A-SHOP Trip Form

Lead Cruise	Permit	Year

Observer Name_____ Vessel Name_____

fold to here

Trip #	Crew Size	Fish in hold at start?	Port of Trip Start	Trip Start Position							Start Date		Time of Trip Start	Port of Trip End	Trip End Position							End Date		Time of Trip End	Did fishing occur?	Time Lost at Sea (hours)					
				Latitude (N)			W	Longitude (100)							Latitude (N)			W	Longitude (100)							Mechanical problems	Weather related problems	Crew related issues	USCG / Enforcement related stoppage	Marine Mammal interaction/predation	Other (include notes)
				Deg	Min	Sec		Deg	Min	Sec	Month	Day			Deg	Min	Sec		Deg	Min	Sec	Month	Day								
							W											W													
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Notes:

A-SHOP Vessel Haul Form

Lead Cruise	Permit	Year	Gear Type	Purpose Code
			2	**HAK**

Observer Name_____ Vessel Name_____

fold to here

Trip #	Haul #	IFQ=N, CDQ/ Tribal code	Vessel Type	Gear Performance	Location Code	Deployment Information										Avg Bottom Depth	Avg Gear Depth	M or F	Retrieval Information									
						Month	Day	Time	Latitude (N)			W	Longitude						Month	Day	Time	Latitude (N)			W	Longitude		
									Deg	Min	Sec		Deg (100)	Min	Sec							Deg	Min	Sec		Deg (100)	Min	Sec
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Notes:

A-SHOP Vessel Haul Form

Lead Cruise	Permit	Year	Gear Type	Purpose Code
			2	**HAK**

Observer Name_____ Vessel Name_____

fold to here

Trip #	Haul #	IFQ=N, CDQ/ Tribal code	Vessel Type	Gear Performance	Location Code	Deployment Information										Avg Bottom Depth	Avg Gear Depth	M or F	Retrieval Information									
						Month	Day	Time	Latitude (N)			W	Longitude						Month	Day	Time	Latitude (N)			W	Longitude		
									Deg	Min	Sec		Deg (100)	Min	Sec							Deg	Min	Sec		Deg (100)	Min	Sec
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Notes:

A-SHOP Observer Haul Form

Lead Cruise	Permit	Year

Catcher Vessel	ADF&G #	EM or Observer?

Observer Name_____ Vessel Name_____

Haul #	Haul Sampled By (Cruise #)	RST	RBT	Sample Design	Sample Unit Type	% Monitored for Marine Mammals	Vessel Estimate (MT)	Estimated Discard Weight (kg)	Observer Catch Estimate (kg)	B, C, V, W	Haulback Bird Obs Code	Short wired? Y, N, U	Catcher vessel ADF&G # (motherships only)

Notes:

A-SHOP Observer Haul Form

Lead Cruise	Permit	Year

Catcher Vessel	ADF&G #	EM or Observer?

Observer Name_____ Vessel Name_____

Haul #	Haul Sampled By (Cruise #)	RST	RBT	Sample Design	Sample Unit Type	% Monitored for Marine Mammals	Vessel Estimate (MT)	Estimated Discard Weight (kg)	Observer Catch Estimate (kg)	B, C, V, W	Haulback Bird Obs Code	Short wired? Y, N, U	Catcher vessel ADF&G # (motherships only)

Notes:

A-SHOP Deck Form

Date	Lead Cruise	Permit	Haul #	Sampled by

Page _____ of _____ for Vessel

Page _____ of _____ for Haul

Sample #	*Subsample #*	Sample Size	Presorted?
		kgs	Y N

Species	**#**	**Weight**	**% ret.**
-------Keypunch-------			**X**

Sample design, sex-lengths, specimens, viabilities, mammals, birds, notes:

FS end:

FS start:

A-SHOP Deck Form

Date	Lead Cruise	Permit	Haul #	Sampled by

Page _____ of _____ for Vessel

Page _____ of _____ for Haul

Sample #	*Subsample #*	Sample Size	Presorted?
		kgs	Y N

Species	**#**	**Weight**	**% ret.**
-------Keypunch-------			**X**

Sample design, sex-lengths, specimens, viabilities, mammals, birds, notes:

FS end:

FS start:

Form POP

MARINE MAMMAL SIGHTING

NOAA/NMFS/AFSC/NMML
Platforms of Opportunity
7600 Sand Point Way NE
Seattle, WA 98115

Observer(s)_____ Vessel_____

year (YR) month (MO) day (DA) — 1 2 3 4 5 6

local time (24 hr. clock) ☐☐:☐☐ — 7 8 9 10

+/- GMT (+/-) ☐☐ — 11 12 13

latitude ☐☐° ☐☐.☐ ′ N/S — 14 15 16 17 18 19

general location of vessel (optional) _____

longitude ☐☐☐° ☐☐.☐ ′ E/W — 20 21 22 23 24 25 26

sighting conditions ☐ xlnt ☐ good ☐ fair ☐ poor

Beaufort ☐ — 27

+/- water temp. (+/-) ☐☐.☐ °C — 28 29 30 31

species (common and/or scientific name) **Please fill out a form for each species**

confidence ☐ sure ☐ likely ☐ unsure

_____

sighting cue

_____

closest approach ☐☐☐☐ meters — 32 33 34 35

number sighted (best) ☐☐☐☐ — 36 37 38 39

number (minimum) ☐☐☐☐ — 40 41 42 43

number (maximum) ☐☐☐☐ — 44 45 46 47

For Office Use Only

observer ☐☐☐☐☐☐☐☐☐☐☐☐ — 48 49 50 51 52 53 54 55 56 57 58 59

platform ☐☐☐☐ — 60 61 62 63

vis. ☐ — 64

species ☐☐ — 65 66

conf. ☐ — 67

sighting cue ☐☐☐ — 68 69 70

photos ☐ roll ☐ frames ☐☐☐ — 71 72 73 74 75 76 77 78

behaviors, cues and interactions ☐☐☐☐☐☐☐☐☐☐ — 79 80 81 82 83 84 85 86 87 88 89 90

behaviors, cues and interactions ☐☐☐☐☐☐☐☐☐☐ — 91 92 93 94 95 96 97 98 99

length multi ☐☐ — 100 101

Narrative

Make identifications only on specific features seen. Mention them here. Include body features, markings and coloration, associated organisms, elaborate on behaviors, etc. The most valuable sightings contain a good amount of detailed information.

_____

_____

_____

_____

_____

_____

_____

Body Length Estimate

- ☐ < 3 m (< 10')
- ☐ 3–8 m (10–25')
- ☐ 8–16 m (25–50')
- ☐ 16–26 m (50–80')
- ☐ >26 m (>80')

Sketches

When possible, make a sketch noting pigmentation, anatomical features, scarring, posture, anatomical anomalies, group positioning, etc.

cruise number & permit number ☐☐☐☐☐☐☐☐☐☐ — 102 103 104 105 106 107 108 109 110 111

Some common behaviors
(circle these or add your own in narrative section)

Small cetaceans
Bow riding
Leaping entirely out of water
Porpoising (swimming fast, body out of the water)
Rooster-tailing (usually a Dall's porpoise cue)
Slow rolling

Large cetaceans
Blow visible from a distance
Breaching
Flipper slapping
Group feeding
Lob-tailing
Spy-hopping
Tail raised on dive
Side wake riding
Stern wake riding

Pinnipeds
Jug handle (flippers in air)
Porpoising (swimming fast, at least partially out of the water)
Rafting
Spooked from haulout
Vocalizing

Fishing Interactions
Contact with gear
Contact with vessel
Entangled in gear
Feeding on discards
Feeding from gear
Following vessel while fishing
Swimming near gear

Photos/Video (optional)
☐ photographs
☐ video

roll/tape # _____

frame(s) _____

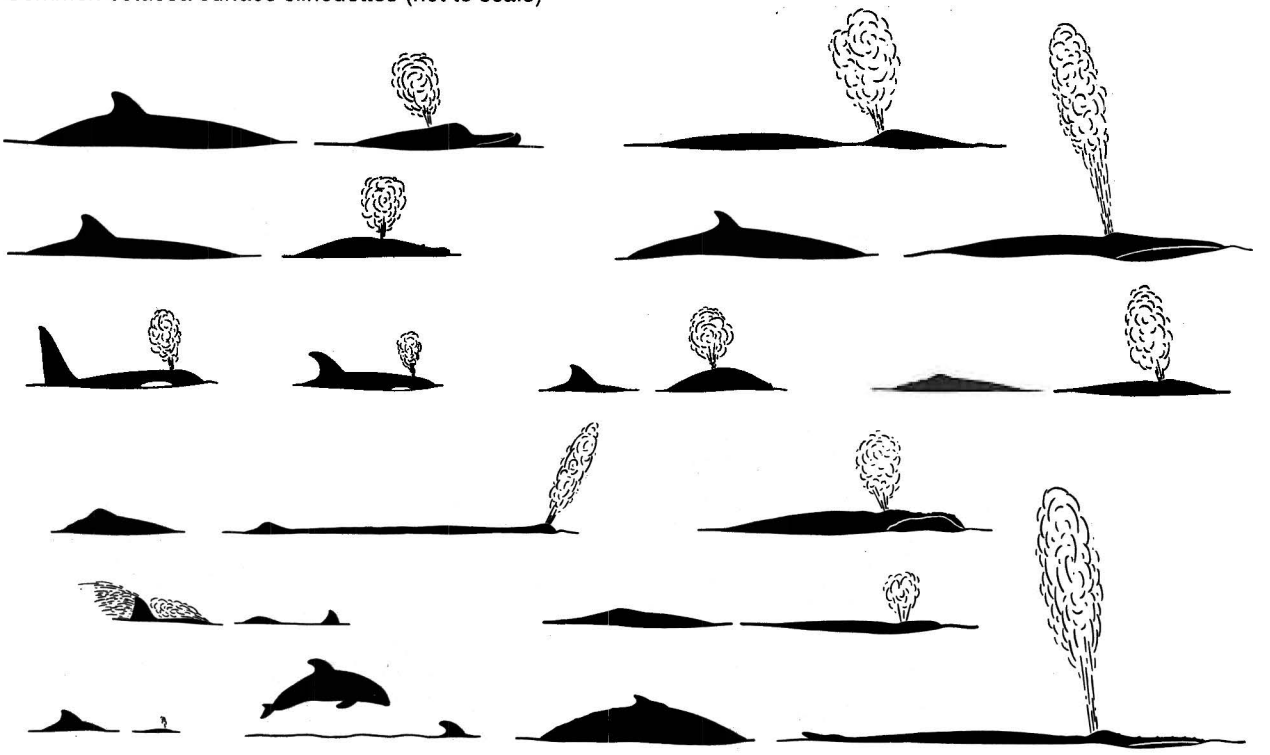
☐ **Check here if there was more than one species of marine mammal present at this sighting.**

