



5350
18 Sep 96

NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL

U. S. COAST GUARD ENFORCEMENT REPORT
6/1/96 - 8/31/96

1. ENFORCEMENT/SAFETY SUMMARY

A. INTERNATIONAL FISHERIES.

1. US/RUSSIAN CONVENTION LINE.

A. 1996 SUMMARY. Foreign fishing activity in the Russian EEZ along the Convention Line resumed much earlier than normal this year. In previous years fishing activity, primarily from Russians, Polish, and Japanese trawlers, did not resume until July; this year it started in mid May, with the seizure of the FF/V Admiral Arciszewski on 15 June. Case highlights of the F/V Admiral Arciszewski are as follows:

On 15 June the USCSC Mellon detected a slow moving contact approximately 1,000 yards inside the US EEZ and diverted to identify the vessel. The vessel was visually identified as the FF/V Admiral Arciszewski (PO) actively fishing inside the US EEZ. The Mellon initiated hot pursuit, as the vessel slowly trawled back into the RS EEZ. The Mellon boarded the vessel and witnessed the haul back which contained 12 metric tons of fish (99% Pollock). The vessel and it's catch were subsequently seized and escorted to Kodiak, AK and turned over to the US Attorney. Vessel was released under \$750K bond agreement. Case pends.

B. The Coast Guard has used approximately 63 cutter days and flown approximately 59 C-130 sorties patrolling the US/RS Convention line since 01 June. Coast Guard intelligence and patrol resources will continue to monitor activity on the Convention Line. C-130 patrols from A/S Kodiak have flown both overt and covert patrols at staggered day/night hours to ensure compliance with the international boundary. Survey flights into the RS EEZ along the line have identified a target population of approximately 20-25 vessels which are working the area within 30 miles of the Convention Line.

2. DONUT. On 11 September the FF/V Acamar (PO) ended a trial fishing run in the Donut. The Coast Guard will continue to monitor the Donut with periodic C-130 patrols, consistent with the minimal threat.

3. HIGH SEAS DRIFTNETTING (HSDN).

A. 1996 SUMMARY. What was expected to be a quiet season with a declining threat did not happen. On 06 July the

USCGC Boutwell, while on a joint HSDN patrol with the Fisheries Agency of Japan (FAJ) Patrol Vessel Toko Maru, acquired a slow-moving contact on radar. Due to low visibility, the Boutwell was unable to visually identify the vessel until it had closed to within 800 yards. The vessel was actively engaged in fishing with a driftnet. Marker bouys, nets and a net pipe running from the forward working deck to the stern net hold were all visible. After sighting the Boutwell, the FF/V cut their nets and proceeded in a southwesterly direction at eight knots. The Boutwell smallboat retrieved a section of the net entangled with two salmon. The vessel had no markings indicating the vessel's name or country of registry. No response was given to numerous communication attempts by Boutwell. On 07 July, Boutwell's small boat made an approach to conduct a boarding. The FF/V began to maneuver so as to create a close quarters situation, forcing the smallboat to abort the boarding attempt. On 08 July, Boutwell used their HH-65 to drop a message block to the FF/V, requesting the crew to provide the vessel name and homeport. The following morning, the vessel was observed flying a Taiwanese flag. Crew members from the vessel dropped a bottle with a message to the smallboat crew identifying the vessel as the Chang Fu 31 from Taiwan. Boutwell maintained surveillance until the arrival of the Taiwanese patrol vessel Shun Ho No. 2 on 13 July. The Shun Ho No. 2 agreed to a joint TW/USCG Boarding. The boarding was non-confrontational and the Taiwanese officials stated their intention to prosecute the case.

CASE DISPOSITION: The Taiwanese captain and six crew members of the FF/V Charng Der No.2 (Chang Fu 31), as well as the two vessel owners, have been indicted for illegal driftnet fishing for salmon. The indictment seeks the forfeiture of the vessel and the imposition of a cash penalty on the fishing company that operated the vessel. The indictment was filed on 23 Aug.

B. The Coast Guard has used 113 cutter days and 60 C-130 aircraft hours patrolling the high threat areas of the North Pacific. The Coast Guard has also maintained coordination with NMFS and the enforcement representatives of the North Pacific Anadromous Fisheries Commission (NPAFC) to ensure effective use of our combined patrol assets. Three shipriders also rode USCG cutters this year in accordance with the "1994 Memorandum of Understanding between the U.S. and China (PRC).

