE PROPOSED SCHEME ON 1985 ACL-RYBEX JOINT VENTURE ACTIVITIES

We anticipate completing our joint venture before salmon bycatch becomes a problem. It may be that we will not achieve this goal. In that case, our fall operation will continue until we are closed by bycatch rates. We learned some lessons last year and may be able to operate later during 1985 with rates less than those seen during 1984. We anticipate completing the 1985 venture with a salmon bycatch on the order of less than 5000. The overall venture rate would be in the range of 0.1 salmon per mt.

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- Figure 5. GOA incidental salmon bycatch in 1984 in numbers of salmon per metric ton of pollock by weekending date from ACL-RYBEX joint venture: ACL data

## NMFS References

Nelson, Russ. January 24, 1985. "Report of observer activities through December, 1984." Report to Rich Marasco. NOAA/NWAFRC. 16 pp.

NOAA/NWAFRC. February, 1985. Requested run of observer summary statistics for Polish, Korean and Taiwanese ventures in the Gulf and Bering Sea for 1984. 12 pp.

# GOA GROUNDFISH CATCH

1984 (NMFS DATA)

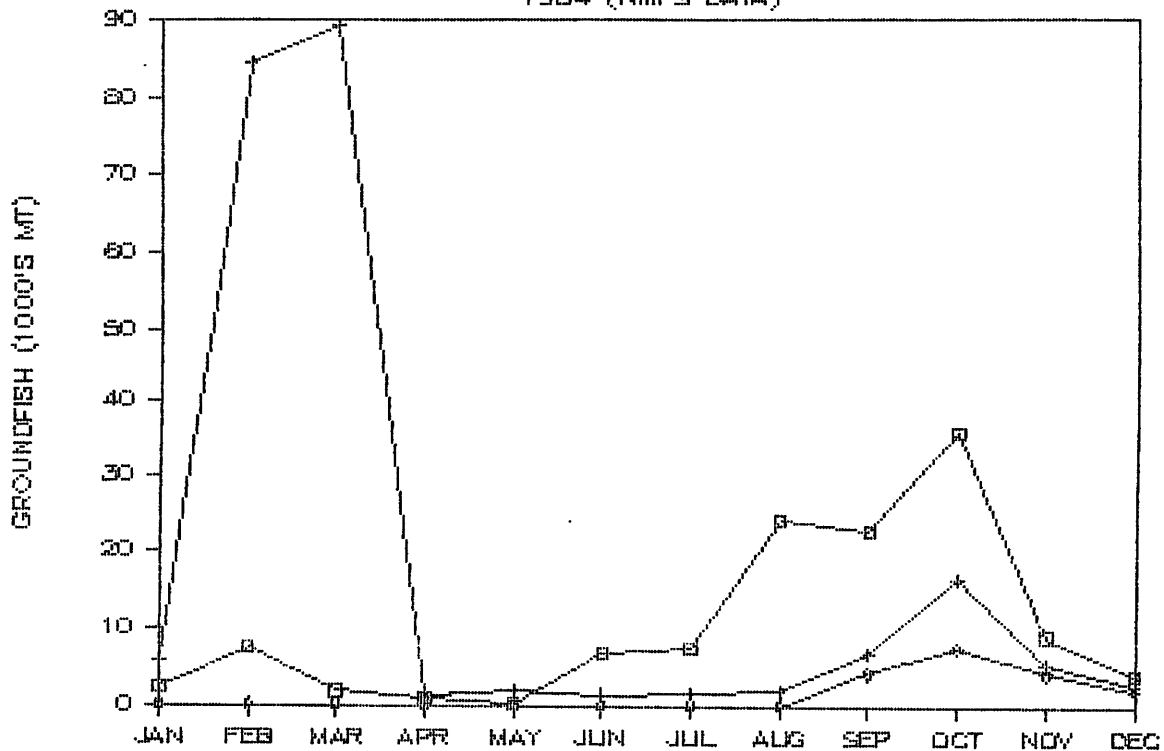


Figure 1. GOA groundfish catch in 1984 from direct foreign fishing (□), total joint venture activity (+), and all Polish joint venture activity (#) :NMFS data