Form POP: ver. XII.97: Balla, Harkness, Hill, Folkens, Lowell, Mizroch

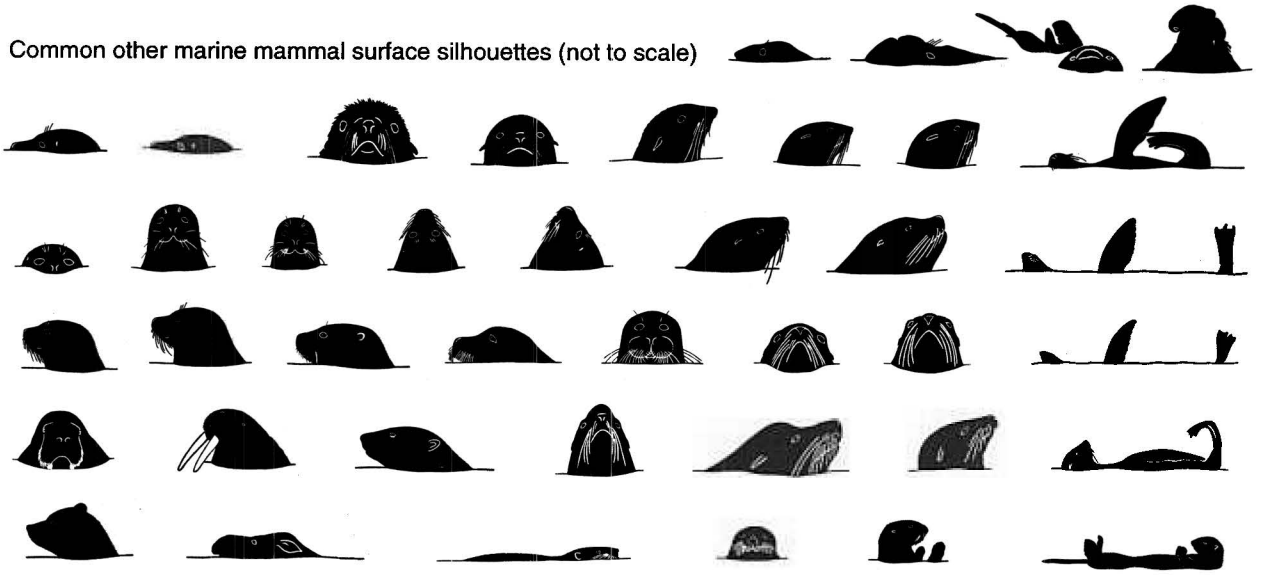
See silhouettes on other side

These are silhouettes of most genera of marine mammals known to occur in and around North America. Subtilties exist between closely related genera. Care should be taken in identifying species. Assessing one's level of confidence with copious notes and observations is more valuable than a brief misidentification. **Please circle appropriate silhouette(s).**

Common cetacea surface silhouettes (not to scale)



Common other marine mammal surface silhouettes (not to scale)



BEAUFORT SCALE (Sea Condition)		***wind***	***wave height***	
0	glassy, calm	0 , 1 kts	calm	
1	light ripple	1 < 4 kts	light air	1/4'
2	small wavelets	4 < 7 kts	light breeze	1/2'
3	scattered whitecaps	7 < 11 kts	gentle breeze	2'
4	small waves, frequent whitecaps	11 < 17 kts	moderate breeze	4'
5	moderate waves, many whitecap	17 < 22 kts	fresh breeze	6'
6	all whitecaps, some spray	22 < 28 kts	strong breeze	10'
7	breaking waves, spindrift	28 < 34 kts	near gale	14'
8	medium high waves, foamy streaks	34 < 41 kts	gale	18'
9	high waves, dense foamy streaks	41 < 48 kts	strong gale	22'
10-12	not meaningful (time to go home)			

Cruise	Permit

Marine Mammal Interaction and Specimen Form

Resubmission
(Circle All Changes)

Page _____ of _____

Observer name _____ **Vessel name** _____

Trip Haul Offload (circle one)	Interaction Date		Species Common Name	Mammal code	Total number of animals observed	Number of animals in interaction	Did you observe mammal?	Interaction code	Condition Code	Deterrence code	Deterrence successful?	Food species	Location during Trip							Specimen Data				
													Latitude (N)			Longitude								
	Month	Day											Deg	min	sec	Deg	min	sec	E/W	Specimen number	Animal number	Specimen type	Sex	Value
Comments: (see manual for list of required information)																								
For condition code 3 was animal injured? Y○ N○ U○																								

Trip Haul Offload (circle one)	Interaction Date		Species Common Name	Mammal code	Total number of animals observed	Number of animals in interaction	Did you observe mammal?	Interaction code	Condition Code	Deterrence code	Deterrence successful?	Food species	Location during Trip							Specimen Data				
													Latitude (N)			Longitude								
	Month	Day											Deg	min	sec	Deg	min	sec	E/W	Specimen number	Animal number	Specimen type	Sex	Value
Comments: (see manual for list of required information)																								
For condition code 3 was animal injured? Y○ N○ U○																								

Cruise	Permit

Marine Mammal Interaction and Specimen Form

Resubmission
(Circle All Changes)

Page _____ of _____

Observer name _____ **Vessel name** _____

Trip Haul Offload (circle one)	Interaction Date		Species Common Name	Mammal code	Total number of animals observed	Number of animals in interaction	Did you observe mammal?	Interaction code	Condition Code	Deterrence code	Deterrence successful?	Food species	Location during Trip							Specimen Data				
													Latitude (N)			Longitude								
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Comments: (see manual for list of required information)																								
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Trip Haul Offload (circle one)	Interaction Date		Species Common Name	Mammal code	Total number of animals observed	Number of animals in interaction	Did you observe mammal?	Interaction code	Condition Code	Deterrence code	Deterrence successful?	Food species	Location during Trip							Specimen Data				
													Latitude (N)			Longitude								
	Month	Day											Deg	min	sec	Deg	min	sec	E/W	Specimen number	Animal number	Specimen type	Sex	Value
Comments: (see manual for list of required information)																								
For condition code 3 was animal injured? Y○ N○ U○																								

Bird Interaction, Activity and Species Form

Page _____ of _____

Cruise	Permit	Event #	Trip Haul Offload (Circle One)

Observer Name _____

Vessel Name _____

Interaction Description

Date ____/____/20____ Time _____

Bird Location [ ]

Fishery Location [ ]

Location During Trip or Offload

Latitude (N)			E/W	Longitude		
Deg	Min	Sec		Deg	Min	Sec

Weather Conditions During Interaction

Beaufort Sea Scale [ ] Weather [ ]

Interaction Description and Comments

Vessel Activity

- Traveling ◯
- Setting ◯
- Offloading ◯
- Sampling ◯
- Processing ◯
- Resting ◯
- Fishing ◯
- Retrieving ◯
- Not applicable ◯

Deterrent Type

Deterrent used? [ ]

- Weights ◯
- Other ◯
- 1 Streamer Line ◯
- 1 Bird Bag ◯
- Lining Tube ◯
- Discharge Offal ◯
- Unknown No. of Streamers. ◯
- 2 Bird Bags ◯
- Water Hose ◯
- 2 Streamer Lines ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short-Tailed Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Bird Interaction, Activity and Species Form

Page _____ of _____

Cruise	Permit	Event #	Trip Haul Offload (Circle One)

Observer Name _____

Vessel Name _____

Interaction Description

Date ____/____/20____ Time _____

Bird Location [ ]

Fishery Location [ ]

Location During Trip or Offload

Latitude (N)			E/W	Longitude		
Deg	Min	Sec		Deg	Min	Sec

Weather Conditions During Interaction

Beaufort Sea Scale [ ] Weather [ ]

Interaction Description and Comments

Vessel Activity

- Traveling ◯
- Setting ◯
- Offloading ◯
- Sampling ◯
- Processing ◯
- Resting ◯
- Fishing ◯
- Retrieving ◯
- Not applicable ◯

Deterrent Type

Deterrent used? [ ]

- Weights ◯
- Other ◯
- 1 Streamer Line ◯
- 1 Bird Bag ◯
- Lining Tube ◯
- Discharge Offal ◯
- Unknown No. of Streamers. ◯
- 2 Bird Bags ◯
- Water Hose ◯
- 2 Streamer Lines ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short-Tailed Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Species Code | Species Name

Number of Birds [ ] Count Type [ ]

Good Look at Bird Y N N/A (Circle One) How Certain of ID Y N M (Circle One)

Interaction Description [ ] Interaction Outcome [ ]

Short Tailed-Albatross Only

Number of Adult Birds [ ] Number of Sub-Adults [ ]

Number of Immatures [ ] Number of Juveniles [ ]

Identifying Characteristics

Specimen? ◯

Bird Specimen and Tag Information Form

Cruise	Permit

Observer Name _____ **Vessel Name** _____

						Tag Data					
Event Number	Species Code	Species Name	Specimen Number	Age of Bird	Specimen Type	Tag Color	Tag Type	Tag location	Tag Position	Tag Number	Comments

National Marine Fisheries Service/Fisheries Monitoring and Analysis Division - OMB Control No. 0648-0593, expires 9-30-2012

Cr. 2010

Bird Specimen and Tag Information Form

Cruise	Permit

Observer Name _____ **Vessel Name** _____

						Tag Data					
Event Number	Species Code	Species Name	Specimen Number	Age of Bird	Specimen Type	Tag Color	Tag Type	Tag location	Tag Position	Tag Number	Comments

National Marine Fisheries Service/Fisheries Monitoring and Analysis Division - OMB Control No. 0648-0593, expires 9-30-2012

Cr. 2010

A-SHOP Observer Logbook

Name _____ Badge # _____

Cruise # _____ Contractor _____

This logbook is to be used to record all details of your deployment. Take a few minutes to look at each section to familiarize yourself with the format. Each section has instructions on what information to include and how to record it. Please refer to your sampling manual for more detailed instructions, such as documenting a suspected violation.

In order to meet the expectations of the Observer Program for a successful deployment, the following required sections of the logbook must be fully completed:

- *Vessel safety* checklist for each vessel
- Documentation of all *sampling techniques* and changes or difficulties with those techniques
- All suspected *violations*
- Any incidents of vessel interaction with *seabirds or marine mammals*
- All total *catch calculations*
- An entry in the *Daily Notes* section for each day of your deployment, including all non-fishing days and days between vessel assignments
- *Sample station inspection* checklist
- *MCP scale daily test* for each day the MCP scale is used

Always date your entries so that the chronology of events can be traced in each section.

Your logbook is a valuable document. Please make the effort to maintain it, and keep it in a safe place.

All TEXT entries must be made in ink! Calculations may be made in pencil.

Complete the following information in chronological order for each of the vessels you are assigned to during this deployment:

1.Vessel Name and Vessel Permit:_____
Captain Name:_____From:_____To:_____
Captain Name:_____From:_____To:_____
Captain Name:_____From:_____To:_____

Observer Name: _____ Lead _____Second _____
Cruise #:_____From:_____To:_____
Observer Name: _____ Lead _____Second _____
Cruise #:_____From:_____To:_____
Observer Name: _____ Lead _____Second _____
Cruise #:_____From:_____To:_____

2.Vessel Name and Vessel Permit:_____
Captain Name:_____From:_____To:_____
Captain Name:_____From:_____To:_____
Captain Name:_____From:_____To:_____

-

Observer Name: _____ Lead _____Second _____

Cruise #:_____From:_____To:_____

Observer Name: _____ Lead _____Second _____

Cruise #:_____From:_____To:_____

Observer Name: _____ Lead _____Second _____

Cruise #:_____From:_____To:_____

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Paperwork Reduction Act Statement for the At-Sea Hake Observer Program

Information collected through the observer program is used to: (1) monitor catch and bycatch; (2) understand the population status and trends of fish stocks and protected species, as well as the interactions between them; (3) determine the quantity and distribution of net benefits derived from living marine resources; (4) predict the biological, ecological, and economic impacts of existing management actions and proposed management options; and (5) ensure that the observer programs can safely and efficiently collect the information required for the previous four uses. In particular, these biological and economic data collection programs contribute to legally mandated analyses required under the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), the National Environmental Policy Act (NEPA), the Regulatory Flexibility Act (RFA), Executive Order 12866 (EO 12866), and other applicable law.

Most of the information collected by observers is obtained through "direct observation by an employee or agent of the sponsoring agency or through non-standardized oral communication in connection with such direct observations". Under the Paperwork Reduction Act (PRA) regulations at 5 C.F.R. 1320.3(h)(3), facts or opinions obtained through such observations and communications are not considered to be "information" subject to the PRA. The public reporting burden for responding to the questions that observers ask and that are subject to the PRA is estimated to average 20 minutes per trip, including the time for hearing and understanding the questions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to: At-sea Hake Observer Program, 2725 Montlake Blvd. East, Seattle, WA 98112.

