

NOAA FISHERIES Office of Law

Sources of Information for Vessel Owners, Locations and Authorizations

SEAFDEC MCS Workshop

David Pearl, Supervisory Investigative Analyst September 2024

Sources of Vessel Ownership Data and Fishing Authorizations

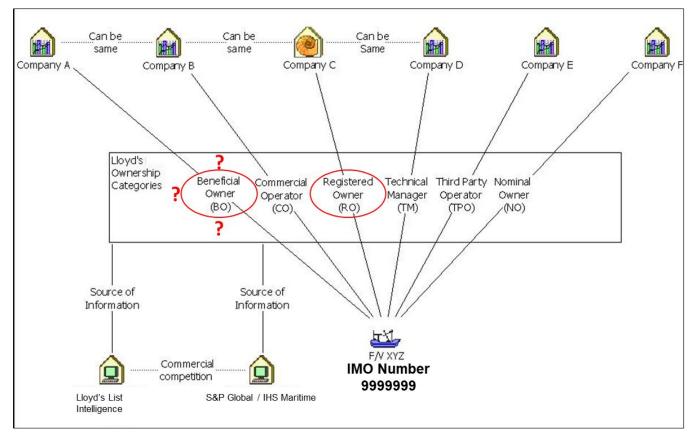
Beneficial Vessel Ownership

- No one single database/tool can reliably pinpoint a vessel's beneficial owner
- There are multiple databases and sources of information that can offer leads for investigators to pursue
- Each vessel is like a unique puzzle that requires thorough research to piece together to determine its beneficial ownership



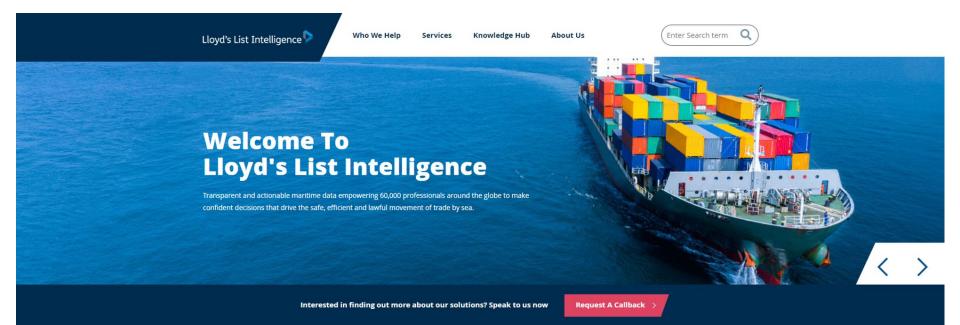


Vessel Ownership 101



Commercially available ownership information can be out of date and lack context but essential <u>first step for further inquiry</u> – System is ripe for liability cover-ups





https://www.lloydslistintelligence.com/



Lloyd's List Intelligence Ownership Definitions :

1) Beneficial Owner: deemed to be the ultimate owning entity or representative thereof (either individual, company, group or organization). The Beneficial Owner may be the vessel's management company or the trading name of a group, both of which are generally perceived to represent the ultimate owners of the vessel.

2) Commercial Operator: either a subsidiary or division of the Beneficial Owner or the same as the Beneficial Owner. This is the in-house entity responsible for the commercial decisions concerning the employment of a ship, and how and where the ship is employed. The Commercial Operator is the direct beneficiary of the revenues from operating the ship, and may also be the entity that is responsible for purchasing bunkers and port services. A company heading a group of Registered Owners is regarded as the Commercial Operator of those ships.

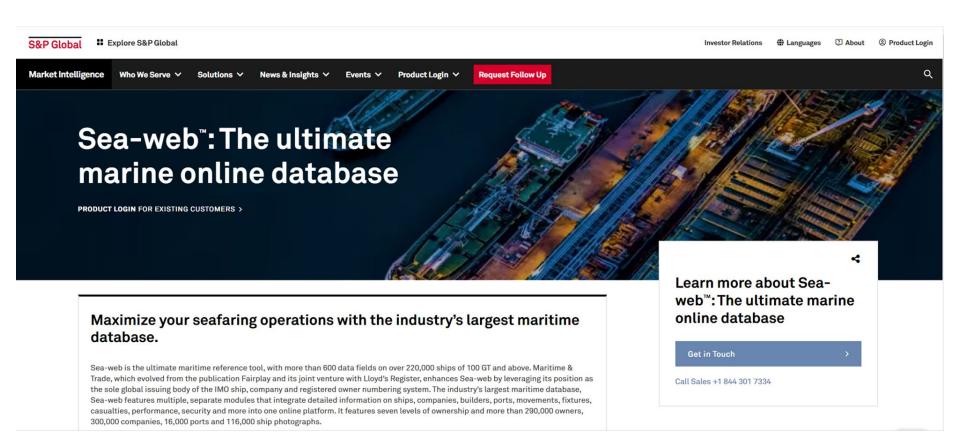
3) Registered Owner: the company or individual whom the ship's legal title of ownership has been registered. This is where "open registry", "paper", or "name-plate" companies are often involved, with ships being registered in a country whose tax on the profits of trading ships is low/absent or whose requirements concerning manning or maintenance might be more relaxed.

4) Technical Manager: the company responsible for the maintenance of the ship and the machinery, repairs, stores and spares, and - in many instances - crew. The Technical Manager can either be an in-house subsidiary or division of the Beneficial Owner, or a third party entity. It is often the case that the DOC Company is also the Technical Manager.

5) Third Party Operator: the company which undertakes control, management, operation or agency of a period chartered ship. The Third Party Operator includes period charters, pool operators, bareboat charters, and third party commercial managers. They have no known corporate relationship with the Beneficial Owner. Sometimes, however, pool companies are partly owned and/or managed by the beneficial owner of one or more vessels in their pool.

6) Nominal Owner: these are the finance organizations or mortgagees behind the purchase of a vessel such as banks or trust companies.





https://www.spglobal.com/marketintelligence/en/mi/products/sea-web-maritime-reference.html



S&P Global/IHS Maritime Ownership Definitions

IHS Maritime identifies the following roles in respect to a vessel's Ownership/Management. It should be noted that the same company may perform more than one role on a ship.

Document of Compliance (DOC) Company - The owner of the ship or any other organization or person such as the manager or bareboat charterer who has assumed the responsibility for the technical operation of the ship from the owner of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibilities imposed by the ISM Code.

A documented company on both DOC and SMC Certificates issued by flag Administrations; but the information for which is also available from the Responsible Organizations, such as Classification Societies, who may undertake the audits. In most cases the DOC Company will be responsible for the Technical Management of the ship.