# 1984 GOA

J/V SALMON NUMBERS

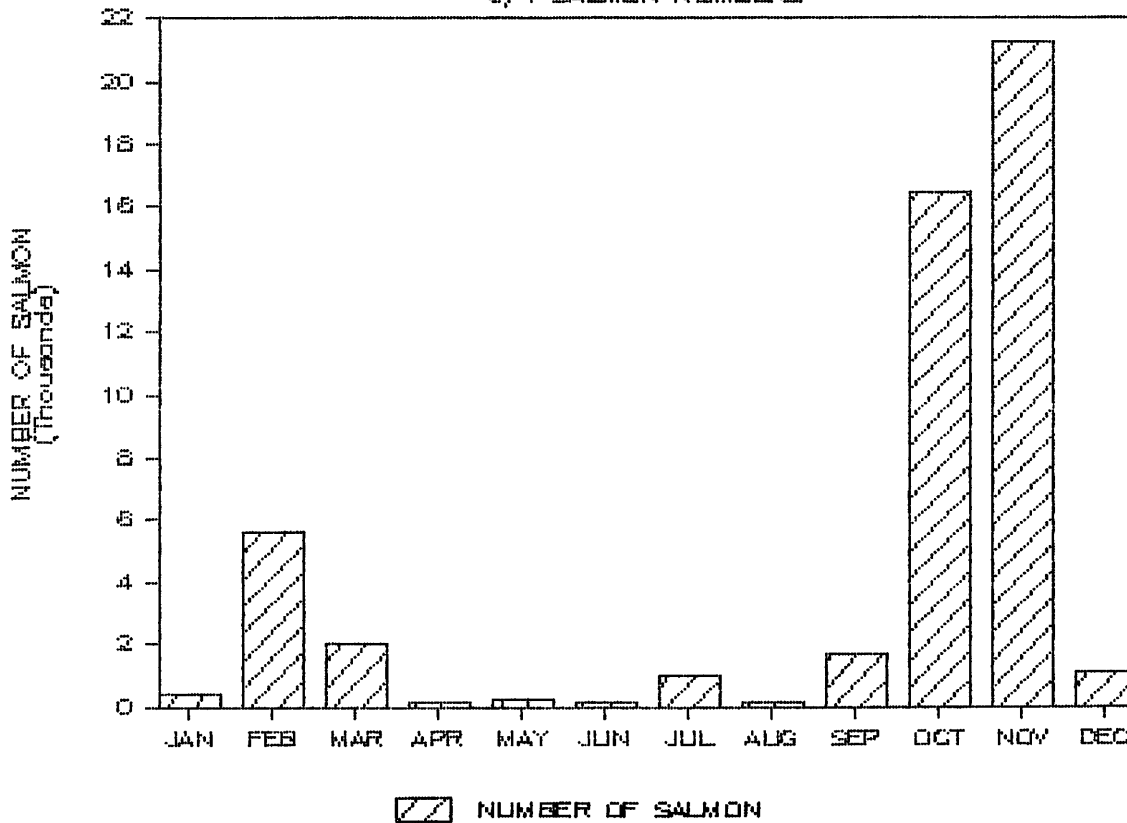


Figure 2. GOA joint venture incidental salmon catch during 1984 in numbers of salmon: NMFS data