Providing information related to observer and vessel safety is mandatory under regulations at 50 C.F.R. 600.746. However, all other requested information is voluntary. Although you are under no legal obligation to answer non-safety related observer questions, we would appreciate your support as it ensures observer data can be used for its intended purpose.

The information collected will be kept confidential as required under Section 402(b) of the MSA (18 U.S.C. 1881a(b)) and regulations at 50 C.F.R. Part 600, Subpart E. Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid OMB Control Number.

OMB Control No. 0648-0593 Expires 1/31/2024

A-SHOP Gear Sheet

A-SHOP gear is issued PER VESSEL so each pair of observers needs to have one full set of A-SHOP gear

Name: _____ **Date:**_____

Lead Cruise #:_____ **Second Cruise #:**_____

Place a check in "Quantity" column once # is verified. To change # cross out and write in the correct #.

Books	Quantity	# at Check-in	Hake Gear Bag	Quantity	# at Check-in
Sampling Manual	1		CWT salmon snout barcoded bags	25	
Logbook	2		Genetics kit (scissors + forceps + sponge)	1	
Wet Manual	1		Salmon genetics barcoded envelopes	250	
A-SHOP Rockfish Guide	1		White genetics envelopes	100	
A-SHOP Species ID Guide	1		Spiny dogfish barcoded bags	50	
NPOP Manual (from AK Program)	1		Specimen collection labels (pack)	1	
Books Packed in Baskets			Sharpie / Red pencil	1 each	
Marine Mammal Guide	1		Rubber bands (pack)	1	
Beached Bird Guide	1		Bags - various sizes	lots	
Pacific Coast Fishes / Eschmeyer Guide	1		Scalpel handle / pack of blades	1	
			Knife	1	
			Large knife + sheath	1	
			Large manila envelope for genetics	2	

Forms *packed in A-SHOP accordion folder*	Quantity	# at Check-in
Trip	3	
VHF/OHF	20	
Deck Forms	300	
Salmon Sampling Deck Form	50	
Miscellaneous & Salmon Species ID	50	
Rockfish Species ID	40	
Flatfish Species ID	15	
Skate Species ID	6	
Seabird Species ID	10	
Marine Mammal Interaction and Specimen	5	
Marine Mammal Sighting	10	
Bird Interaction, Activity, and Species	5	
Bird Specimen and Tag	2	

Other	A-SHOP #
Salmon Wand	
Camera	

As an agent of your contractor, you are assuming responsibility for the satisfactory return of equipment issued to you by the A-SHOP. All items need to be accounted for and cleaned prior to returning them to the A-SHOP.

Sampling Gear Checked Out from AK Program

Name: _____ **Date:**_____

Cruise #:_____ **Employer:**_____

Gear Check-out Location: Seattle

Immersion Suit / PFD					
	Serial #	Circle size			
Immersion Suit		**Imperial:** Intermediate Universal Jumbo **Stearns:** Small Universal Oversize			
PLB					
PFD		SM / MD	L / XL	XXL / XXXL	

Place a check in "Quantity" column once # is verified. To change # cross out and write in the correct #. Optional items, record the # checked out. Leave "# at Check-in" blank until gear check-in.

Basket Items	Quantity	# at Check-in
Basket	4	
Basket Lid	1	
Calculator	1	
Clipboard	2	
Knife	1	
Knife Sheath	1	
Line - 20 ft length	1	
Measuring Board (Optional)	1	
Length Measuring Strip	2	
Measuring Tape	1	
Sponge	1	
Tie Down Strap	2	
Vials - Bag of 100	3	
Vial Block	1	
Optional Equipment		
Ear Muffs		
Flashlight		
Gaff		
Hardhat		
Safety Glasses		
Other (Specify)		

Pencil Pouch	Quantity	# at Check-in
Flash Drive	2	
Paper Clips (pack)	1	
Pen	3	
Pencil - Mechanical	1	
Pencil - No. 3B Green/Blue	4+	
Pencil Leads (pack)	1	
Pencil Sharpener	1	
Permanent Marker	1	
Sample Box		
Cotton Balls (pack)	1	
Earplugs (pair)	2	
Forceps	2	
Marine Mammal Sample Kit	1	
Rubber Bands (pack)	1	
Scalpel Handle	1	
Scalpel Blades (pack)	1	
Zip Ties (bundle)	1	

Changes To Gear During Deployment
(Losses, Transfers, Additions, etc.)

Name of Observer/ Donor	Date	Action: Loss, Found, Transfer, Checked out, Checked In	Gear Item	Quantity

Disembark Checklist

Frozen

- [ ] *Marine mammal specimens*
- [ ] *Seabird carcasses*
- [ ] *Special project samples*
- [ ] Whole salmon
- [ ] Whole fish
- [ ] Salmon snouts
- [ ] Spiny dogfish spines

Biospecimens

- [ ] Otoliths
- [ ] Salmon genetics
- [ ] Rockfish genetics

Data

- [ ] Notification of estimated time of arrival in port sent to provider and in-season advisor
- [ ] Transmit final non-fishing day and Trip End
- [ ] Archive ATLAS data
- [ ] Copies of vessel logbook pages - *confirm all hauls present*
- [ ] Copies of flow scale haul end weight print-outs - *confirm all hauls present*
- [ ] Completed data forms
- [ ] Completed species ID forms, per observer
- [ ] Folder of labeled JPG photos, per observer

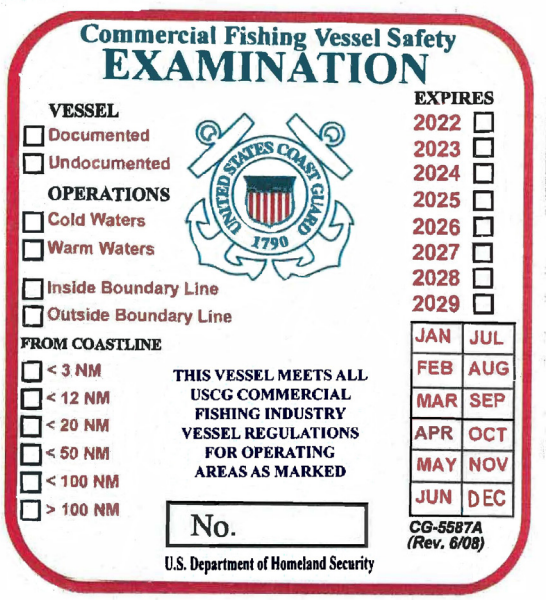
Gear

- [ ] Salmon wand
- [ ] Camera
- [ ] PLB
- [ ] Immersion suit
- [ ] Refer to gear sheets in front of logbook

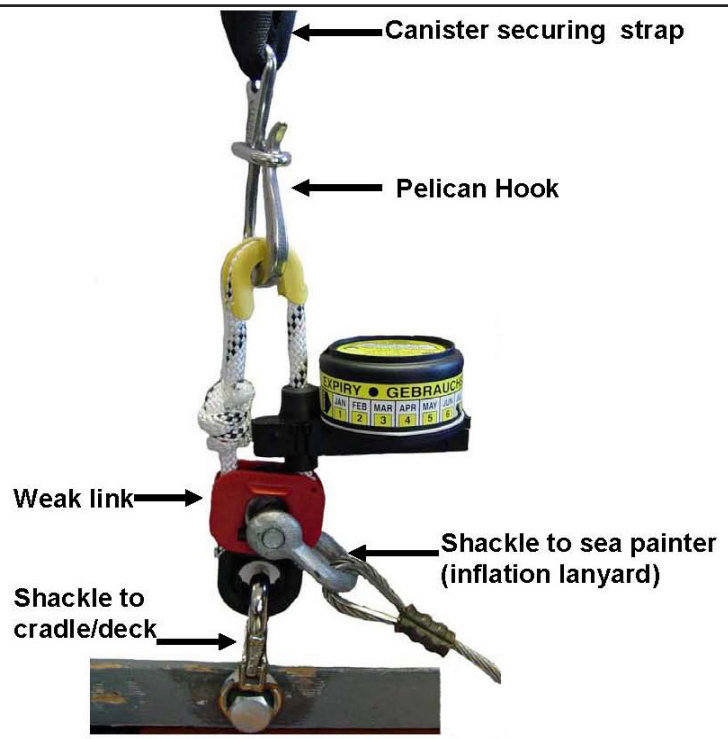
Vessel Safety Checklist

Vessel Name: _____ Vessel permit:_____

Ensure the USCG Commercial Fishing Vessel Safety decal is not expired. The expiration date is at the end of the month displayed.



Is the decal valid? Y N



Is hydrostatic release installed correctly? Y N

Survival Craft: p. 6-9

Number of:_____

Total capacity:_____

# of crew & observers on board_____

Sufficient capacity? Y N

Survival crafts stowed correctly? Float free or otherwise in accordance with the Federal Requirements for Commercial Fishing Industry Vessels (p. 9) Y N

Service Due decal exp. date:____/____ (expires at end of month displayed- inflatables only)

Hydrostatic release exp. date:___/_____ (expires at end of month displayed)

Your survival craft assignment:_____

Immersion Suit/PFDs: p. 3-4

Available for everyone on board? Y N

Location(s):_____

Distress Signals: p. 11

of distress signals meets federal requirements Y N

Location(s):_____

All distress signals within expiration date (expires on date displayed) Y N

EPIRB: p. 12-13

(Visual inspection only. Please leave all testing/handling to crew)

Location(s):_____

Battery exp. date: _____ (expires at end of month displayed)

Hydrostatic release expiration date:_____/_____ (expires at end of month displayed)

Located in a Coast Guard approved location?: Y N

NOAA Registration valid? Y N

Exp. date: _____ (expires at end of month displayed)

Registered to this vessel (name of vessel displayed): Y N

Alphanumeric code on decal matches code on EPIRB: Y N

Signal tested (or asked to see station log in wheelhouse for most recent test. Signal should be tested monthly): Y N

Fire Extinguishers: p. 14-16

Extinguisher(s) found in every main area/corridor? Y N

Extinguishers in "good and serviceable condition" (gauge in the green, low amounts of rust, canister in good condition, unobstructed, hoses attached, service tags available)? Y N

Throwable Flotation Devices: p. 5

Number of flotation devices appropriate for vessel size? Y N

of: Rings_____ Slings_____

Easily accessible?: Y N

Name of vessel displayed on each? Y N

Location(s):_____

Additional Safety Checks:

Factory hydraulic shut-off(s) - know location? Y N

Watertight doors - do they close properly? Y N

Hatches/passageways - are they unobstructed? Y N

Discussed safe places to work on deck and in factory with captain/crew? Y N

Discussed refrigerant leak procedures? Y N

Type of refrigerant used_____

To whom will you report marine casualties or inoperative alarms? _____

Did you hear the general alarm? Y N

Safety Orientation: p. 26

Did you complete drills upon embarking? Y N

Did the vessel conduct a safety orientation? Y N

Did vessel personnel address all of the items in the safety checklist during the safety orientation? Y N

Who gave the orientation? _____
(Detail what was covered in the comment section)

Where will you go during emergencies:

_____

Observer Personal Protective Equipment:

Do you have the PLB that was issued to you? Y N

PLB UIN: _____

Immersion Suit with Strobe Light and Battery? Y N

Serial #:_____

Personal Flotation Device with Strobe Light and Battery? Y N

First Aid Materials: p. 26

Location(s):_____

Who is designated to perform CPR/First Aid on board?