Registered Owner - The legal title of ownership of the vessel that appears on the ship's registration documents. It may be an Owner/Manager or a wholly-owned subsidiary in a larger shipping group; or a bank or one-ship company vehicle set up by the bank, or of course, it may be a "brass-plate" company created on paper to legally own a ship and possibly to limit liability for the "real" owners and/or benefit from offshore tax laws. It may anyway be a legal-requirement of the flag-state with whom the ship is registered for the legal owner to be a company registered in that country.

Commercial Manager - The company designated by the shipowner or charterer to be responsible for the day to day commercial running of the ship and the best contact for the ship regarding commercial matters. Including post fixture responsibilities, such as laytime, demurrage, insurance and charter clauses. This company may be an owner related company, or a third-party manager, whose purpose is primarily the management of ships for their ship-owning clients.

In some circumstances a ship may be owned by a financial organization who has no operational involvement whatever. The lessee company, or one of its subsidiary companies, may be deemed to be the commercial manager of the ship.

Technical Manager - The company designated by the ship owner or operator or ship manager to be specifically responsible for the technical operation and technical superintendency of a ship. This company may also be responsible for purchases regarding the fleet, such as repairs, spares, re-engining, surveys, dry-docking, etc.

In the majority of cases the DOC Company will also be responsible for the Technical Management of the ship.

Commercial Operator - The company responsible for the commercial decisions concerning the employment of a ship and therefore who decides how and where that asset is employed. The direct beneficiary of the profits from the operations of the ship, this company may also be responsible for purchasing decisions on bunkers and port services. A medium to long-term time charterer is considered to be the commercial operator of the ship while a medium to long-term bareboat charterer may sometimes be considered to be the commercial operator of the ship. Companies heading operator pools are the commercial operators of the ships in the pool. In Shipping Circles the Commercial Operator may often be referred to as the Disponent Owner of the ship.

- In the absence of an authoritative source for the Operator of the ship, the Commercial Ship Manager will be used as a default until the identity of the Operator is substantiated.

Bareboat/Demise Charterer – The company identified on the charter-party who charters the ship on a bareboat or demise charter. In this the charterer assumes control over all operations, costs and responsibilities associated with the vessel for an agreed period of time. The charterer becomes or appoints the managers and may also have the right to sub-charter the vessel. In Time Charter Party agreements, the charterer may only assume responsibility for operations, routing and cargo, while technical, crewing etc. remain with the owner. In some circumstances, the Bareboat/Demise Charterer may be referred to as the Disponent Owner of the ship.

It is increasingly common for ships to be in parallel registry during the period of a bareboat charter. In this case, the ship is transferred by the bareboat charterer to a new operational flag, while the ownership of the ship (Registered Owner) continues under the original Registry. None of the legal or financial responsibilities of the Registered Owner are transferred to the bareboat charterer during the period of charter.

- In Demise Charter agreements, if negotiated at the beginning of charter agreement, the charterer may have the option to purchase the vessel at the end of the charter period.

Group Beneficial Owner This is the parent company of the Registered Owner. It is the controlling interest behind its fleet and the ultimate beneficiary from the ownership. A Group Beneficial Owner may or may not directly own ships itself as a Registered Owner. It may be the Manager of its fleet, which is in turn owned by subsidiary companies. Its ships may also be managed by a 3rd party under contract.

In some circumstances a ship may be owned by a financial organization who has no operational involvement whatever. In Shipping Circles, the lessee company, which may also sometimes be referred to as the Disponent Owner, can also be the Group Beneficial Owner, Commercial Manager or Commercial Operator of the ship.

Group Operated Fleet – For companies identified as Group Beneficial Owners, IHS Maritime can identify the total operational fleet. This Group Operated Fleet includes all the ships in the fleet operated by the group, including both their owned vessels and chartered in ships.





REQUEST FOR IMO SHIP IDENTIFICATION NUMBER

HS Maritime & Trade Sentinel House, 163 Brighton Road Coulsdon, Surrey CR5 2YH United Kingdom Tel: +44 01334 328300 Email: ship.imo@ihs.com

TO ENABLE UNIQUE IDENTIFICATION OF SHIPS FOR ASSIGNMENT OF AN IMO NUMBER IN ACCORDANCE WI IMO RESOLUTION A.1078 (28), SOLAS XI 1/3 and 1/5, PLEASE COMPLETE THE FOLLOWING DETAILS IN CAPITAL	
Note: Shipbuilding details are essential to issue an IMO Ship Number for Newbuildings prior to completion	n

riginal Name*							
lag*		Port	of Registry†		Call Sign	•	
IMSI†		Offi	cial Number†	F	lag Registration I	Date:	
onnage (69	Yes	No	Fishing No.+				
iross*			Net*		Deadweight		
ength Overall*			Length B.P.		Beam*		
foulded Depth*			Draught				
cel Laying Date;			Launch Date		Completion I	Date*:	
hipbuilder*				Shipbuilde	er Hull Number*		
ub-Contractor Hull				Sub-Contrac	tor Hull Number		
lace of Build*					Hull Material*		
hip Type				Fishing V	essel Gear-type		
IARPOL requiremen or Oil Tankers	The	ship co	-	gulation 13F(3) (doubl gulations 13 and 13E (Yes Yes	No No
or Oil Tankers	The Oth The	er (pleases ship is	subject to CAS		SBT/PL)	Yes	
or Oil Tankers Registere	The Othe	er (pleas er (pleas ship is	subject to CAS	gulations 13 and 13E (SBT/PL)	Yes Yes idress†	No
or Oil Tankers Registere	The Oth The d Owner† & A Fax, Telephone	er (pleas er (pleas ship is	mplies with re te specify) subject to CAS	gulations 13 and 13E (SBT/PL) lation Manager† & Ad	Yes Yes idress†	No
r Oil Tankers Registere (Including	The Oth The d Owner† & A Fax, Telephone	er (pleas er (pleas e ship is Addresst e & Email	mplies with re te specify) subject to CAS	gulations 13 and 13E (SBT/PL)	Yes Yes Idress† Email &	No
Registere (Including	The Oth The d Owner† & / Fax, Telephone	ship co er (pleas ship is Address [†] & Email	mplies with re is specify)	gulations 13 and 13E (requirements of regu (Includin	SBT/PL) lation Manager† & Ac g Fax, Telephone, Engine Model*	Yes Yes Idress† Email &	No No Website)
Registere (Including	The Oth The d Owner† & / Fax, Telephone	ship co er (pleas ship is Address [†] & Email	mplies with re is specify)	gulations 13 and 13E (i requirements of regu (Includir	SBT/PL) lation Manager† & Ac g Fax, Telephone, Engine Model*	Yes Yes Idress† Email &	No No Website)