# ACL-RYBEX POLISH J/V

1984 GOA (ACL data)

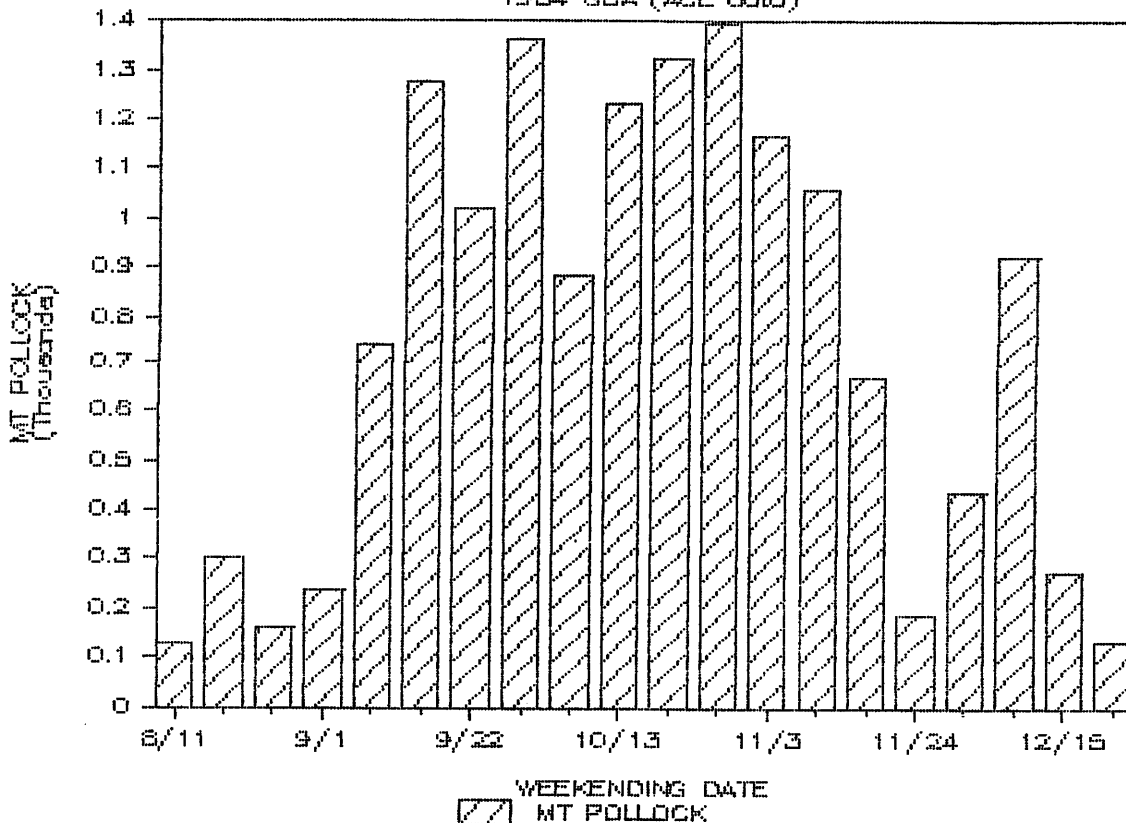


Figure 3. GOA pollock catch in 1984 in thousands of metric tons by weekending date from ACL-RYBEX joint venture: ACL data