_____

Communication Equipment: p. 22-23

How many SSB and VHF radios?: _____ / _____

Are emergency call instructions posted? Y N

Were procedures for making an emergency call discussed? Y N

List any additional communication systems onboard (satellite phone, inReach, DSC, etc.)_____

_____

_____

Station Bill: p. 24

Did you review the information on the Station Bill? Y N

Describe your duties outlined in the station bill:

_____

_____

_____

_____

Emergency Drills and Date(s) Conducted: p. 25

(Document only drills you personally witnessed)

Fire_____

Abandon Ship _____

Man Overboard _____

Vessel flooding/stabilization _____

General alarm activation _____

Donning immersion suits _____

Radio/visual distress signals _____

Were the drills hands-on involving actual gear? Y N

Did you participate in the drills? Y N

Abandon Ship Plan:

From your muster station, how will you get to and board survival craft? _____

_____

_____

_____

Comments (All "N" responses require a comment):

_____

_____

Observer Name: _____ Cruise #: _____

Observer Signature: _____ Date: _____

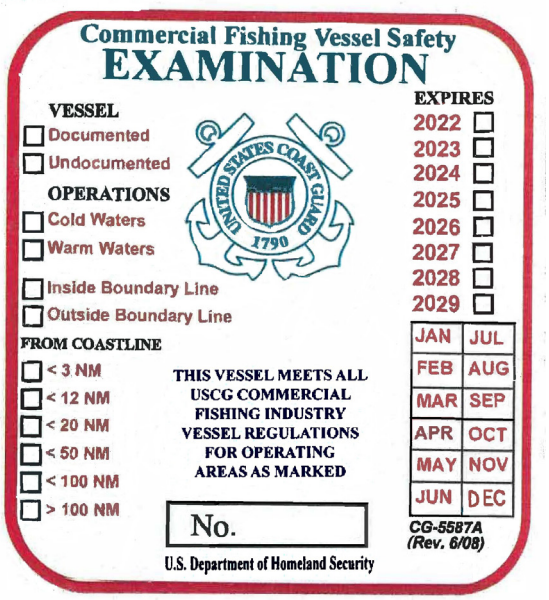
Captain Name: _____

Blue indicates "no go" items!

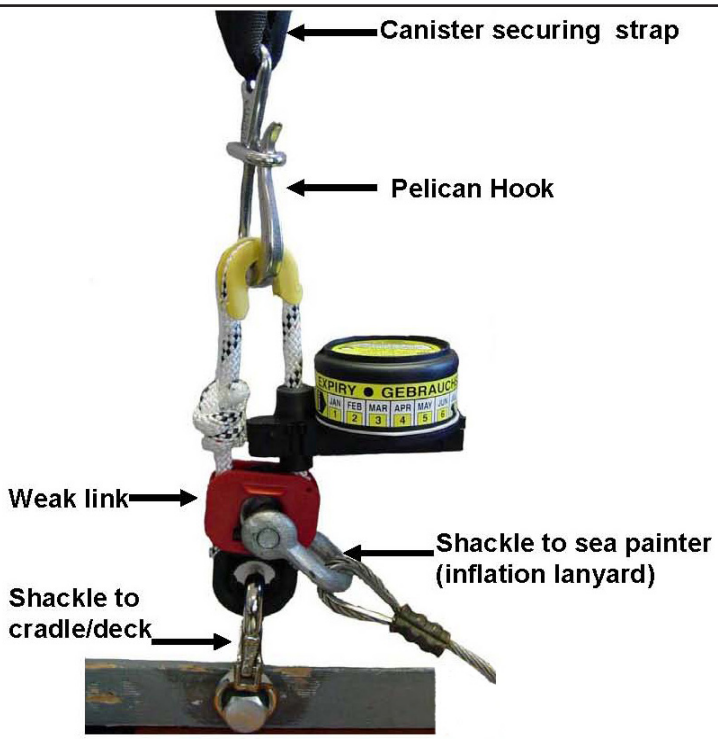
Vessel Safety Checklist

Vessel Name: _____ Vessel permit:_____

Ensure the USCG Commercial Fishing Vessel Safety decal is not expired. The expiration date is at the end of the month displayed.



Is the decal valid? Y N



Is hydrostatic release installed correctly? Y N

Survival Craft: p. 6-9

Number of:_____

Total capacity:_____

# of crew & observers on board_____

Sufficient capacity? Y N

Survival crafts stowed correctly? Float free or otherwise in accordance with the Federal Requirements for Commercial Fishing Industry Vessels (p. 9) Y N

Service Due decal exp. date:____/____ (expires at end of month displayed- inflatables only)

Hydrostatic release exp. date:___/_____ (expires at end of month displayed)

Your survival craft assignment:_____

Immersion Suit/PFDs: p. 3-4

Available for everyone on board? Y N

Location(s):_____

Distress Signals: p. 11

# of distress signals meets federal requirements Y N

Location(s):_____

All distress signals within expiration date (expires on date displayed) Y N

EPIRB: p. 12-13

(Visual inspection only. Please leave all testing/handling to crew)

Location(s):_____

Battery exp. date: _____ (expires at end of month displayed)

Hydrostatic release expiration date:_____/_____ (expires at end of month displayed)

Located in a Coast Guard approved location?: Y N

NOAA Registration valid? Y N

Exp. date: _____ (expires at end of month displayed)

Registered to this vessel (name of vessel displayed): Y N

Alphanumeric code on decal matches code on EPIRB: Y N

Signal tested (or asked to see station log in wheelhouse for most recent test. Signal should be tested monthly): Y N

Fire Extinguishers: p. 14-16

Extinguisher(s) found in every main area/corridor? Y N

Extinguishers in "good and serviceable condition" (gauge in the green, low amounts of rust, canister in good condition, unobstructed, hoses attached, service tags available)? Y N

Throwable Flotation Devices: p. 5

Number of flotation devices appropriate for vessel size? Y N

of: Rings_____ Slings_____

Easily accessible?: Y N

Name of vessel displayed on each? Y N

Location(s):_____

Additional Safety Checks:

Factory hydraulic shut-off(s) - know location? Y N

Watertight doors - do they close properly? Y N

Hatches/passageways - are they unobstructed? Y N

Discussed safe places to work on deck and in factory with captain/crew? Y N

Discussed refrigerant leak procedures? Y N

Type of refrigerant used_____

To whom will you report marine casualties or inoperative alarms? _____

Did you hear the general alarm? Y N

Safety Orientation: p. 26

Did you complete drills upon embarking? Y N

Did the vessel conduct a safety orientation? Y N

Did vessel personnel address all of the items in the safety checklist during the safety orientation? Y N

Who gave the orientation? _____
(Detail what was covered in the comment section)

Where will you go during emergencies:

_____

Observer Personal Protective Equipment:

Do you have the PLB that was issued to you? Y N

PLB UIN: _____

Immersion Suit with Strobe Light and Battery? Y N

Serial #:_____

Personal Flotation Device with Strobe Light and Battery? Y N

First Aid Materials: p. 26

Location(s):_____

Who is designated to perform CPR/First Aid on board?

_____

Communication Equipment: p. 22-23

How many SSB and VHF radios?: _____ / _____

Are emergency call instructions posted? Y N

Were procedures for making an emergency call discussed? Y N

List any additional communication systems onboard (satellite phone, inReach, DSC, etc.)_____

_____

_____

Station Bill: p. 24

Did you review the information on the Station Bill? Y N

Describe your duties outlined in the station bill:

_____

_____

_____

_____

Emergency Drills and Date(s) Conducted: p. 25

(Document only drills you personally witnessed)

Fire_____

Abandon Ship _____

Man Overboard _____

Vessel flooding/stabilization _____

General alarm activation _____

Donning immersion suits _____

Radio/visual distress signals _____

Were the drills hands-on involving actual gear? Y N

Did you participate in the drills? Y N

Abandon Ship Plan:

From your muster station, how will you get to and board survival craft? _____

_____

_____

_____

Comments (All "N" responses require a comment):

_____

_____

Observer Name: _____ Cruise #: _____

Observer Signature: _____ Date: _____

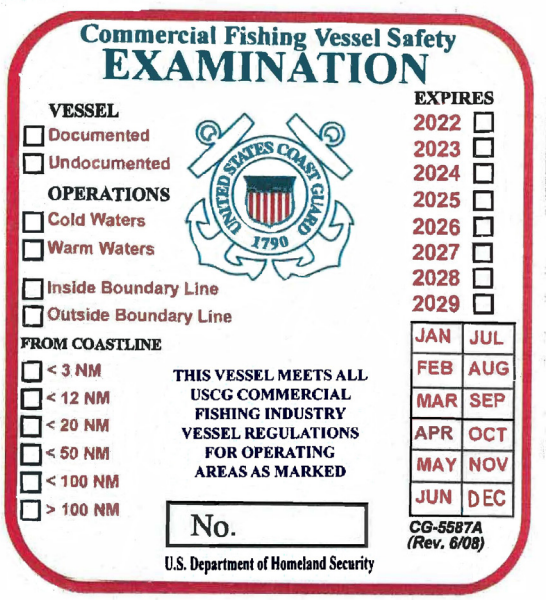
Captain Name: _____

Blue indicates "no go" items!

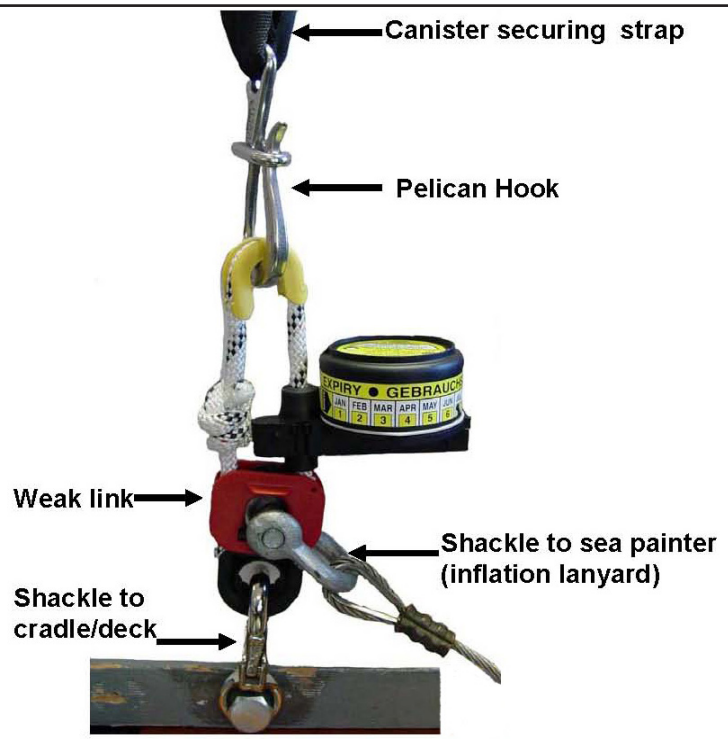
Vessel Safety Checklist

Vessel Name: _____ Vessel permit:_____

Ensure the USCG Commercial Fishing Vessel Safety decal is not expired. The expiration date is at the end of the month displayed.