4. DIXON ENTRANCE. The Coast Guard used 110 foot patrol boats from Ketchikan, Petersburg, Juneau, and Seward to deter Canadian vessels from fishing in undisputed US waters. A continuous patrol presence was maintained from mid-June to mid August in the high threat area between Ketchikan and Dixon Entrance. Two patrol boats were underway in the area during peak periods of activity. Air Station Sitka provided helicopter surveillance. No incursions were detected this year.

B. DOMESTIC FISHERIES.

1. GROUND FISH.

A. Coast Guard cutters and aircraft concentrated patrol efforts around major fishery openings in the BSAI for pollock and yellowfin sole and the GOA for pollock and flats. The majority of violations during the period were for substantive

logkeeping errors.

B. Primary Coast Guard interest is with regard to safety and pre-positioning Search and Rescue (SAR) resources for major Bering Sea crab openers. We are working closely with the State and have scheduled a 378' cutter with deployable helicopter to be in the area for the St Matthew blue and Pribilofs red/blue September openers. We will plan a similar presence for November bairdi and January opilio once the State announces plans for those fisheries. Coast Guard aircraft sighting information is also provided to the State to support monitoring of openings and closures.

2. IFQ HALIBUT/SABLEFISH. At sea Coast Guard patrols are seeing high compliance; observed violations have included failure to carry permit onboard, careful release, and logging. We continue to work cooperatively as a team effort with local NMFS agents/FEO's, sharing sighting information on the grounds that can then be used to compare landings. With regard to safety, the Coast Guard has begun to look at trends between the derby and the IFQ systems. While Coast Guard databases do not capture data by specific fishery, the information available from the Coast Guard when coupled with NMFS data is adequate to provide a qualitative review. The trends thus far are encouraging. Coast Guard SAR cases are down in the GOA in comparison to the last three years of halibut derby fisheries. This trend correlates with what fishermen have generally told our boarding parties in that they are giving due consideration to weather. However, we must caution there is still 24% of the halibut quota and 16% of the sablefish quota available as of 11 September.

C. SAFETY. As of 01 September there have been 22 fishing vessels and 15 lives lost in the North Pacific in CY96. There were five terminations this period, with 3 of the 5 terminations for survival suit deficiencies such as broken zippers, not enough suits, and in one case, no suits at all.

2. ADMINISTRATION.

A. Blaes update: The U.S. vs Blaes case is currently scheduled to go before the Grand Jury the week of 16-20 Sept. The delay in proceedings is defense generated. The defense counsel is now having to prepare for trial because an agreement where Mr. Blaes would plead guilty to a felony count of 18 USC 111 (a)(1) did not materialize.

B. Greenpeace activity: On 09 September, Greenpeace protesters demonstrated around the trawler Ocean Rover. The M/V Greenpeace launched four RHI's and one helo which circled the vessel waving signs and banners. Both vessels communicated via VHF and advised each other of actions and course changes. The protest lasted approximately 3 hours and was non-confrontational.

PATROL STATISTICS

01 APRIL - 31 AUGUST

- a. 10 High Endurance Cutter (HEC) patrolled for 418 days.
- b. 04 Medium Endurance cutters (MEC) patrolled for 129 days.
- c. 05 Patrol boats patrolled for 254 days.
- d. C-130 aircraft conducted 261 long-range surveillance flights for 1920 hours.
- e. HH60/65 aircraft conducted 457 surveillance flights for 933 hours.
- f. Domestic vessels:
 - 6306 = Sightings
 - 471 = Boardings
 - 24 = Violations (Fishery)