Foundation for S&P Global/IHS Maritime SeaWeb database



Vessel Registration Application Example: United States

	HOMELAND SECURITY OMB No: 1625-0027	L. CITIZENSHIP OF OWNER (CHECK THE BOX(ES) TO SHOW THE TYPE(S) OF ENTITYHES) THAT OWNS THE VESSEL)	TRUST ARRANGEMENT (COMPLETE EQUITY/STOCK SECTION) (SEE SECTION M, ITEM 5 WHEN APPLYING FOR A FISHERY OR COASTWISE.
	ast Guard Expires: 04/30/2023	ONE OR MORE INDIVIDUALS I (WE) CERTIFY THAT ALL OWNERS OF THIS VESSEL ARE CITIZENS OF THE UNITED STATES	ENDORSEMENT)
	CHANGE, OR REPLACEMENT OF	GOVERNMENT ENTITY (FEDERAL, STATE, TERRITORY, POSSESSION OR SUBDIVISION)	I (WE) CERTIFY THAT ALL TRUSTEES AND ALL BENEFICIARIES WITH AN ENFORCEABLE INTEREST IN THIS TRUST ARRANGEMENT
	TATION; REDOCUMENTATION		ARE CITIZENS OF THE UNITED STATES, ELIGIBLE TO DOCUMENT VESSELS WITH THE ENDORSEMENT(S) SOUGHT IN THEIR OWN RIGHT.
NOTE: FILING THIS APPLICATION DOES NOT ENTITLE A VESSEL TO DO DOCUMENTATION. OFFICIAL NUMBERS DESIGNATED ON THE BASIS O		CORPORATION (SEE SECTION M, ITEM 5 WHEN APPLYING FOR A FISHERY OR COASTWISE ENDORSEMENT	
CERTIFICATE OF DOCUMENTATION IS VALID FOR VESSEL OPERATION.	THIS APPLICATION ARE NOT TRANSFERABLE. ONLY A CORRENT	1. STATE OF DECORPORATION	EQUITY INTEREST OWNED BY PERSONS ELIGIBLE TO DOCUMENT VESSELS IN THEIR OWN RIGHT WITH THE ENDORSEMENT(S) SOUGHT IN ACCORDANCE WITH 46 CFR PART 67 (SUBPART C)
COMPLETE FOR A	ALL APPLICATIONS	2 CITIZEN HIP OF CHIEF EXECUTIVE OFFICER BY WHATEVER TITLE	
A. VESSEL NAME (REQUIRED)	B. OFFICIAL # (IF AWARDED)	3. CITZENSHIP OF CHAIRMAN OF THE BOARD	LESS THAN 50% T5% OR MORE (AND, AT EACH TIER, IF APPLICABLE) 50% OR MORE: STATE EXACT 75% OR MORE (AND, AT EACH TIER AND IN THE AGGREGATE (IF FISHERY), IF APPLICABLE
		4. NOMBER OF DIRECTORS NECESSARY TO CONSTITUTE A QUORUM	PERCENTAGE
LICK ICON TO ATTACH LIST OF ADDITIONAL VESSEL(S)		5. NUMBER OF ALIEN DIRECTORS	OR
C. HULL ID # (IF ANY) D. IMO # (IF ANY)	E. HAILING PORT INCLUDING STATE (TO BE MARKED ON VESSEL)	6 PERCENTAGE OF STOCK OWNED BY U.S. CITIZENS ELIGIBLE TO DOCUMENT VESSELS IN THEIR OWN RIGHT, WITH THE ENDORSEMENT(S) SOUGHT ON THIS APPLICATION IN ACCORDANCE WITH 46 CFR PART 67 (SUBPART C)	VESSEL OWNED IN A TRUST ARRANGEMENT PURSUANT TO 46 USC 12111(c) (CROSS BORDER FINANCING) I (WE) CERTIFY THAT THE VESSEL IS OWNED IN A TRUST ARRANGEMENT THAT QUALIFIES FOR A REGISTRY ENDORSEMENT
F. NAME OF MANAGING OWNER	SOCIAL SECURITY OR TAX TO NUMBER (REQUIRED - 46 USC 12104): SSN:	LESS THAN 50% 75% OR MORE (AND, AT EACH TIER, IF APPLICABLE)	ONLY PURSUANT TO PUBLIC LAW 104-324, SECT. 1136. ATTACHED IS AN AFFIDAVIT OF EACH TRUSTEE AND CITIZENSHIP EVIDENCE FOR THE CHARTERER AS REQUIRED UNDER THE STATUTE.
	SSN: TIN:	50% OR MORE: STATE EXACT 75% OR MORE (AND, AT EACH TIER AND IN THE AGGREGATE (IF FISHERY), IF APPLICABLE) PERCENTAGE	
E-MAIL ODRESS:		IMITED LIABILITY COMPANY (LLC): (COMPLETE EQUITY SECTION AND CHOOSE TYPE) (SEE SECTION M. ITEM 5 WHEN APPLYING	CLICK ICON TO ATTACH LIST OF ALL TRUSTEES AND ALL BENEFICIARIES WITH AN ENFORCEABLE INTEREST/(REQUIRED)
TELEPHONE NUMBER:	MAILING ADDRESS OF MANAGING OWNER (IF DIFFERENT THAN	FOR A FISHERY OR COASTWISE ENDORSEMENT).	M. I (WE) CERTIFY THAT: (MARK ALL THAT ARE APPLICABLE. ITEM 5. NOT REQUIRED FOR COASTWISE BOWATER ONLY, OIL SPILL, OR UNDER CHARTER ENDORSEMENTS.)
6. PHYSICAL ADDRESS OF MANAGING OWNER (REQUIRED – 46 CFR 67.113)	MAILING ADDRESS OF MANAGING OWNER (IF DIFFERENT THAN PHYSICAL ADDRESS – E.G., P.O. BOX)	EQUITY INTEREST OWNED BY PERSONS ELIGIBLE TO DOCUMENT VESSELS IN THEIR OWN RIGHT WITH THE ENDORSEMENT SOUGHT IN ACCORDANCE WITH 46 CFR PART 67 (SUBPART C)	1. I AM (WE ARE) A CITIZEN(S) OF THE UNITED STATES AND LEGALLY AUTHORIZED TO EXECUTE THIS APPLICATION IN THE
		LESS THAN 50% 75% OR MORE (AND, AT EACH TIER, IF APPLICABLE)	CAPACITY SHOWN;
N .		50% OR MORE: STATE EXACT 75% OR MORE (AND, AT EACH TIER AND IN THE AGGREGATE (IF FISHERY), IF APPLICABLE PERCENTAGE	IN ACCORDANCE WITH 46 CFR PART 67 (SUBPART I) THE VESSEL(S) TO WHICH THIS APPLICATION APPLIES; (a) HAS (HAVE) BEEN MARKED OR WILL BE MARKED;