Is the decal valid? Y N



Is hydrostatic release installed correctly? Y N

Survival Craft: p. 6-9

Number of:_____

Total capacity:_____

# of crew & observers on board_____

Sufficient capacity? Y N

Survival crafts stowed correctly? Float free or otherwise in accordance with the Federal Requirements for Commercial Fishing Industry Vessels (p. 9) Y N

Service Due decal exp. date:____/____ (expires at end of month displayed- inflatables only)

Hydrostatic release exp. date:___/_____ (expires at end of month displayed)

Your survival craft assignment:_____

Immersion Suit/PFDs: p. 3-4

Available for everyone on board? Y N

Location(s):_____

Distress Signals: p. 11

# of distress signals meets federal requirements Y N

Location(s):_____

All distress signals within expiration date (expires on date displayed) Y N

EPIRB: p. 12-13

(Visual inspection only. Please leave all testing/handling to crew)

Location(s):_____

Battery exp. date: _____ (expires at end of month displayed)

Hydrostatic release expiration date:_____/_____ (expires at end of month displayed)

Located in a Coast Guard approved location?: Y N

NOAA Registration valid? Y N

Exp. date: _____ (expires at end of month displayed)

Registered to this vessel (name of vessel displayed): Y N

Alphanumeric code on decal matches code on EPIRB: Y N

Signal tested (or asked to see station log in wheelhouse for most recent test. Signal should be tested monthly): Y N

Fire Extinguishers: p. 14-16

Extinguisher(s) found in every main area/corridor? Y N

Extinguishers in "good and serviceable condition" (gauge in the green, low amounts of rust, canister in good condition, unobstructed, hoses attached, service tags available)? Y N

Throwable Flotation Devices: p. 5

Number of flotation devices appropriate for vessel size? Y N

of: Rings_____ Slings_____

Easily accessible?: Y N

Name of vessel displayed on each? Y N

Location(s):_____

Additional Safety Checks:

Factory hydraulic shut-off(s) - know location? Y N

Watertight doors - do they close properly? Y N

Hatches/passageways - are they unobstructed? Y N

Discussed safe places to work on deck and in factory with captain/crew? Y N

Discussed refrigerant leak procedures? Y N

Type of refrigerant used_____

To whom will you report marine casualties or inoperative alarms? _____

Did you hear the general alarm? Y N

Safety Orientation: p. 26

Did you complete drills upon embarking? Y N

Did the vessel conduct a safety orientation? Y N

Did vessel personnel address all of the items in the safety checklist during the safety orientation? Y N

Who gave the orientation? _____
(Detail what was covered in the comment section)

Where will you go during emergencies:

_____

Observer Personal Protective Equipment:

Do you have the PLB that was issued to you? Y N

PLB UIN: _____

Immersion Suit with Strobe Light and Battery? Y N

Serial #:_____

Personal Flotation Device with Strobe Light and Battery? Y N

First Aid Materials: p. 26

Location(s):_____

Who is designated to perform CPR/First Aid on board?

_____

Communication Equipment: p. 22-23

How many SSB and VHF radios?: _____ / _____

Are emergency call instructions posted? Y N

Were procedures for making an emergency call discussed? Y N

List any additional communication systems onboard (satellite phone, inReach, DSC, etc.)_____

_____

_____

Station Bill: p. 24

Did you review the information on the Station Bill? Y N

Describe your duties outlined in the station bill:

_____

_____

_____

_____

Emergency Drills and Date(s) Conducted: p. 25

(Document only drills you personally witnessed)

Fire_____

Abandon Ship _____

Man Overboard _____

Vessel flooding/stabilization _____

General alarm activation _____

Donning immersion suits _____

Radio/visual distress signals _____

Were the drills hands-on involving actual gear? Y N

Did you participate in the drills? Y N

Abandon Ship Plan:

From your muster station, how will you get to and board survival craft? _____

_____

_____

_____

Comments (All "N" responses require a comment):

_____

_____

Observer Name: _____ Cruise #: _____

Observer Signature: _____ Date: _____

Captain Name: _____

Blue indicates "no go" items!

Transport Vessel Safety Profile

Use this page if you are boarding a vessel that is providing you with transportation to or from your vessel. This vessel has volunteered to transport you and it is not subject to observer coverage safety regulations. Regardless, your safety is your number one priority and the final decision to utilize this mode of transportation is yours. This page is intended to help you identify and familiarize yourself with safety equipment and emergency procedures while you are aboard this vessel. Always exercise your best judgment and follow the 7 Steps to Survival to evaluate every situation that may arise on a vessel to ensure the proper emergency response.

TRANSPORT PLAN

Transport Vessel Name _____ Vessel Type_____

Duration _____min hrs Distance _____m km Can you see your destination? Y N

From_____ To _____

Departure Time: _____ Estimated Time of Arrival:_____ Date _____

Are your contractor and the A-SHOP aware of your Transport Plan? _____

Trip and Weather Conditions

Assess the following to help you determine if it is appropriate to embark on this vessel. ***Do not embark*** a transport vessel in rough seas, inclement weather, at night, or any other conditions that you feel are unsafe.

Beaufort scale _____ Meters of Visibility _____ Weather (circle): Clear Cloudy Rain Fog

Safety on Board

Identify the following safety equipment to evaluate if it is appropriate based on your Trip and Weather Condition observations. We recommend that you not embark on a transport vessel that is not equipped with the safety equipment that will provide a sufficient inventory to address an emergency.

• PFDs • Immersion Suits • Survival Crafts • EPIRB/PLB • Fire Extinguishers

• Signals (general alarm, radios, distress signals) • Throwable Flotation Devices • First Aid

Additional Safety Procedures

• Safety Orientation: Request a safety orientation from the master of the vessel or crew member.

• Station Bill: If available, familiarize yourself with it and recognize your potential role in an emergency.

• Develop a plan of action for how you will respond to a fire, flood, MOB, or an abandon ship emergency.

• If the vessel is equipped with a survival craft , identify the muster station and where you would board the craft in an emergency.

• Look for watertight doors and if you see them open while underway, inform a crew member and ask if it should be closed.

• Look at the general vessel conditions; does the vessel appear to be in a condition appropriate for the trip? Consider all observations listed above.

• If you are being transported on a commercial fishing vessel, refer to your Safety Checklist and the USCG Federal Requirements for Commercial Fishing Industry Vessels Pamphlet provided in briefing/training for additional information.

If you embark on additional transport vessel trips, please record transport plans on the following page.

TRANSPORT PLAN

Transport Vessel Name _____ Vessel Type_____

Duration _____min hrs Distance _____m km Can you see your destination? Y N

From_____ To _____

Departure Time: _____ Estimated Time of Arrival:_____ Date _____

Are your contractor and the A-SHOP aware of your Transport Plan? _____

Beaufort scale _____ Meters of Visibility _____ Weather (circle): Clear Cloudy Rain Fog

TRANSPORT PLAN

Transport Vessel Name _____ Vessel Type_____

Duration _____min hrs Distance _____m km Can you see your destination? Y N

From_____ To _____

Departure Time: _____ Estimated Time of Arrival:_____ Date _____

Are your contractor and the A-SHOP aware of your Transport Plan? _____

Beaufort scale _____ Meters of Visibility _____ Weather (circle): Clear Cloudy Rain Fog

TRANSPORT PLAN

Transport Vessel Name _____ Vessel Type_____

Duration _____min hrs Distance _____m km Can you see your destination? Y N

From_____ To _____

Departure Time: _____ Estimated Time of Arrival:_____ Date _____

Are your contractor and the A-SHOP aware of your Transport Plan? _____

Beaufort scale _____ Meters of Visibility _____ Weather (circle): Clear Cloudy Rain Fog

TRANSPORT PLAN

Transport Vessel Name _____ Vessel Type_____

Duration _____min hrs Distance _____m km Can you see your destination? Y N

From_____ To _____

Departure Time: _____ Estimated Time of Arrival:_____ Date _____

Are your contractor and the A-SHOP aware of your Transport Plan? _____

Beaufort scale _____ Meters of Visibility _____ Weather (circle): Clear Cloudy Rain Fog

MAY 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

JUNE 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

JULY 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

AUGUST 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

SEPTEMBER 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

OCTOBER 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

NOVEMBER 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

DECEMBER 2023						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

JUNE 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

JULY 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

AUGUST 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

SEPTEMBER 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

OCTOBER 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

NOVEMBER 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

DECEMBER 2024						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

MARPOL Reporting

Discharge of all garbage, most importantly all forms of plastic, is prohibited into the navigable waters of the United States and into all other waters except as specifically allowed below:

- Within 3 nautical miles of land - discharge of all garbage is prohibited.
- 3-12 nautical miles from land - ground food waste that is able to pass through a screen with openings no larger than 1 inch is permitted.
- 12 or more nautical miles from land - food waste, wash water, cargo residues and cleaning agents not harmful to the marine environment are permitted.

Form Instructions:

- Complete a form whenever you observer the dumping of plastics, discharge of oil or other petroleum product, or dumping of any prohibited materials by the vessel.
- Be as descriptive as possible. Make sure to record the date, location, and type of violation.
- Definitions of descriptions of oil or petroleum product discharge:

  Sheen - A very thin layer of oil floating on the water surface. Sheen is the most commonly observed form of oil during the later states of a spill. Depending on the thickness, sheens range in color from dull brown for the thickest sheens to rainbows, grays, silvers, and near-transparency in the case of the thinnest sheens.

  Sludge - Usually refers to oil that has mixed with other oils or other natural materials that it picks up as it floats along. Sludge is usually seen with heavier oils and creates a substance that is thick and gooey (think, sewer sludge).

  Emulsion - The formation of a water-in-oil mixture. Different oils exhibit different tendencies to emulsify, and emulsification is more likely to occur under high energy conditions (strong winds and waves). An emulsified mixture of water in oil is commonly called a “mousse;” it’s presence indicates a spill that has been on the water for some time. An emulsion can range in color from dark brown to nearly red or tan, and typically has a thickened or pudding-like consistency compared with fresh oil.

  Discoloration - Oil that causes a discoloration to the water. Thicker oils in cold weather will tend to stick together on the water and not create a “sheen” readily. The oil creates a distinct patch on the water. Also, some heavier oils tend to sink below the surface and become suspended in the water column, causing dark colored patches under the surface of the water.

- If the oil spill that you observe does not fit any of these descriptions, then use your own descriptive terms to define what you see. It is more important to report an accurate description of the spill than to make the spill fit into one of these four categories.
- If you need to make more room you may use the back of the form or your logbook pages. Make sure to reference the page number of the logbook on the form.
- Copies can be made of the forms.

Report of Marine Pollution from Commercial Fishing Vessels

At a minimum, provide information for the fields that are underlined.

General Information

Name of vessel	**Permit Number**	**Name of Vessel Captain**
Date of Incident	**Location (Lat/Long) of incident**	**Name of NMFS Observer**

Type of Discharge

Oil/Petroleum Product: *Be as specific as possible, use the comments box to explain circumstances, attach extra pages, or write on the back of this form, if necessary.*				
What did the discharge look like? Circle one and describe below	Sheen	Sludge	Emulsion	Discoloration
Size of Sheen (ft X ft)			Amount if known (gallons):	
Type of Oil: Circle One	Diesel	Lube Oil	Hydraulic Oil	Other (explain)
Source of Oil? Please explain. i.e. broken hydraulic line, engine leak, etc.				
Path of Discharge: Explain route of discharge from origin to water, i.e. Bilge pump, scupper etc.				

Plastics: *Be as specific as possible, use the comments box to explain circumstances, attach extra pages, or write on the back of this form, if necessary. Any plastic discharge is a violation*
Type and amount of Plastic: i.e. 20 ft hose, 3 trash bags, one set of rain gear etc.

HAZMAT: *Some chemicals can be discharged if below a certain amount (reportable quantity). For our purposes, report anything that seems wrong to you. Be as specific as possible.*
Type of HAZMAT: Provide chemical name. i.e. ammonia leak, Ask skipper, engineer if necessary.
Amount: Either in gallons if liquid or pounds if a solid. Estimate when necessary.

Comments: Use reverse side if necessary.

Vessel Diagram Instructions

Diagrams are useful documentation in every debriefing and many observer statements. They do not have to look like they were drawn by an architect, but they should include the following basic features. Use different colors of ink, if its helpful to demonstrate features.

Orientation: Label the sides and ends for your diagram as appropriate to indicate port and starboard, bow and stern, overhead and deck.

Dimensions: Label each dimension using standard abbreviations (ft, m, cm, etc.).

Features: Label each feature carefully. Draw lines or arrows from each label to the feature it describes, or write the label on the feature if there is enough room. You can use keys to label repeated features (such as locations of factory workers) but make them clear and distinct.