VESSELS BOARDED WITH NO FISHERY VIOLATIONS

AA	082296
ADELYN L	073196
ADVANTAGE	050896
AGILE	040596
AJAX	061996
AK 3351H	070596
AK 3376N	070996
AK3563N	071796
AK 4760L	040996
AK 8291	070596
AK1824N	060596
ALASKA PACKER	062396
ALASKA SPIRIT	050196
ALASKA VICTORY	082896
ALASKA VICTORY	050196
ALASKA VOYAGER	082896
ALASKAN	071596
ALASKAN ROSE	070496
ALBION	070196
ALL STAR	073196
ALLURE	050396
ALOMA	050396
ALPHA CENTAURION	041896
ALRITA	050496
ALSEA	042396
ALSKA	050896
AMERICAN NO 1	041196
ANGELIQUE	042796
ANGELIQUE	082896
ANNA D	062896
ANNA HOPE	040996
ANNA J	060596
ARBALESTE	061896
ARCTIC FJORD	041296
ARCTURS	042296
ARGOSY	051096
ARLICE	052496
ARROW	040896
ARTIC MARINER	082896
ARTIC OX	061896
ARTIC SPRING	061396
ASTRI	082396
ASTRI	082496
AUGUSTINE	040896
BALLAD	080196
BALLARD STATION	062696
BARQ	052696
BASHO	082296
BEAGLE	071596
BEAR PAW	072796
BERING ENTERPRISE	080996
BERING SEA	081596
BIG BLUE	062896
BILLIE B	082596
BILLY MARIE	081596
BIMINI	050396

BLUE BOY	043096
BLUE MIST	061896
BOLD PACIFIC	051996
BONNY JEAN	050396
DREEZE	071596
BRENDA K	061896
BRENDA LEE	082096
BRONIVIK	080196
BROWNS POINT	082196
BROWNS POINT	040796
BUCK & ANN	050896
CATTIIN ANN	042396
CALIFORNIA HORIZON	041096
CAPE FANSHAW	082596
CAPE FLATTERY	051696
CAPE HORN	073096
CAPE KAWANDA	042196
CAPE OMMANEY	041796
CAPT'N ART	062896
CAROL D	052796
CAROLINA GIRL II	081596
CAROLL G	070296
CATHY	070396
CHACAL	070196
CHAIKA	061196
CHANDALAR	080696
CHEROKEE	041396
CHEYENNE	050196
CHILKAT	050696
CHRIS TE JOE MARIE	071496
CHRISTINA	071796
CHUBASCO	041796
CINDEE	060696
CIRUS	082296
CLAUDIA II	070296
CLEARLIGHT	071896
CLYDE	051496
COLUMBIA	040196
CONDOR	040996
CONNIE M	051796
CONSTELLATION	053196
CORAL SEA	080796
CORSAIR	061896
CRACKER JACK	061296
CUATRO VIDAS	050396
DEBORAH ANNE	071496
DEBRA LYNN II	083096
DEEP SEA	052796
DEFENDER	061196
DEFENDER	060596
DEFIANCE	070196
DEFIANT	050496
DEVONY LEIGH	071596
DUNDAS	082796
EDITH K	071896
EDWARD R	061796

VESSELS BOARDED WITH NO FISHERY VIOLATIONS

EL NIDO	082796
ELIZABETH ANN	050396
ELKA	061996
EMILY NICOLE	042796
ETHEL E	062196
EXCALIBUR	061396
FAIRLIGHT	040796
FAIRLIGHT	040796
FALCON	072396
FALCON	060696
FIERCE ALLEGIAN	040796
FIESTA	061996
FISHING FEVER	081996
FLYING CLOUD	042296
FORTUNE	042496
FOUR CEASONS	070196
FRONTIER SPIRIT	041396
GALATEA	060996
GARNET	040996
GEMINI	063096
GENE S	080796
GEORGIA	082996
GERI	061796
GETAWAY	061896
GINNY C	050696
GLACIER POINT	083096
GOLD NUGGET	080696
GOLDEN CHALICE	050696
GOLDEN FLEECE	041396
GOLDEN PISCES	042196
GRANT	073196
GREEN HOPE	080696
GUARDIAN	060496
GULF MAIDEN	052896
HAIDA QUEEN	071696
HALFMOON BAY	042296
HARDY	050696
HEATHER KAY	080596
HELEN G	061996
HEY JOE	071996
HICKORY WIND	070296
HIGH FLYER	040996
HIGHLAND LIGHT	041396
HORNET	042496
HUNGRY JACK	040596
IMPERIAL	082796
INDEPENDENCE	050396
INDIGO	050596
INUPIAT	082296
ISLAND DAWN	061796
ISLAND PRIDE	050896
IZZY	061896
JACKIE R	050696
JANIS	071596
JENNIFER LEE	040596
JENNISON	060696