		1. MEMBER MANAGED LIMITED LIABILITY COMPANY	(b) WILL AT ALL TIMES REMAIN UNDER THE COMMAND OF A U.S. CITIZEN, UNLESS DOCUMENTED SOLELY WITH A RECREATIONAL ENDORSEMENT; WILL NOT BE OPERATED IN A TRADE NOT AUTHORIZED BY THE ENDORSEMENT(S) ON THE
H. NAME(S) OF OTHER OWNER(S)	SOCIAL SECURITY OR TAX ID NUMBER(S) OF OTHER OWNER(S	I (WE) CERTIFY THAT ALL MEMBERS OF THIS LLC ARE CITIZENS OF THE UNITED STATES ELIGIBLE TO DOCUMENT VESSELS WITH	CERTIFICATE(5) OF DOCUMENTATION. THE NAME(5) OF THE VESSEL(5) WILL NOT BE CHANGED WITHOUT APPROVAL FROM THE NATIONAL VESSEL DOCUMENTATION CENTER: AND I(WE) WILL PROMPTLY NOTIFY THE NATIONAL VESSEL
	Solv. III.	THE ÉNDORSEMENT(S) SOUGHT IN THEIR OWN RIGHT.	DOCUMENTATION CENTER UPON A CHANGE IN ANY OF THE INFORMATION OR REPRESENTATIONS IN THIS APPLICATION.
CLICK ICON TO ATTACH LIST OF ADDITIONAL OWNER(S)		CLICK ICON TO ATTACH LIST OF ALL MEMBERS)(REQUIRED)	3. HAS (HAVE) NOT OR HAS (HAVE) BEEN REBUILT OR SUBSTANTIALLY ALTERED SINCE LAST DOCUMENTATION;
I, PURPOSE OF APPLICATION		LIMITED LIABILITY COMPANY NOT MANAGED BY MEMBERS AND NOT SIMILAR TO GENERAL PARTNERSHIP:	4. THE VESSEL IS
1. EXCHANGE OF CERTIFICATE OF DOCUMENTATION.		PLEASE NOTE (A) & (B) MUST BE CHECKED FOR FISHERY AND COASTWISE ENDORSEMENTS; NOT REQUIRED FOR COASTWISE OIL SPILL OR COASTWISE UNDER CHARTER ENDORSEMENTS.	NOT TITLED UNDER A STATE OR
2. REPLACEMENT OF LOST, WRONGFULLY WITHHELD OR MUTILA	ED CERTIFICATE OF DOCUMENTATION.		TITLED UNDER THE LAWS OF
3. RE-INSTATEMENT OF CERTIFICATE OF DOCUMENTATION FOLL	WING FAILURE TO RENEW.	A. I (WE) CERTIFY THAT ANY PERSON ELECTED TO MANAGE THE LLC OR WHO IS AUTHORIZED TO BIND THE LLC, AND ANY PERSON WHO HOLDS A POSITION EQUIVALENT TO THE CHIEF EXECUTIVE OFFICER. BY WHATEVER TITLE, AND THE	THE FOLLOWING ITEM IS REQUIRED FOR COASTWISE AND/OR FISHERY ENDORSEMENTS; HOWEVER, IT IS NOT REQUIRED FOR COASTWISE
4. RETURN TO DOCUMENTATION FOLLOWING DELETION. VESSEL	NAME WHEN LAST DOCUMENTED	CHAIRMAN OF THE BOARD OF DIRECTORS IN A CORPORATION, AND ANY PERSONS AUTHORIZED TO ACT IN THEIR ABSENCE	BOWATER ONLY, OIL SPILL, OR UNDER CHARTER ENDORSEMENTS.
5. APPLICATION FOR OFFICIAL NUMBER AND FIRST CERTIFICATE	OF DOCUMENTATION, VESSEL	ARE CITIZENS OF THE UNITED STATES. B. NON-CITIZENS DO NOT HAVE AUTHORITY WITHIN A MANAGEMENT GROUP, WHETHER THROUGH VETO POWER, COMBINED	5. U.S. CONTROL CERTIFICATION: THERE IS NO CONTRACT OR UNDERSTANDING THAT PROVIDES MORE THAN 25% OF THE VOTING POWER IN THE PARTNERSHIP. LIMITED LIABILITY COMPANY. CORPORATION. OR OTHER OWNING ENTITY EITHER
WAS BUILT AT	IN	VOTING, OR OTHERWISE, TO EXERCISE CONTROL OVER THE LLC.	DIRECTLY OR INDIRECTLY ON BEHALF OF ANY PERSON NOT A CITIZEN OF THE UNITED STATES. BY NO MEANS WHATSOEVER IS CONTROL IN EXCESS OF 25% CONFERRED UPON OR PERMITTED TO BE EXERCISED BY A PERSON WHO IS
OR CITY, STATE, O		STATE WHERE ORGANIZED	WHATSUEVER IS CONTROL IN EXCESSION 25% CONFERRED UPON OR PERMITTED TO BE EXERCISED BY A PERSON WHO IS NOT A CITIZEN OF THE UNITED STATES.
IS UNDER CONSTRUCTION AT	AND IS SCHEDULED FOR COMPLETION IN	PAR WERSHIP (COMPLETE EQUITY SECTION AND CHOOSE TYPE) (SEE SECTION M, ITEM 5 WHEN APPLYING FOR FISHERY OR	POTENTIAL PENALTIES FOR FALSE STATEMENTS OR REPRESENTATIONS BY OWNER OR REPRESENTATIVE: CIVIL MONETARY, VESSEL
HULL MATERIAL: WOOD STEEL FIBRO	IS REINFORCED PLASTIC ALUMINUM CONCRETE	COASTWISE ENDORSEMENT)	FORFEITURE (46 USC 12151), FINE AND/OR IMPRISONMENT (18 USC 1001)
		EQUITY INTEREST OWNED BY PERSONS ELIGIBLE TO DOCUMENT VESSELS IN THEIR OWN RIGHT WITH THE ENDORSEMENT SOOGHT IN ACCORDANCE WITH 46 CFR PART 67 (SUBPART C)	SKINATURE DATE CAPACITY (E.G., OWNER, AGENT, TRUSTEE
PREVIOUS NAMES, NUMBERS, OR FOREIGN REGISTRATION	S OF VESSEL	LESS THAN 50%	SIGNATURE DATE CAPACITY (E.G., OWNER, AGENT, TRUSTEE, GENERAL PARTNER, CORPORATE OFFICER, MEMBER)
J. ENDORSEMENTS FOR WHICH APPLICATION IS MADE		Stand	PRINTED OR TYPED NAME