Use the Sampling Area Diagram Features Checklist to ensure you include the following features:

- flow of fish
- sample collection location
- incline belts
- diverter board
- flow scale and flow scale readout
- MCP
- sample table
- hose location
- discard / fish meal chutes

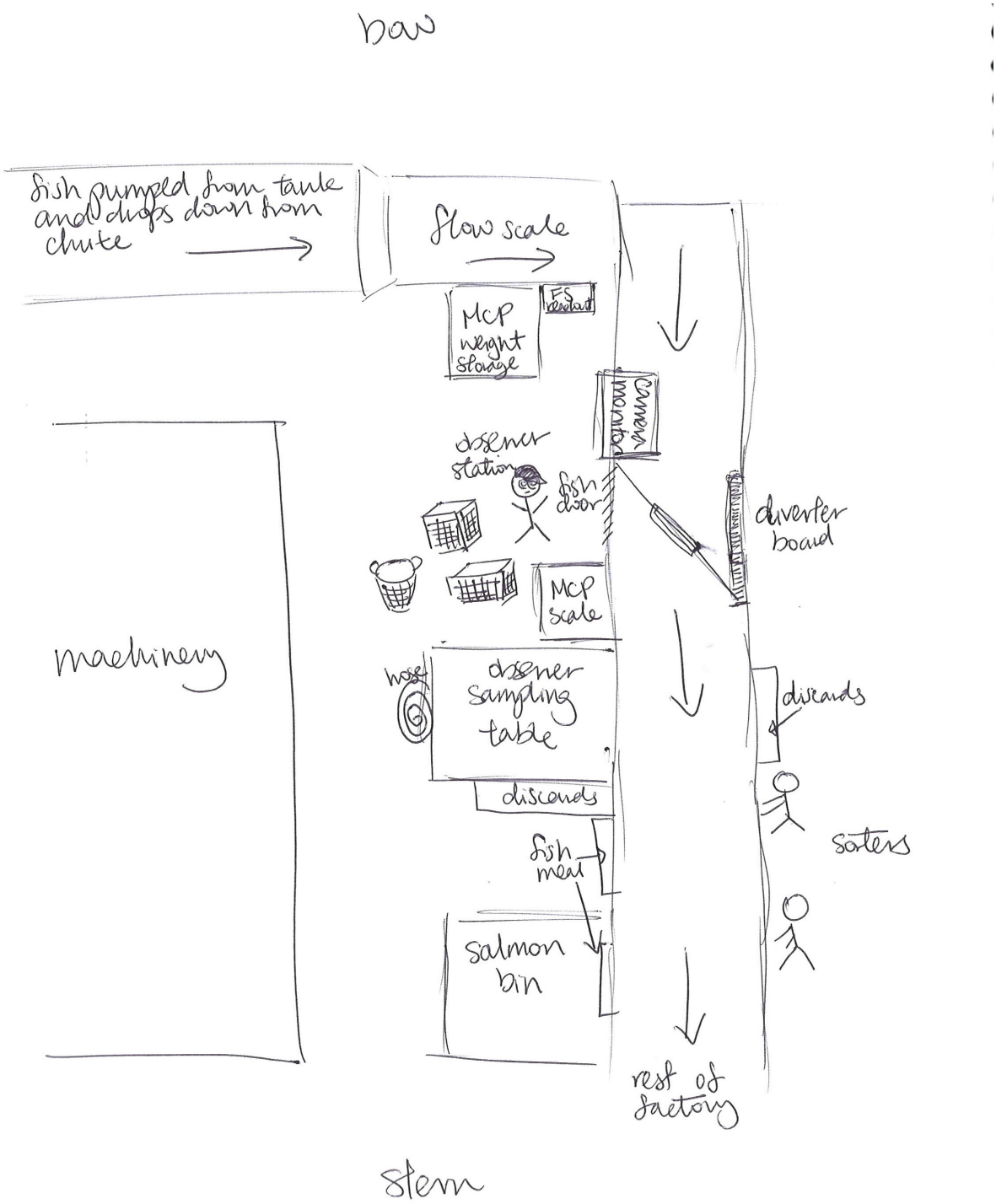
It is acceptable to use the vessel's diagram but all of the above features need to be shown.

If applicable, you should draw diagrams of areas in which you witnessed violations.

Diagrams of Sampling Area

Vessel Name Example of Trawl Factory Layout

Sampling Area Diagram Features Checklist					
X	orientation	X	diverter board	X	sample table
X	flow of fish	X	flow scale	X	hose location
X	sample collection location	X	flow scale readout	X	discard / fish meal chutes
X	incline belts	X	MCP		hydraulic shut-off



Diagrams of Sampling Area

Vessel Name_____

Sampling Area Diagram Features Checklist					
	orientation		diverter board		sample table
	flow of fish		flow scale		hose location
	sample collection location		flow scale readout		discard / fish meal chutes
	incline belts		MCP		hydraulic shut-off

Diagrams of Sampling Area

Vessel Name_____

Sampling Area Diagram Features Checklist					
	orientation		diverter board		sample table
	flow of fish		flow scale		hose location
	sample collection location		flow scale readout		discard / fish meal chutes
	incline belts		MCP		hydraulic shut-off

Diagrams of Sampling Area

Vessel Name_____

Sampling Area Diagram Features Checklist					
	orientation		diverter board		sample table
	flow of fish		flow scale		hose location
	sample collection location		flow scale readout		discard / fish meal chutes
	incline belts		MCP		hydraulic shut-off

Sample Station Inspections and Inspection Reports

Vessels required by regulation to have an observer sampling station or motion compensated platform scale must have those items certified. Observer sampling stations are certified by Fisheries Analysis and Monitoring Division (FMA) staff and motion compensated platform scales are certified by NMFS Regional Office staff. Certification is good for one year from the date the observer sampling station or motion compensated scale was approved.

Observer Sampling Station Certification Verification

Request an Observer Sampling Station Inspection Report from the vessel. A faxed copy and original inspection report was sent to each vessel's home office following certification and the vessel should be able to obtain a copy. Notify your inseason advisor if the vessel does not have a copy onboard. Document any discrepancies between the inspection report and your verification on the Observer Sample Station Verification Checklist.

Before you complete your inspection of the sampling station to verify that all requirements are met (table of acceptable area and height, adequate work space, etc.), make sure the station is completely set up. Many vessels store their motion compensated platform scales or disassemble the observer sampling station when switching between fisheries. If possible, test the platform scale before your vessel embarks to make sure it passes the daily test (see "Platform Scale Testing" in your NPOP manual). The scale should be turned on at least 1/2 hour prior to testing so it can warm up. If the scale is not warmed up the display weight may drift.

Sample Station Verification Checklist

Vessel Name: _____ **Permit Number:**_____

Date:_____

Physical Characteristics of Sampling Station - Factory Vessels			
Item	**Requirement**	**Complies?**	**Inspector Comments**
Sample Station Location *If Sample Collection Area is Within Sample Station, Record as: 0.0.*	**Trawlers/Motherships** - within 4.0 m of unsorted Sample Collection Area. From Sample Collection Area, observer must be able to see that no fish have been removed between the live bin and flow scale.	YES NO	Distance of Sample Station to Sample Collection Area: Location of Sample Collection Area:
Unobstructed Passage	Passageways between Sample Station and Collection Area must be at least 65 cm wide at the narrowest point. In these areas the Ceiling Height must be at least 1.8 m from the lowest point on the ceiling. No tripping hazards exist between Sample Station and Collection Area.	YES NO	Passage Width(s): Minimum Ceiling Height: Obstructions:
Minimum Work Space	Sample Station Work Area is at least 4.5 square meters, including sampling table (multiple area measurements may be necessary). Has a work area at least 0.9 m deep in front of the table and MCP scale. *Please show all calculations; use additional space if needed.*	YES NO	Length(s): Width(s): Total Work Area: Depth in Front of Table and MCP Scale: Unusable Space:
Accessible Belt Space	1.0 m or more of accessible belt space, downstream of flow scale, must be available for observer use in sample collections of all sizes.	YES NO	Length of Belt Space:

Item	Requirement	Complies?	Inspector Comments
Diverter Board	Conveyor belt carrying unsorted catch must have a removable (from flow of fish) and functional board to divert fish into observer baskets.	YES NO	Description of Diverter Board:
Table	At least 0.6 m deep x 1.2 m wide x 0.9 m high and not more than 1.1 m high. Table must be secured to floor or wall. (Area for MCP scale is not included in this space).	YES NO	Length: Width: Height:
Observer Sampling Scale (MCP Scale)	Electronic motion-compensated platform scale with capacity of at least 50 kg is within 1.0 m of sampling table with weighing surface no greater than 0.7 m above flooring (scale need not be present at inspection).	YES NO	Distance from MCP Scale to Table: Scale Height (Estimate if Scale Absent):
Flow Scale Display	Flow scale display is readable from where observer collects unsorted samples.	YES NO	Display Location:
Flooring	Grating, or other non-slip material that drains well, located throughout Sample Station, and Collection Areas exposed to wind and seas.	YES NO	Type: Condition:
Lighting	Lighting adequate to allow observer to collect samples during day or night.	YES NO	Type: Number of Lights:
Hose	Hose supplying fresh or salt water to the observer at the Sample Station.	YES NO	Type: Location:
Sample Sizes	Sample Station and Collection Area configuration allows observer to weigh large samples.	YES NO	

Additional Comments/Calculations:

Sample Station Verification Checklist

Vessel Name: _____ **Permit Number:**_____

Date:_____

Physical Characteristics of Sampling Station - Factory Vessels			
Item	**Requirement**	**Complies?**	**Inspector Comments**
Sample Station Location *If Sample Collection Area is Within Sample Station, Record as: 0.0.*	**Trawlers/Motherships** - within 4.0 m of unsorted Sample Collection Area. From Sample Collection Area, observer must be able to see that no fish have been removed between the live bin and flow scale.	YES NO	Distance of Sample Station to Sample Collection Area: Location of Sample Collection Area:
Unobstructed Passage	Passageways between Sample Station and Collection Area must be at least 65 cm wide at the narrowest point. In these areas the Ceiling Height must be at least 1.8 m from the lowest point on the ceiling. No tripping hazards exist between Sample Station and Collection Area.	YES NO	Passage Width(s): Minimum Ceiling Height: Obstructions:
Minimum Work Space	Sample Station Work Area is at least 4.5 square meters, including sampling table (multiple area measurements may be necessary). Has a work area at least 0.9 m deep in front of the table and MCP scale. *Please show all calculations; use additional space if needed.*	YES NO	Length(s): Width(s): Total Work Area: Depth in Front of Table and MCP Scale: Unusable Space:
Accessible Belt Space	1.0 m or more of accessible belt space, downstream of flow scale, must be available for observer use in sample collections of all sizes.	YES NO	Length of Belt Space:

Item	Requirement	Complies?	Inspector Comments
Diverter Board	Conveyor belt carrying unsorted catch must have a removable (from flow of fish) and functional board to divert fish into observer baskets.	YES NO	Description of Diverter Board:
Table	At least 0.6 m deep x 1.2 m wide x 0.9 m high and not more than 1.1 m high. Table must be secured to floor or wall. (Area for MCP scale is not included in this space).	YES NO	Length: Width: Height:
Observer Sampling Scale (MCP Scale)	Electronic motion-compensated platform scale with capacity of at least 50 kg is within 1.0 m of sampling table with weighing surface no greater than 0.7 m above flooring (scale need not be present at inspection).	YES NO	Distance from MCP Scale to Table: Scale Height (Estimate if Scale Absent):
Flow Scale Display	Flow scale display is readable from where observer collects unsorted samples.	YES NO	Display Location:
Flooring	Grating, or other non-slip material that drains well, located throughout Sample Station and Collection Areas exposed to wind and seas.	YES NO	Type: Condition:
Lighting	Lighting adequate to allow observer to collect samples during day or night.	YES NO	Type: Number of Lights:
Hose	Hose supplying fresh or salt water to the observer at the Sample Station.	YES NO	Type: Location:
Sample Sizes	Sample Station and Collection Area configuration allows observer to weigh large samples.	YES NO	

Additional Comments/Calculations:

Gear Verification Details

Vessel Name: _____

Vessel type: Catcher-processor Mothership

Where does the vessel record haul and catch information:

_____

_____

_____

If on a mothership, how are catcher vessel discards being recorded?