JERRY	082596
JODIE LYNN	061796
JOMA	071796
JON K	050996
JULIE ANN	082596
JUST ONE MORE	061896
KAARE	070296
KAARE	041596
KAREN II	061996
KAREN L	082396
KARIEL	062896
KARLUK ANA	080796
KATHT	082596
KATHLEEN JO	083096
KATHRYN ANN	071296
KATIE D	062396
KELLY MARIE	082596
KEMA-SUE	070196
KENO	041996
KESIA DAWM	050696
KETA	041196
KETA	082896
KIVIOK	061996
KJEVOLJA	041596
KODIAK	053196
KRAKEN	042696
KRISTI LYNN	082896
KRISTIANA	042096
KRISTIN ANN	062396
KRISTINA	081496
KRISTINA	050396
KRISTINE	060796
KYRION	062396
LADY ELIZABETH	070196
LADY JO	050496
LADY LUANA	043096
LADY REBECCA	042096
LAUG	070296
LAZARO	062696
LEGACY	042396
LETUN	040296
LIBERTY BAY	051396
LINDY	080696
LIPARUS	051196
LITTLE DOLPHIN	061996
LITTLE RED	061296
LOANGEN	071796
LOGAN T	040596
LOIS D	060596
LONE FISHERMAN	051496
LONE STAR	051096
LORELEI II	050596
LOU-ED	072396
LUCKY STRIKE	050996
MAJESTIC	051596
MALAGA	040896

VESSELS BOARDED WITH NO FISHERY VIOLATIONS

MALI	070196
MAR JO II	061296
MARANATHA	062396
MARATHON	071696
MARK I	041796
MARLISSA	052696
MARTIN TOMICH	040996
MARTUSHOFF	061896
MARUDER	071396
MAVERICK	062296
MEGAN	040596
MELIANTR D	061896
MELISSA LYNN	040796
MELISSA LYNN	040796
MEMORIES	042096
MERCURY	080596
MERLENA	070496
MERMAID	051796
METEDECONK	071496
MIN E	051596
MINDALINA	082696
MINERVA	082596
MISS JANE	060996
MISS LORELEI	061796
MISS WENDY	071496
MISTY	061796
MISTY	041996
MOJO	041896
MOONSHADOW	082296
MY DONA	062696
MY MICHELLE	082596
MYSTERY MAID	050496
NAKAT	060496
NAN SEA M	062396
NACY BARBARA	042696
NANCY H	052496
NETTIE B	071596
NEW OREGON	082096
NEW VENTURE	053196
NIGHTWATCH	051596
NIKKA	051796
NTP N TUCK	061596
NO NAME	040596
NORDBY	082396
NORTH LIGHT	052796
NORTHERN BELLE	082096
NORTHERN JAEGER	040596
NORTHLAND	062496
OCEAN DAWN	040196
OCEAN HARVEST	051096
OCEAN HOPE 1	071596
OCEAN HOPE 3	042696
OCEAN PEARL	061796
OCEAN PEARL	061096
OCEAN POINT	071496
OCEAN PRIDE	062496

OCEAN PROWLER	042196
OCEAN SPIRIT	050696
OCEAN STORM	050996
OCEANIC	083196
ODDIE	071596
ODIN	040896
OMNISEA	062396
OVERCOMER	061996
PACIFIC GLACIER	082696
PACIFIC LADY	061796
PACIFIC MIST	050996
PACIFIC PRARI.	061596
PACIFIC QUEEN	070196
PACIFIC SEA	042096
PACIFIC SUN	042796
PACIFIC VENTURE	070296
PATRIOT	070196
PATTY K	070196
PAULA D	062296
PEGGY	071596
PEGGY B	070696
PEGGY JO	070196
PEGGY JO	041296
PELICAN	082696
PENNOCK	061796
PERSISTENCE	061996
PHALAROPE	062496
PILLAR POINT	070196
PINTA	041896
POLAR LADY	080296
POLAR SEA	060596
POLARIS	040196
PROSPECTOR	062496
PROSPECTOR	061196
PROSPERITY	080596
PROWLER	060896
PUFFIN	082996
PURSUIT	081096
RANTIN RAVIN	051596
RAVEN	062696
RAVEN	042196
RRRR.	070196
RED BARON	081596
RED BLUFF	040896
REDBLUFF	040896
REEL HUNTER	071596
RENEGADE	062196
RESOLUTE	051496
REVERIE	062396
RISKY BUSINESS	052696
ROSALYN	041396
ROYAL FLUSH	072396
ROYAL FLUSH	071796
ROYAL SEA	040696
RUFFIAN	062596
SAAMI	082496