# ACL-RYBEX POLISH J/V

1984 GOA (ACL data)

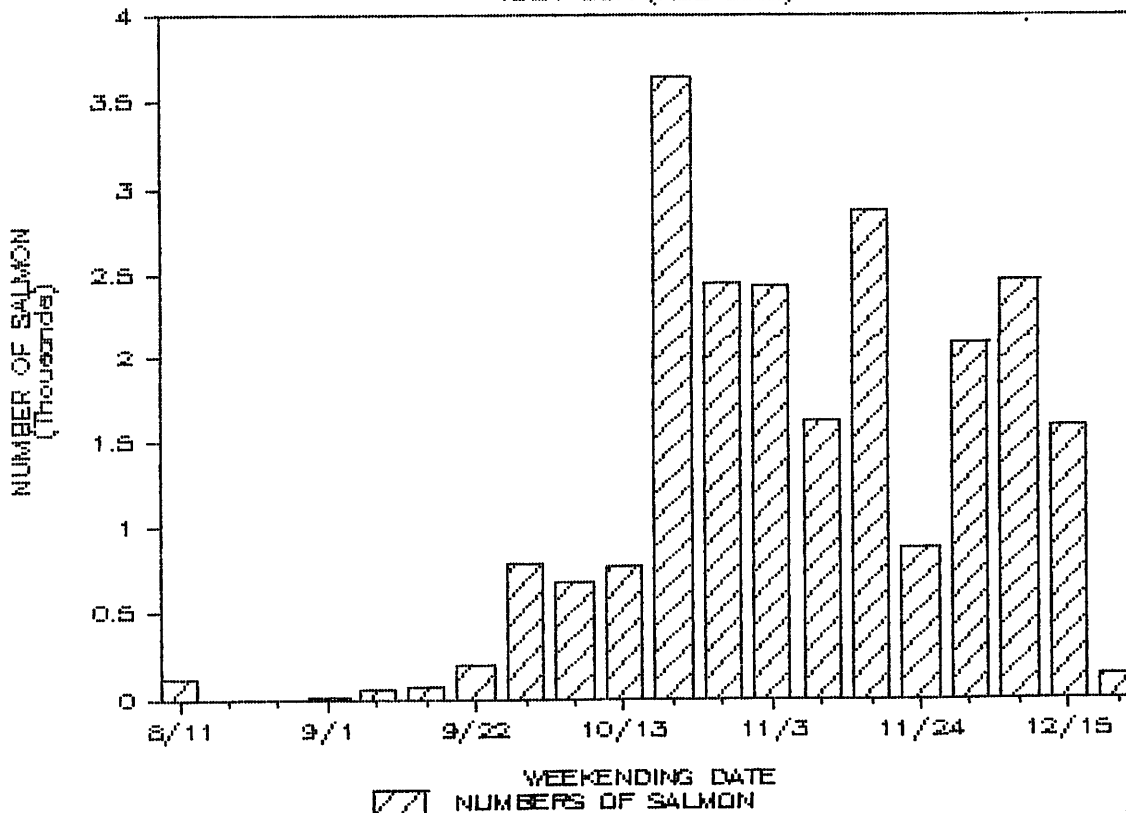


Figure 4. GOA incidental salmon bycatch in 1984 in numbers of salmon by weekending date from ACL-RYBEX joint venture: ACL data

# ACL-RYBEX POLISH J/V

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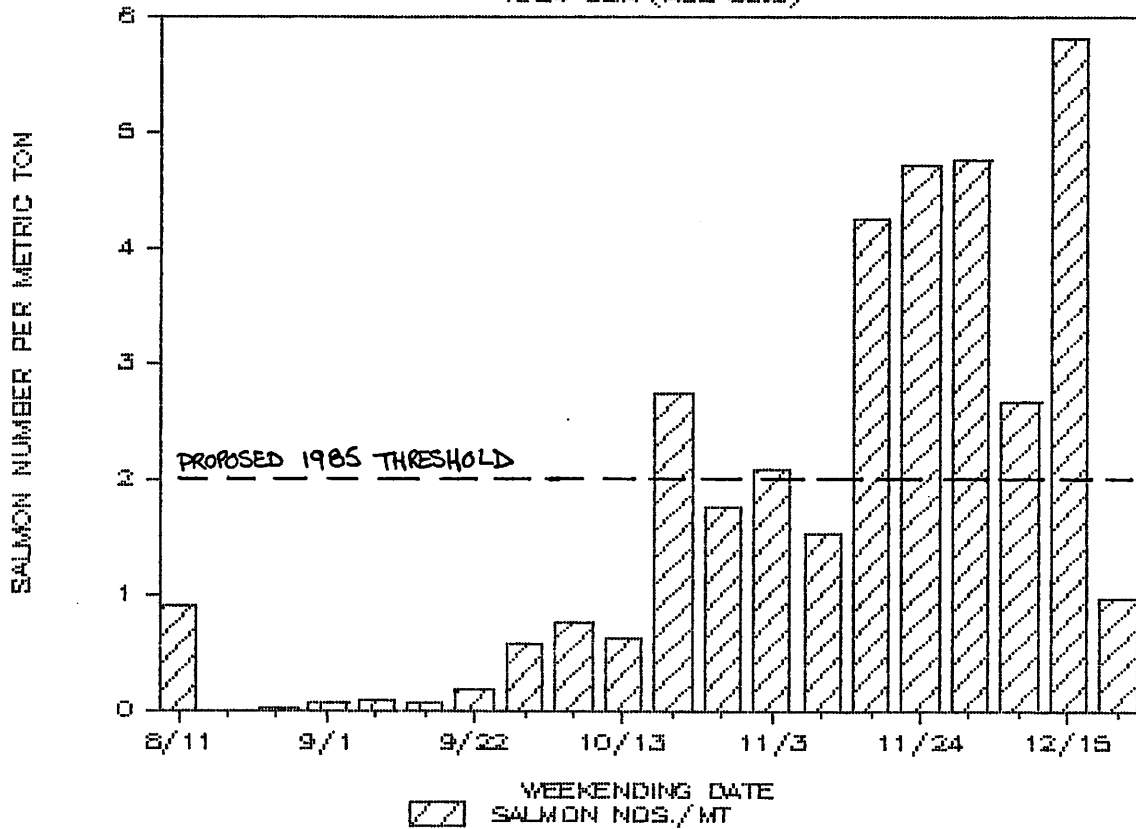


Figure 5. GOA incidental salmon bycatch in 1984 in numbers of salmon per metric ton of pollock by weekending date from ACL-RYBEX joint venture: ACL data