RECREATIONAL COASTWISE - BOWATERS O	NLY (CERTIFICATE ON FILE)	PERCENTAGE	APPLICATION FEES ARE NOT REFUNDABLE (46 CFR 67.500 (d)).
	PONSE ONLY (LETTER OF QUALIFICATION ON FILE)	1. GENERAL PARTNERSHIP	PRVACY ACT STATEMENT
	R TO AN ENTITY QUALIFIED TO ENGAGE IN COASTWISE TRADE	I (WE) CERTIFICIANT ALL PARTNERS IN THIS PARTNERSHIP ARE CITIZENS OF THE UNITED STATES EUGIBLE TO DOCUMENT VESSELS WITH THE ENDORSEMENT(S) SOUGHT IN THEIR OWN RIGHT.	PURSUANT TO 5 U.S.C. § 8524(E)(3). THIS PRIVACY ACT STATEMENT SERVES TO INFORM YOU OF WHY THE U.S. COAST GUARD (USCG) IS REQUESTING THE INFORMATION ON THIS FORM.
REGISTRY (COPY OF CHARTER ON FILE)	2. LIMITED PARTNERSHIP I (WE) CERTIFY THAT ALL GENERAL PARTNERS IN THIS PARTNERSHIP ARE CITIZENS OF THE UNITED STATES, ELIGIBLE TO	AUTHORITY 40 LTDS FUNDAL STATUS 551 AND \$50501.
K. PRIMARY SERVICE & HORSEPOWER		DOCUMENT VESSELS WITH THE ENDORSEMENT(S) SOUGHT IN THEIR OWN RIGHT.	PURPOSE: TO OBTAIN INFORMATION TO ESTABLISH THE ELIGIBILITY OF A VESSEL TO BE DOCUMENTED AS A "VESSEL OF THE UNITED STATES"; ENGAGE IN A PARTICULAR TRADE AND/OR BECOME THE OBJECT OF A PREFERRED SHIP'S MORTGAGE.
HORSEPOWER: OFFSHORE SUPPLY		CLICK ICON TO ATTACH LIST OF ALL GENERAL PARTNERS (REQUIRED)	ROUTINE USES: AUTHORIZED USCG PERSONNEL WILL USE THIS INFORMATION TO DETERMINE CITIZENSHIP OF THE OWNER OF THE VESSEL FOR WHICH
COMMERCIAL FISHING BOAT PASSENGER (6 OR FI	WER) RESEARCH VESSEL	CORPORATION QUALIFIED AND APPLYING UNDER 46 CFR 68.01 (BOWATERS)	APPLICATION FOR DOCUMENTATION IS MADE; AND DETERMINE ELIGIBILITY OF THE VESSEL TO BE DOCUMENTED WITH THE TRADE ENDORSEMENT SOUGHT. ANY EXTERNAL DISCLOSURES OF DATA WITHIN THIS RECORD WILL BE MADE IN ACCORDANCE WITH DHS/USCG-013, MARINE INFORMATION FOR SAFETY AND
FISH PROCESSING VESSEL PASSENGER (MORE		I (WE) CERTIFY THAT THE CORPORATE STRUCTURE HAS NOT CHANGED SINCE ISSUANCE OF THE CERTIFICATE OF COMPLIANCE.	LAW ENFORCEMENT, 74 FEDERAL REGISTER (FR) 30305, JUNE 25, 2009.
FREIGHT SHIP PASSENGER BARGE	6 OR FEWER) TANK BARGE	VESSEL OWNED OR OPERATED BY NOT-FOR-PROFIT OIL RECOVERY COOPERATIVE I (WE) CERTIFY THAT THE INFORMATION ON FILE WITH REGARD TO COOPERATIVE AND ISSUANCE OF THE LETTER OF	DISCLOSURE: FURNISHING THIS INFORMATION IS VOLUNTARY. HOWEVER, FAILURE TO PROVIDE THE INFORMATION REQUESTED MAY RESULT IN DENAL OF THE APPLICATION FOR DOCUMENTATION, WHICH MAY PREVENT THE OWNER FROM OPERATING THE VESSEL(S) IN A SPECIFIED TRADE.
FREIGHT BARGE PASSENGER BARGE	(MORE THAN 6) TANK SHIP	QUALIFICATION REMAINS UNCHANGED.	AN AGENCY MAY NOT CONDUCT OR SPONSOR AND A PERSON IS NOT REQUIRED TO RESPOND TO A COLLECTION OF INFORMATION UNLESS IT DISPLAYS A VALID OMB CONTROL NUMBER.
INDUSTRIAL VESSEL DUBLIC FREIGHT	TOWING VESSEL	JOINT VENTURE OR ASSOCIATION I (WE) CERTIFY THAT ALL MEMBERS OF THIS (JOINT VENTURE) (ASSOCIATION) ARE CITIZENS OF THE UNITED STATES, ELIGIBLE TO	
MOBILE OFFSHORE DRILLING UNIT PUBLIC TANKSHIP/BA	RGE UNCLASSIFIED VESSEL	FIGUE DEVICE THAT ALL MEMBERS OF THIS (JOINT VENTORE) (ASSOCIATION) ARE CITIZENS OF THE UNITED STATES, ELIGIBLE TO DOCUMENT VESSELS IN THEIR OWN RIGHT WITH THE ENDORSEMENT(S) SOUGHT.	THE COAST GUARD ESTIMATES THAT THE AVERAGE BURDEN FOR THIS FORM IS 30 MINUTES. YOU MAY SUBMIT ANY COMMENTS CONCERNING THE ACCURACY OF THIS BURDEN ESTIMATE OR MAKE SUGGESTIONS FOR REDUCING THE BURDEN TO: U.S. COAST GUARD, NATIONAL VESSEL DOCUMENTATION CENTER, 792
OIL RECOVERY DUBLIC VESSEL, UNC		CLICK ICON TO ATTACH LIST OF ALL JOINT VENTURERS/MEMBERS/(REQUIRED)	TJ JACKSON DRIVE, FALLING WATERS, WEST VIRGINIA 25419, OR OFFICE OF MANAGEMENT AND BUDGET, PAPERWORK REDUCTION PROJECT (1625-0027), WASHINGTON, DC 20503.
CG-1258 (05/20) Previo	as Edition Obsolete Page 2 of 4	CG-1258 (05/20) Page 3 of 4	CG-1258 (05/20) Page 4 of 4
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Flag State vessel registration application documents are a great source of information to support investigations into beneficial ownership