VESSELS BOARDED WITH NO FISHERY VIOLATIONS

SABRINA	070196
SAILOR	060596
SALMON BAY	082896
SATORI	072396
SAMANTHA DAWN	061896
SAMAQU	062396
SANDRA JO	051796
SARA DAWN	072196
SCHY TOO	083096
SCORPIO	061996
SEA ALASKA	062696
SEA DOG	082096
SEA HUNT	083096
SEA LEGEND	050396
SEA PRIDE	042496
SEA SPRAY	061996
SEA STAR	053196
SEA STAR	041896
SEA STORM	041096
SEA VALLEY II	050896
SEA VENTURE	072096
SEA WITCH	082596
SEA WOLF	040496
SEABORN	061996
SEADAWN	042396
SEAFISHER	082296
SEATTLE ENTERPRISE	083196
SEATTLE STAR	051396
SELAH	080196
SEQUIOA	060596
SERVETTE	040896
SHAKER	050896
SHANBRE	061896
SHARIE MARIE	043096
SHILOH	061796
SILVER ARROW	042096
SILVER FOX 4	082996
SILVER ICE	051496
SILVER LADY	040896
SILVER PHANTOM	071596
SILVER SPRAY	071396
SITKIN ISLAND	072796
STAVA	082296
SMOKY BAY	080896
SPAWN	061096
ST JAMES	071596
ST JOHN II	050796
ST RAPHAEL	062796
STARBOUND	081896
STARFISH	051096
STJILBE	051796
STORMY K	071496
STRANGER	082296
SUNDANCE KID	040896
SUNRISE	040596
SUNRISE	082396

SUNSE	082896
SUNSET	040896
SUNSET	082896
SUNSET BAY	042296
SUNWARD	001596
SUPERFLY	071496
SUPERIOR	061796
SWAN	052696
TALIA	082896
TANI RAE	050696
TARKA	042996
TEAL	082896
TRNACTIOUS	040896
TENACIOUS	050996
TERRI BABY	061996
THOR	052696
TIARA	070496
TINA SUE	080596
TITANIC II	080596
TONI MARIE	040596
TRACI J	071796
TRAILBLAZER	062696
TRAVELER	070296
TRINITY	040596
TRINKET	060996
TSUNAMI	062296
TUK	082396
TURBO	040396
TUXEDNI	041396
TWOCRACK	082596
TYNE	070296
US	051796
VAERDAL	071496
VAN ELLIOTT	051696
VANSEE	052196
VEGA	061996
VENTURE	082596
VESTERAALEN	041496
VIANNESE	050596
VINDICATOR	061896
VULCAN	040996
WAVE DANCER	071496
WAVR RYDER	071596
WESTERN DAWN	042696
WHALE BIRD	082996
WHISPER	061996
WHITE CAP II	060796
WHITE NIGHT	080796
WINDY BAY	040896
WN7315MD	070996
WOLVERINE	062296
YANKEE	082596
YARDARM KNOT	062496
ZAREMBO	051896
ZONTA	082896

VESSELS BOARDED WITH FISHERY VIOLATIONS

ADMIRAL ARCIZEWSKI (PL) -FISHING INSIDE THE US EEZ	MELLON	14JUN96
ALASKAN SHORES 1-IMPROPER LOG KEEPING 2-FAILURE TO SUBMIT DFL YELLOW COPIES AT THE END OF QUARTER 3-NO MORATORIUM PERMIT ON BOARD	MELLON	27MAY96
AMBER NICOLE 1-TRANSITING A SEALION ROOKERY	HAMILTON	01MAY96
C-LADY 1-NO MORATORIUM PERMIT ON BOARD	STORIS	08APR96
CAPRICE 1-IMPROPER LOG KEEPING 2-NO OBSERVER FOR FIRST QUARTER	YOCONA	17APR96
CHANG FU 31 (TW) 1-HIGHSEAS DRIFTNET FISHING	BOUTWELL	14JUL96
DAWN 1-IMPROPER LOG KEEPING	JARVIS	07MAY96
DUSK 1-IMPROPER LOG KEEPING	ACUSHNET	03AUG96
GOLDEN DAWN 1-FAILURE TO PROVIDED SAFE BOARDING LADDER 2-IMPROPER LOG KEEPING	MIDGETT	01APR96
JANI K 1-TRANSITING A SEALION ROOKERY	MUSTANG	17JUL96
KRISTEEN SEA 1-NO PERMIT ONBOARD	YOCONA	05MAY96
LYNX 1-TRANSITING A SEALION ROOKERY	HAMILTON	02MAY96
MAR PACIFICO -IMPROPER LOG KEEPING	JARVIS	08MAY96