_____

_____

_____

Are you verifying deployment / retrieval times and positions? Yes No

If yes, how are you verifying positions?

_____

_____

_____

How often are you verifying haul data?

_____

_____

What is the captain's definition of deployment / retrieval times and positions?

_____

_____

_____

If on a catcher-processor, does the vessel short-wire (or long-wire)? Yes No

If so, how do they record short-wiring (or long-wiring)?

_____

_____

_____

Gear Verification Details

Vessel Name: _____

Vessel type: Catcher-processor Mothership

Where does the vessel record haul and catch information:

_____

_____

_____

If on a mothership, how are catcher vessel discards being recorded?

_____

_____

_____

Are you verifying deployment / retrieval times and positions? Yes No

If yes, how are you verifying positions?

_____

_____

_____

How often are you verifying haul data?

_____

_____

What is the captain's definition of deployment / retrieval times and positions?

_____

_____

_____

If on a catcher-processor, does the vessel short-wire (or long-wire)? Yes No

If so, how do they record short-wiring (or long-wiring)?

_____

_____

_____

Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

Instructions:

1. Scale should be tested daily
2. Test scale at 10 kg, 25 kg, and 50 kg
3. Display must be accurate to +/- 0.5 percent

Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

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Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

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Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

Instructions:

1. Scale should be tested daily
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Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

Instructions:

1. Scale should be tested daily
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Daily Observer MCP Scale Test Log

Vessel Name				Observer Name		
		Display Weight				
Date	Time	10 kg (9.95 to 10.05 kg)	25 kg (24.88 to 25.13 kg)	50 kg (49.75 to 50.25kg)	Pass/Fail	Observer Initials

Instructions:

1. Scale should be tested daily
2. Test scale at 10 kg, 25 kg, and 50 kg
3. Display must be accurate to +/- 0.5 percent

Catcher-Processor Catch Estimate Calculations

mothership observers - use the Mothership Catch Estimate and Discard Calculations section

Use the pages in this section to document flowscale and total catch weight. Remember to add to the total flowscale value the weight of any items that were too large to go over the flowscale. If you run out of room in this section, continue your documentation in the Additional Calculations section of this logbook.

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)
EXAMPLE:			
1	56699 kgs	0	56699 kgs
2	45231 kgs	+150 kg (salmon shark)	45381 kgs
3	37362 kgs	0	37362kgs

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Vessel Name:_____

Haul #	Flowscale Stop Minus Start Equals Total Flowscale Weight (kgs)	Large Items not Weighed on Flow Scale (kgs)	Rounded Total Catch Estimate (kgs)

Mothership Catch Estimate and Discard Calculations

Use the pages in this section to document flowscale weight, the weight of any items that were too large to go over the flowscale, catcher vessel (CV) discards reported from the catcher vessel, and mothership (MS) discards calculated from your samples. Use these values to calculate Estimated Discard Weight and Observer Catch Estimate. Also, calculate the percent of catch delivered for hauls with CV discards. If the percent of catch delivered is < 100%, you will need to adjust the percent retained for all species from that haul on your decksheets and in ATLAS. If you run out of room in this section, continue your documentation in the Additional Calculations section of this logbook.

Mothership Vessel Name _____

							record on OHF	**record on OHF**	
Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**Estimated Discard Weight (kg) = [D] + [E]**	**Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	
EXAMPLE:									
1	Poseidon	37814 kg	37814 kg	1500 lb	680 kg	115 kg	795 kg	38494 kg	98%
2	Siren's Call	39251 kg	39251 kg	---	---	89 kg	89 kg	39251 kg	100%
3	Sea Witch	44281 kg +100 kg salmon shark	44381 kg	500 lb	227 kg	267 kg	494 kg	44608 kg	99%

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
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Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
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Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Mothership Vessel Name _____

Haul #	Catcher Vessel Name	Flowscale End - Start = Flowscale Weight (kg)	[A] + Large Items Not Weighed on Flowscale (kg)	CV discard estimate (lb)	CV discards (kg) = [C] x 0.4536 kg/lb	MS discards <sample + pre-sort> (kg)	**record on OHF** **Estimated Discard Weight (kg) = [D] + [E]**	**record on OHF** **Observer Catch Estimate (kg) = [B] + [D]**	% of catch delivered = ([B] / [F]) x 100
		[A]	**[B]**	**[C]**	**[D]**	**[E]**		**[F]**	

Additional Calculations

Use the following blank pages to document calculations, including derivation of calculations of percent retained and discard, and calculations of total catch weights. Please strive to be consistent and neat with your documentation.

Vessel Name _____

Vessel Name _____

Vessel Name _____

Vessel Name _____

Vessel Name _____

Vessel Name _____

Sample Design Detail Instructions

Sampling design descriptions must be documented! Complete a Sample Design Description form each time you change vessels or significantly alter your sampling approach. Consider your sampling options based upon species diversity, storage space, and vessel assistance. **Document both typical (low) bycatch and high bycatch sample designs.**

ALL ENTRIES MUST BE MADE IN INK!

For each vessel you must describe:

- the flow of fish, detailing any biasing factors
- the population from which you are sampling
- the sample methods used
- how samples are selected
- any factors that impact your ability to sample randomly

Sample Design EXAMPLE:

Vessel Name: _____*McHakester*_____

How do fish flow from the codend to the point where you collect your sample?

Fish are emptied from codend over the excluder bars into the bins. They flow from the bins up the incline belt, over the flowscale, onto the sorting belt where I collect my samples, then to the size-sorting bins in the factory.

Species Composition Samples

What is the population of fish from which you are sampling? *All fish in the codend; hauls have been clean 30-60 MT hauls.*

How are you generating random numbers?_____*NMFS issued random number table (RNT)*_____

How are you accounting for potential incline belt bias (e.g. live tank doors closed before and after sample)?

For all species comp samples, I have the bleeder close the live tank doors and run out all the fish on the belts after the doors at the beginning and end of each sample.

What factors affected the collection of your random sample (e.g. sorting, limited access)? *For especially dirty hauls, I am limited by how much bycatch can be stored. The excluder bars are preventing large organisms from entering the tanks. I watch the bag dump when not sampling and asked the deck crew to notify me so I can know when a large item has been kept from going into the tanks because of the excluder bars.*

Describe each element of your sample design:

Typical (low bycatch) haul:

How are you randomly selecting your sample(s) from the population? *I divide the hail weight in half and refer to the list of pre-chosen halves we generated using the RNT to determine which half to sample.*

What units are you using? *I have been using a spatial frame by dividing the estimated haul weight into 2 equal units (typically 15-35 MT), depending on the size of the bag.*

What is your sampling method? *I remove all bycatch from the sorting belt and weigh it on the MCP. The hauls have been pretty clean, so there is little problem collecting large sample sizes.*

Subsampling for two predominant species:

How are you randomly selecting your sample(s) and subsample(s) from the population? *I will use a spatial sample frame by dividing the sample unit into subsample units of equal size. I use the RNT to randomly select which units will be subsampled.*

What units are you using? *I will employ the 'flowscale is my friend' method using 1 MT units. If the 2nd predominant species is closer to 50% of the catch, I will use baskets to try to get ~200kg for each subsample.*

What is your sampling method? *I will divide the sample into 3 equal units and randomly choose a start point in the first unit, sampling systematically throughout the rest of the sample (e.g. haul is 30MT with some dogfish, randomly chose 1st half to sample, broke sample into 3 units of 5MT, used RNT to pick #3, first subsample at 3MT, second subsample at 8MT, third subsample at 13MT). Size of subsamples will either be ~200kg or ~1MT (using flowscale), depending on size and prevalence of second predominant species.*

High bycatch haul:

How are you randomly selecting your sample(s) from the population? *I divide the haul into equal-sized units based on how much I think I can sample at one time. Then I use a random-systematic sample frame to choose when to sample. Smaller sample sizes are employed for dirtier hauls*

What units are you using? *I have been using a spatial frame by dividing the haul into equal sized units. Unit size depends upon how much bycatch is seen. Smaller sample sizes are employed for dirtier hauls*

What is your sampling method? *If species of concern present, I will get help and try to maintain 50% sample size. If no help given or overwhelmed with bycatch, I will systematically sample throughout the entire haul (e.g. 40MT haul: sample 2 MT with help, take 8 MT off to work up sample, repeat).*

Did you census for species composition? Y (N)

Average Weights:

What is your method for collecting hake average weights?

Using the RNT, I randomly select a ton within my sample. When the flowscale hits my randomly chosen ton, I open the diverter board and run ~50 hake into a tared basket, tossing any bycatch into my sample baskets. I weigh the basket on the MCP, then count the hake for average weight. When there are two predominant species, I randomly select one of my subsamples from which to collect the average weight sample

What is your method for collecting average weights for abundant non-hake species?

After my species comp sample, I use the RNT to randomly select a basket of ~50 fish to count and weigh for average weight. If the species is very abundant, I collect the next ~50 fish of that species right after the hake average weight is collected, and set them aside for average weight.

Sex/Length Samples:

For HAKE:

What is the population of fish from which you are sampling? *All the fish in my average weight sample .*

How are you generating random numbers? *NMFS issued random number table*

How are you randomly selecting your sample(s) from the population? *I use my randomly collected hake average weight sample.*

What is your sampling method? *I basket dump to split the average weight sample to about 15 fish.*

For NON-HAKE SPECIES:

What is the population of fish from which you are sampling? *All the fish in my sample (bycatch).*

How are you randomly selecting your sample(s) from the population? *When there are only a few individuals of a species, I take sex/lengths from all of that species in my species comp sample*

What is your sampling method? *I set aside all the individuals of certain species from my species comp sample to take sex/lengths*

Which species? *Spiny dogfish, bocaccio, darkblotched, POP, canary*

If you use more than one method for selecting non-hake sex/lengths, describe them below.

How are you randomly selecting your sample(s) from the population? *When there are more individuals of a species than is indicated on the priority list, I choose a random basket from my species comp sample to take sex/lengths*

What is your sampling method? *As I count and weigh my species comp sample, I set aside separated baskets of fish on the priority list . Then I choose a random basket take sex/lengths from.*

Which species? *Spiny dogfish, rougheye, widow, yellowtail*

How are you randomly selecting your sample(s) from the population? *When there are a lot of a particular species in a haul, I choose a random point in the sample and set aside the next ~20 individuals of that species to take sex/lengths from. .*

What is your sampling method? *I set aside the next ~20 individuals of that species right after my hake average weight sample.*

Which species? *Spiny dogfish, yellowtail*

What factors affected the collection of your random sample (e.g. sorting, limited access)? *There were a couple of hauls where crew members got over-enthusiastic about homepacks but after I spoke to the factory manager, they have been staying out of my sample area until I'm done.*

Biopecimen Samples (ages, genetics, etc.):

What is the population of fish from which you are sampling? *All the fish in my sex/length samples.*

How are you generating random numbers? *NMFS issued random number table*

How are you randomly selecting your sample(s) from the population? *My frame is spatial - fish are placed on my sample table and numbered sequentially.*

What is your sampling method? *I select the fish corresponding to the random numbers I have chosen from the RNT.*

What factors affected the collection of your random sample (e.g. sorting, limited access)? *This method is working great, with no problems to date.*

Sample Design Detail

Vessel Name: _____

How do fish flow from the codend to the point where you collect your sample?

_____

_____

_____

_____

Species Composition Samples

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you accounting for potential incline belt bias (e.g. live tank doors closed before and after sample)? __

_____

_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Describe each element of your sample design:

Typical (low bycatch) haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

_____

Subsampling for two predominant species:

How are you randomly selecting your sample(s) and subsample(s) from the population?_____

_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

High bycatch haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

_____

Did you census for species composition? Y N

Average Weights:

What is your method for collecting hake average weights?