Vessel Registration Application Forms Example: Panama

	f in home news about us contact us
PMA Certification	SHIP REGISTRATION - CLASS AND STATUTORY CERTIFICATION - SEAFARER LICENSING - PANAMA
REQUIREMENTS	AND DOCUMENTS
Documents Required for Provisional F	Registration
Proof of ownership (Builder's certificate, Bill o	of Sale, Certificate issued by the court in case of legal auctions) dup executed and authenticated l
a Notary Public confirming the authenticity of	the signatures and legal capacity of the signatories and legalized by a Panamanian Consul or by w
of Apostille. The notary must also acknowledg	e in this document, that the Seller was the previous legal owner of the vessel before transference
was effected; In case of a Building Certificate, account of the buyer".	there must be a declaration by the builder stating that "the vessel has been built by order and on
Original Power of attorney in favour of our firm	n duly notarized and authenticated by a Panamanian Consul or by way of Apostille.
-	

- Deletion certificate / cancellation of previous registry (not required for new vessels) duly authenticated to evidence the effect that the previous registry has been cancelled or closed.
- Radio application forms, duly filled out.
- Technical certificates: International Tonnage Certificate, certificates issued by a recognized organization under the vessel's name and under the authority of the Panamanian Government.
- Upon presentation of the above documentation to the Shipping Bureau, registration of the respective Title of ownership (e.g. Bill of sale) and completion of various procedural steps, the Panama Maritime Auythority will issue Statutory Navigation Patente and Statutory Radio License valid for five (5) years.

Documents Required for Provisional Registration

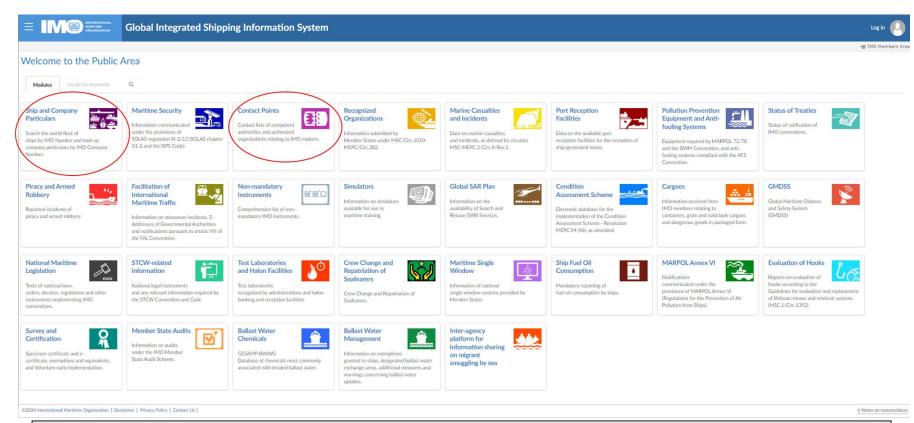
- Copy of a Power of attorney duly authenticated by a Notary Public and legalized (draft will be provided by our office upon your request)
 - Completed application for registration (data in respect of technical description of the vessel)
- Payment of governmental fees; enrollment and first year annual taxes.
- Document of title (Builder's certificate, Bill of Sale, Certificate issued by the court in case of legal auctions)*

Technical certificates:

Valid copy of the current Safety Management Certificate (SMC).



Finding National Contact Points for IMO related issues



IMO's GISIS Contact Points module helpful for providing investigator's leads to reach out to for more information about a vessel's flag state registration; Ship and Company Particulars provides some ownership information