VESSELS BOARDED WITH FISHERY VIOLATIONS

ORSKA 1-IMPROPER LOG KEEPING	ACUSHNET	11AUG96
NORTH PACIFIC 1-TRANSITING A SEALION ROOKERY	MELLON	05JUN96
PACIFIC KNIGHT 1-NO MORATORIUM PERMIT ON BOARD 2-IMPROPER LOG KEEPING	HAMILTON	24APR96
PROSPERITY 1-IMPROPER LOG KEEPING	HAMILTON	12MAY96
ROBYN ANN 1-TRANSITING A SEALION ROOKERY	HAMILTON	30APR96
RUBY ANN 1-TRANSITING A SEALION ROOKERY	HAMILTON	
SEA QUAIL 1-NO PERMIT ONBOARD	ROANOKE ISLAND	15MAY96
STARLITE 1-IMPROPER LOG KEEPING	MUNRO	26AUG96
TITAN 1-NO MORATORIUM PERMIT ON BOARD	YOCONA	11APR96
VANGUARD 1-IMPROPER LOG KEEPING 2-FAILURE TO SUBMIT DEL	JARVIS	07MAY96
VIGOROUS 1-IMPROPER LOG KEEPING	JARVIS	22MAY96

ENFORCEMENT COMMITTEE REPORT
September 18, 1996

Improved Retention/Improved Utilization (C-2). The committee reviewed the AP's recommendation on Increased Utilization to require a maximum percentage allowance (10%) based on round weight for meal production. If the Council specifies a percentage for maximum meal production, the Enforcement Committee recommends that the percentage be based on total weight, due to monitoring difficulties involving meal production from both primary and secondary production (i.e., offal, undersized, damaged, and non-IR/IU fish). The specified rate should not be set too low to encourage discarding or too high to encourage increased meal production. The committee discussed the enforcement difficulties with a maximum allowance of meal production for shore-based facilities and motherships because of multiple vessel deliveries, noting that the above recommendations would likely be workable only for catcher/processor vessels. The IR/IU Committee may be able to determine an appropriate maximum level of meal production based on total weight.

Ice and Slime (D-3b) The committee recommends a standard deduction for ice and slime for halibut that is based on the best available scientific information and acceptance by the industry. It is the committee's understanding that sablefish is not included in the analysis.

from June 1996:

Ban on night trawling for Pacific cod in the Bering Sea The Enforcement Committee noted that the comments made in the NOAA Enforcement letter dated February 16, 1993 still applied. Defining night can be addressed by setting a specific hour by season/month for start/stop. Enforcement of a species-specific ban on night trawling would be impeded because: (1) directed fishing standards cannot be tied to individual hauls; (2) use of the directed fishing standards would not prevent vessels from targeting on Pacific cod at night; (3) only individuals voluntarily complying would be prevented from fishing, while nonparticipants would be advantaged. In this case, that advantage is considerable given the added fishing time gained during night periods. Therefore, there would be a greater potential gain with minimal risk to the violator. The committee further noted the possibility for increased discarding.

The most enforceable approach to reduce halibut bycatch in the Pacific cod fishery would be to close all trawling on certain Pacific cod fishing grounds that have demonstrated high bycatch in the past. The committee recommends to the Council that an industry group identify a geographic area for a night trawling ban that would have minimal impact on other fisheries and not be tied to a species fishing standard. The committee discussed that any night trawling ban would be an interim measure until improved retention/improved utilization and/or vessel bycatch allocation measures were implemented.

The committee requests that the Council designate a catcher vessel and catcher/processor representative to meet with the committee in September to discuss other possible time and area closure alternatives.