_____

_____

What is your method for collecting average weights for abundant non-hake species?

_____

_____

_____

Sex/Length Samples:

For HAKE:

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

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_____

For NON-HAKE SPECIES:

What is the population of fish from which you are sampling?_____

_____

_____

How are you randomly selecting your sample(s) from the population? _____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

If you use more than one method for selecting non-hake sex/lengths, describe them below.

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

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_____

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Which species?_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Biopecimen Samples (ages, genetics, etc.):

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you randomly selecting your sample(s) from the population?_____

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_____

What is your sampling method?_____

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_____

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_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

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Sample Design Detail

Vessel Name: _____

How do fish flow from the codend to the point where you collect your sample?

_____

_____

_____

_____

Species Composition Samples

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you accounting for potential incline belt bias (e.g. live tank doors closed before and after sample)? __

_____

_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Describe each element of your sample design:

Typical (low bycatch) haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

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_____

_____

Subsampling for two predominant species:

How are you randomly selecting your sample(s) and subsample(s) from the population?_____

_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

High bycatch haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

_____

Did you census for species composition? Y N

Average Weights:

What is your method for collecting hake average weights?

_____

_____

What is your method for collecting average weights for abundant non-hake species?

_____

_____

_____

Sex/Length Samples:

For HAKE:

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

_____

_____

_____

_____

For NON-HAKE SPECIES:

What is the population of fish from which you are sampling?_____

_____

_____

How are you randomly selecting your sample(s) from the population? _____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

If you use more than one method for selecting non-hake sex/lengths, describe them below.

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Biopecimen Samples (ages, genetics, etc.):

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

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_____

How are you randomly selecting your sample(s) from the population?_____

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What is your sampling method?_____

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What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Sample Design Detail

Vessel Name: _____

How do fish flow from the codend to the point where you collect your sample?

_____

_____

_____

_____

Species Composition Samples

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you accounting for potential incline belt bias (e.g. live tank doors closed before and after sample)? __

_____

_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Describe each element of your sample design:

Typical (low bycatch) haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

_____

Subsampling for two predominant species:

How are you randomly selecting your sample(s) and subsample(s) from the population?_____

_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

High bycatch haul:

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What units are you using? _____

_____

What is your sampling method?_____

_____

_____

_____

_____

Did you census for species composition? Y N

Average Weights:

What is your method for collecting hake average weights?

_____

_____

What is your method for collecting average weights for abundant non-hake species?

_____

_____

_____

Sex/Length Samples:

For HAKE:

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

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For NON-HAKE SPECIES:

What is the population of fish from which you are sampling?_____

_____

_____

How are you randomly selecting your sample(s) from the population? _____

_____

_____

What is your sampling method?_____

_____

_____

_____

Which species?_____

If you use more than one method for selecting non-hake sex/lengths, describe them below.

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

_____

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_____

Which species?_____

How are you randomly selecting your sample(s) from the population?_____

_____

_____

What is your sampling method?_____

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_____

_____

Which species?_____

What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Biopecimen Samples (ages, genetics, etc.):

What is the population of fish from which you are sampling? _____

_____

_____

How are you generating random numbers?_____

_____

_____

How are you randomly selecting your sample(s) from the population?_____

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What is your sampling method?_____

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What factors affected the collection of your random sample (e.g. sorting, limited access)? _____

_____

_____

_____

Sampling & Specimen Collection Record (optional)

Use these pages to:

- plan out sample halves and hake otolith hauls ahead of time
- keep track of physical collections - age-structures, whole fish, special project samples

Vessel Name:_____

Haul#	Pre-chosen sample half: (1st / 2nd)	Hake Otoliths Haul (Y / N)	Bycatch Age-Structures (list species)	Specimens (whole salmon, fish collection, special project samples)

Sampling & Specimen Collection Record (optional)

Vessel Name:_____

Haul#	Pre-chosen sample half: (1st / 2nd)	Hake Otoliths Haul (Y / N)	Bycatch Age-Structures (list species)	Specimens (whole salmon, fish collection, special project samples)

Sampling & Specimen Collection Record (optional)

Vessel Name:_____

Haul#	Pre-chosen sample half: (1st / 2nd)	Hake Otoliths Haul (Y / N)	Bycatch Age-Structures (list species)	Specimens (whole salmon, fish collection, special project samples)

Sampling & Specimen Collection Record (optional)

Vessel Name:_____

Haul#	Pre-chosen sample half: (1st / 2nd)	Hake Otoliths Haul (Y / N)	Bycatch Age-Structures (list species)	Specimens (whole salmon, fish collection, special project samples)

Daily Notes

Use the following pages to record the day to day events that occur throughout your deployment. Your entries should start on the day you are first deployed and end after you leave your assignment to debrief.

The importance of documentation cannot be stressed enough. Recording each incident is preferable to trying to reconstruct events from memory months later. Making timely entries enhances the overall quality of your data and will greatly ease your debriefing process by making your cruise self-explanatory.

All daily notes entries must be made in ink!

At the start of your deployment:

- Record embark date, time, and location.
- List key crew members (captain, factory manager, deck boss, etc.). *Tip:* Ask for a crew roster.
- Record information regarding the safety orientation and drills.
- Document plans regarding working with your observer partner (safety plan, shifts, data entry/checking, etc.)

Daily entries should be made at least once per day and include:

- date for every entry and times, if you make more than one entry per day
- information regarding your sampling efforts and data collection - include haul numbers and any problems you may have encountered
- specific notes on problems that occur while you are aboard the vessel
- any illnesses or injuries you suffer
- details regarding your safety orientation(s) and all safety drills
- sampling methods you choose for catch estimation, species composition sampling, length and specimen collections, halibut viability/injury assessments, as well as any other data collections completed
- non-fishing days and unassigned days, including days in town between fishing trips
- details regarding potential violations

At the end of your deployment:

- Record disembark date, time, and location.

Additional sampling information that should be included for each deployment:

- Detailed explanation on any missed hauls
- Detailed explanation of changes to your sampling (e.g. ran out of space to store bycatch)
- All sample designs attempted and all changes to a design

Enforcement issues / any type of potential violation

Your daily notes entries should also be used to record the circumstances surrounding any potential violations you witness including:

- interference with your duties
- harassment
- marine casualties
- mishandling of prohibited species
- harassing or harming marine mammals or seabirds
- MARPOL (marine pollution) concerns

These pages should be used to document any problems you encounter and the actions taken by you or vessel personnel. Document crew member's names, their position or title, dates, locations, and the details of the incident or conversation. Remember to include "who, what, when, where, and why."

If an event seems significant only in hindsight, record the details on the day on which you document it. Include the current date and the date of the event. For example, "May 19, 2021 - Three days ago, on May 16th at about 3:00 pm, I was on the bridge when..."

Document all marine casualties. Marine casualties are: Fire, Flooding, Man Overboard, Grounding, Loss of Power, Loss of Steering, Crew Injury Beyond Regular First Aid, Lack of Safety Drills, Refrigerant Leaks.

Include the following with each entry:

- Vessel location, date, and time
- Captain's name
- Where did the incident occur
- Cause of the event
- Injuries
- Action taken by the vessel
- Crew involved
- Was a MAYDAY issued?
- Did the general alarm sound?
- Vessels involved
- Resolution

Daily Notes Examples:

Beginning of deployment:

Vessel Name _____*McHakester*_____

5/17/21 - Boarded the vessel at 2140. I'll be acting as lead observer with Julia Pescada as second. Crew threw lines and began steaming to grounds at 2315. Prior to leaving the dock, I completed my vessel safety checklist and participated in a safety drill for abandon ship (including donning my immersion suit). All looks good safety equipment wise. I checked the ATLAS system on the observer computer and sent a message to my inseason advisor. Got full crew roster from purser Dan deMan to help with daily notes.

5/18/21 - Still enroute to fishing grounds. Asked captain Mike McFisher if I could put one of the boat's immersion suits under the stairs that exit from the factory to the deck, since that's the way I'll exit from sampling if there is an emergency. He agreed and had the purser get a suit for me from the bow locker. Julia and I checked it over to make sure the seams were all good and waxed the zipper before stashing it under the stairs.

5/19/21 - Brought up the first net (haul 1) just before midnight on 5/18. A large salmon shark was in it, too large to go into the live tank. I measured the fork and natural length and decided to try to cut it up to weigh on the MCP. Worked pretty well with a deckhand helping. I recorded it on my decksheet as a presorted sample with a count of 1 and the weights from all the pieces. In the wheelhouse, I summed the pieces to get a total weight for the shark and added that to the final flowscale weight to get my observer estimate and to the discard weight. I didn't see any other sharks in the haul. I sampled hauls 2, 3 (hake otolith haul) and 4, and details on my sample design are on page 74.

5/20/21 - Rough weather today. The crew tested the flowscale 3 times before it passed. Factory manager Jack Mackerel said the rough weather messed with the scale calibration. I sent an ATLAS message to let my inseason advisor know that the scale had to be re-tested twice.

Mid-deployment example 1:

6/1/21 - Received my mid-cruise questions this morning and sent answers off after I entered my data for the day.

6/2/21 - Went through otoliths we've collected thus far to make sure they're all correctly labeled with species and haul and bundled groups of hauls together in each species bag.

Mid-deployment example 2:

6/3/21 - All is pretty routine. Sampled hauls 91, 92, and 93. Got a yelloweye rockfish in haul 293 so I collected the whole specimen for training.

6/4/21 -Sampled hauls 96, 97, and 98. Seeing quite a bit of dogfish so I've been using large (1MT) subsamples, taken systematically throughout my sample. The bin operator Jorge Eglesias is pretty helpful about stopping the belts and helping lift baskets when I need it.

6/5/21 - When I went to my sampling station, I discovered someone had taken my clipboard with my Deck Forms and pencil out of my basket. I had to look around for it for awhile and it delayed my sampling start time by 20 minutes! It turns out one of the crew, Tom Foolery, was playing a joke on me. I talked to the captain about it and he assured me he would emphasize to the crew that they can't touch my sampling equipment. I will discuss this with my debriefer to see if I need to write a statement about this.

End of deployment:

6/12/21 - Steaming into port and I will be disembarking to go debrief. Let my contractor know that we are done and expected to hit the dock tomorrow afternoon. Used the Disembark Chekcklist to make sure we don't forget anything before we disembark. Julia and I checked our data one last time before archiving it. Sent a text message to A-SHOP to let them know we were done and would be at NMFS tomorrow afternoon to drop off specimens and data. Used the boat's pressure washer to wash my sampling gear so hopefully won't have to do too much cleaning back in the lab. I put a big note to myself on the door so that I remember to grab the fish and specimens from the freezer.

6/13/21 - Disembarked! Gonna grab an Uber to NMFS to drop off frozen fish and turn in data.

Vessel Name _____

Vessel Name _____

Vessel Name _____

Vessel Name _____

Vessel Name _____

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Vessel Name _____

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Northwest Fisheries Science Center
2725 Montlake Boulevard East
Seattle, WA 98112-2097

To Whom It May Concern:

The certified At-Sea Hake Observer bearing this letter has permission from NOAA Fisheries to collect fish and invertebrates, including species that the vessel is prohibited from retaining. These species include: Pacific halibut, Dungeness crab, and all salmonid species. All fish collected are for identification, verification, or teaching purposes for the at-sea hake briefing. Fish will be frozen whole, tagged and each bag or box labeled "observer specimen collection" and returned to the At-Sea Hake Observer Program, Seattle, Washington.

Any questions about this collection should be directed to the At-Sea Hake Observer Program: Vanessa Tuttle, (206) 860-3479 or Vanessa.Tuttle@noaa.gov. This authorization expires December 31, 2023.

Sincerely,

Jon T. McVeigh
Program Manager
At-Sea Hake Observer Program