https://gisis.imo.org/Public/



Fishing Permit Example: United States

							W NATIONAL OCEANIC AND ATNO	SPHERIC ADMINISTRATION	
						4 Back	search	•	
						Pennite Home	NOAA Fish	eries Permits	DTPEARL991 Lop or
NOAA HO	NNE WEATHER OCEAN FISHERES CHARTING SATELLITES CLINIATE RESEARCH COASTS CAREERS	NOAA HOM	RE WEATHER OCEAN FISHERBES CHARTING SA	TELLITES CLIMATE RESEARCH	COASTS CAREERS	Online Services Permit Information	Vessel Details		Back To Search Results
			$\Delta \Delta$ Fisheries serv	/ICE		Bearch Issued Permits		VESSEL IDENTIFICATION	
)AA FISHERIES SERVICE					Permit Applications	Vessel Name	FRIESLAND	
	N V NATIONAL OCEANIE AND ATMOSPHENIE ADMINISTRATION					Track Application Status	USCG Document Number	1216624	
1011001000		4 Back	search				International Radio Call Sign	WDE6789	
	search E	Permits Home	NOAA Fisheries Permit		DTPEARL99 Log-out //	My Account	Vessel Registration Type	CG	
Permits Home	NOAA Fisheries Permits Log-In ()		HOAR FISHING FURIA		511 250 2551 209 001	My Permits	USCG Document Status	VALID	
Online Services		Online Services Permit Information	Search Results			Edit Account Information	USCG Number Issued Date	01/10/2024	
Permit Information	Search Issued Permits	Search Issued Permits			100000000000000000000000000000000000000	Change Password	USCG Document Expiration Date	02/28/2025	
Search Issued Permits		Permit Applications	Permits Found: 4 Permit Type:		Date: 28-Aug-2024	Resources	IMO Number	9310953	
Permit Applications ?	This facility allows you to search for NOAA issued permits.	Track Application Status	Permittee Name: Not Specified				Halling Port City	LAS VEGAS	
Track Application Status ?	Note: We are in the process of integrating permits from all regional offices so that they will be accessible through this web site. Until this process is complete, current search results are limited to the permit types displayed in the list below.	My Account	Vessel Name: Friesland			F.A.Q.	Halling Port State	NV	
Resources		My Permits Edit Account Information	PERMIT PERMITTEE ADDR	ESS STATE ZIP VESSEL	D STATUS EXPIRATION DATE	Useful Links			
FAQ.		Edit Account Information Change Password	FEEZ FRIESLAND FISHING 2535 K		CURRENT	Contact Information		VESSEL PHYSICAL PROPERTIES	
Useful Links Contact Information	Search Parameters	Resources	FOREION EE2 COMPANYILLC EUVE SUITE	142	and the second of the second sec	Technical Support	Gross Tons - Registered	2437	
Technical Support	NOTE: Any option with the word "ALL" in it requires a value for "Permittee Name" and/or "Vessel Name"	FAQ	SAN DI 92101	IEGO, CA			Processing Equipment	RSW AND BRINE	
	Permittee Name:	Useful Links	ETP-V FRIESLAND FISHING 2535 KI SW ETP VESSEL COMPANY LLC BLVD S	ETTNER CA 92101- 5259 STE 1A2 1252	CURRENT 12/31/2024	Adobe' Reader	Vessel maximum speed	16	
Adobe" Reader	Vessel Name:	Contact Information	#150	FIGD CA			HOLD CAPACITY (WEIGHT)	2100	
		Technical Support	92101-	1252		Some online documents require Adobe Reader for viewing and	Shaft Horsepower (SHP)	4500	
Adobe Reader for viewing and printing. Please click on the		Adobe Reader	-HIGH SEAS FISHING COMPANY LLC BLVD S	ETTNER CA 92101- 5259 STE 142 1252	CURRENT 12/03/2028	printing. Please click on the image above to obtain or update	Length - Registered	255.3	
image above to obtain or update this application as needed.	Permit Program: - All Permits V		COMPLIANCE ACT #150 SAN DI	EGO. CA 1252		this application as needed.	Breadth - Registered	47	
	I'm not a robot	Some online documents require Adobe Reader for viewing and printing. Please dick on the		1252 ETTNER CA 92101- 1259	CURRENT 12/03/2028		Depth - Registered	28.8	
	I'm not a robot	image above to obtain or update this application as needed.	-WCPFC AREA COMPANY LLC BLVD S ENDORSEMENT 8150	STE 1A2 1252	Contraction in the second seco		Net Tonnage - Registered	731	
	Progy - Terms	(Contraction of the	SAN DI 92101-	EGO, CA 1252			Hull or Construction Material	STEEL	
	Search						Propulsion	DIESEL REDUCTION	
							Self Propelled Indicator	YES	
				Search Again				VESSEL EXTENDED ATTRIBUTES	
	search						Refrigeration/Product Storage	BRINE	
Fisheries Permits	Ethnis tools						VESSEL PHOTOGRAPH SUBMISSION METHOD	SENT ELECTRONICALLY VIA E-MAIL	
System v. PR 38.02			search	•			DATE PHOTOGRAPH TAKEN	08/04/2023	
Common Questions			and the				VESSEL PHOTOGRAPH MARKINGS	WDE6789	
Useful Links	Privacy Policy About Us View View View View View View View View	Fisheries Permits	Fisheries Service				Hull Configuration	UNSPECIFIED	
	Disclaimer	System v PR 3.6.0.2		a.	🛛 🏠		Hull Yard City	KAOHSUNG	
		Common Questions	Contact Information Forms Search Privacy Policy About 1				Hull Yard Country	TAIWAN	
			Information Quality Contact	Us .			Hull shape	UNSPECIFIED	
								VESSEL CHARACTERISTICS	
							Fishing Vessel Type	PURSE SEINER - TUNA	
							SINGLE SIDEBAND RADIO	YES	
							HAS AN INTERNATION RADIO CALL	YES	
							SIGN (IRCS)	A.77.77.5	
							Service Type	COMMERCIAL FISHING VESSEL	
							Trade endorsement	REGISTRY	
							Hall Province	UNITED STATES	
								VESSEL CONTACT INFORMATION	
	01-1						VESSEL COMMUNICATION TYPE	EMAIL INMARSALADDRESS	
Flad	State vessel fishing permit re	sprone	are another	dood so			COMMUNICATION NUMBER	NAVIGATORFRIESLAND@GMAIL.COM	
i iug	jotato vossoi noning pormitri	500103		9000 30			INMARSAT SERVICE	OTHER	
<i>c</i> .	e						OTHER INMARSAT SERVICE TYPE	VSAT	
of in	nformation to support investig	ationsi	nto honotici	al owne	rshin			VESSEL FOREIGN FLAG INFORMATION	
	normation to support investig	auonsi			i ship		Effective date - Begin period	02/17/2005	
	•••				20 - 30		Effective date - End period	05/09/2007	
							Chective date - End period	05/09/2007	



Foreign Vessel Flag Indicator

Previous Vessel Flag Country Name YES NETHERLANDS ANTILLES

 \bigcirc NOAA FISHERIES SERVICE

Finding National Contact Points for Fisheries Governance Issues

Food and Agriculture Organization of the United Nations		Global Information Exchange System Agreement On Port State Measures			English 👻		
🕅 GIES Webpage	National Contact	t Points		Filter by country	Q Search		
Overview	Country name	Authority name	Authority email		Phone number		
Ū+ Login	Switzerland	Federal Food Safety and Veterinary Office	iuu@blv.admin.ch				
NCP & DP	Thailand	Fisheries and Fleet Management Division, Department of Fisheries	thaipsm.investigation@gn	nail.com , thaipsm@fisheries.go.th	66@621539351		
Search	Timor-Leste	National Directorate of Inspection for Fisheries and Aquatic Resources	pamrodrigues@maf.gov.tl	Ú.	670@78496100		
Designated ports	Тодо	Direction des pêches et de l'aquaculture/Ministère de l'agriculture, de la production animale et halieutique	dpamaep_tg@yahoo.com		+228 90 00 60 11		
Settings 🔅 Theme	Tonga	Ministry of Fisheries	vailalam@yahoo.com		676@7401202		
About GIES	Trinidad and Tobago	Fisheries Division, Ministry of Agriculture, Land and Fisheries	fisheriesmcs@gov.tt		1@868 625 9358		
記 Legal Disclaimer	Türkiye	The Ministry of Agriculture and Forestry, The Directorate General of Fisheries and Aquaculture	esrafatma.denizci@tarimo	orman.gov.tr	90@312 258 30 73		
	Uganda	DIRECTORATE OF FISHERIES RESOURCES	edwardrukunya@yahoo.c	om	256@772482599		
	United Kingdom	UK Marine Management Organisation	UKIUUSLO@marinemana	gement.org.uk	+44 0 330 041 6585		
	United States of America	National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Office of Law Enforcement	NOAA.OLE.International@	noaa.gov	+1 (301) 427-2300		
	Uruguay	Dirección Nacional de Recursos Acuáticos	direcciongeneraldinara@r	mgap.gub.uy	+598 92141354		
	Vanuatu	Vanuatu	vupsm@vanuatu.gov.vu		678@7748506		
	Viet Nam	Fisheries Surveillance Department (Ministry of Agriculture and Rural Development)	trangnhungicd@gmail.cor	m; nhungntt.htqt@mard.gov.vn	84@912153865		
	Showing 13 results of 93				Page 5 of 5 < >		

FAO's GIES a good source for providing investigator's leads to reach out to for more information about a vessel's fishing authorizations/permits

https://psma-gies.fao.org/



RFMO Fishing Authorization Example: ICCAT

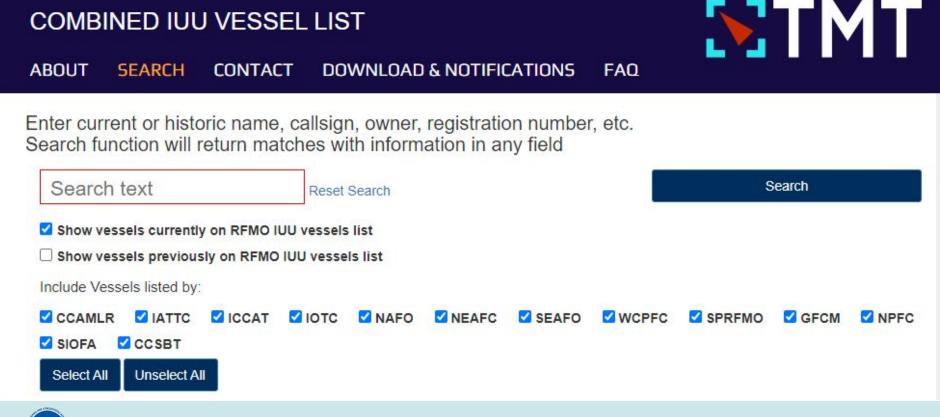
29/24, 11:47 AM AT000NAM000				CCAI-CICTA-CICCA		
ATUUUNAMUUU	J90, HALIF	**				
Reporting Flag : IRCS : GRT : Type of IRN :	Namibia V5IW 93,18 IMO	Current Flag : Length : Type of Tonnage : Vessel Type :	Namibia 27,32 GT Longliner	Registry Number : Type of length : International Reg No : Gear Type :	2021LB001 LOA 8529533 Longlines (r	Dot specified)
		Dates of Autho	prization (Flag	State)		
				From	То	Notified
		Positive List (LC	OA >= 20 m)	19/05/2024	31/12/2024	02/07/2024
		Tropical Catchin	ng Vessels	19/05/2024	31/12/2024	02/07/2024
		SWO-S catchin	g vessels	19/05/2024	31/12/2024	02/07/2024
		ALB-S catching	vessels	19/05/2024	31/12/2024	02/07/2024
Owner Details	$\mathbf{)}$					
Name : So	outh Wolf Hol	dings (PTY) LTD		Address :	P.O.Bo	x 305,
City : Lu	uderitz			Postal Code :	264	
Country : Na	amibia			Telephone :	264632	202135
Fax :				E-Mail :	Ilm@iw	ay.na
Operator Details	>					
Name : St	outh Wolf Hol	dings (PTY) LTD		Address :	P.O.Bo	x 305,
City : Lu	uderitz			Postal Code :	264	
Country : N	amibia			Telephone :	264632	202135
Fax :				E-Mail:	IIm@iw	/ay.na
History Details (*) Vessel Details	>					
DateToHistory	ICCATNO	RegNo IRCS	VesName	FlagCode VesCode Ge	arCode LengthM	Tonnage Ton

Compete list of RFMOs found here: https://www.fao.org/fishery/en/organization/search

RFMO vessel authorization lists can also be a good source of information to support investigations into beneficial ownership



Helpful RFMO IUU Fishing Vessel List Compilation Trygg Mat Tracking Combined IUU Vessel List (<u>http://www.tm-tracking.org/</u>)



OAA FISHERIES

Additional Sources of Vessel Specific Information

• UN - FAO Global Record

(https://www.fao.org/global-record/information-system/en/)

• Information on fishing vessel and their support vessels provided by official State authorities

• UN – FAO Fishing Vessel Finder

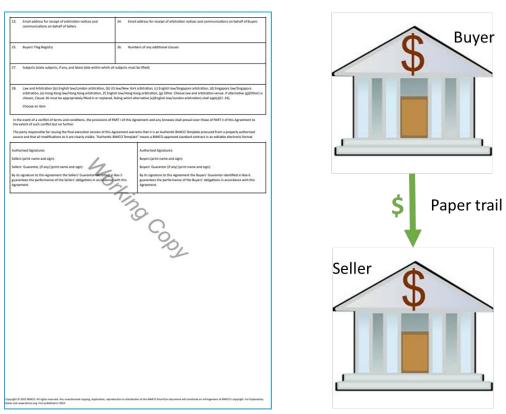
- (<u>https://www.fao.org/fishery/en/collection/fvf</u>)
- Large Database that pulls from open sources
- **Equasis**(<u>https://www.equasis.org/EquasisWeb/public/HomePage</u>)
 - Safety related information on ships and companies



Ship Sale and Purchase Documentation

Example: Memorandum of Agreement for Ship Sale and Purchase

1.	Name of Vessel	2.	Date of Agreement
-	Sellers (name and address)	4	Buyers (name and address)
5.	Sellers' Guarantor (if any) (name and registered office address)	6.	Buyers' Guarantor (If any) (name and registered office address)
7.	Vessel details	8.	Inspection
	(i) MO number: (ii) GTNR: (iii) Yao, Nakher and place of built. / / (iii) Class Antoleon: Petches Prior Bennett and Currenco)		Select subclause ((a), (b)) or ((c). Choose an item If subclause ((a), or (b)) is applicable, insert place and date / date range of Vesel inspects and Classification Society records inspection as applicable.
	(vi) Classification Society: (vii) Class notation:	2	
9.	Purchase Price (amount and currency)	10.	Degets (state percentage of the Purchase Price)
11.	Deposit Holder (name and address)	12.	Sellers' Account (name of bank, branch location and account details)
13.	Banking Days (places/countries) 54.	arliest	date for giving Notice of Readility J S. Cancelling Date
16.	Delivery place/range		
17.	Underwater Inspection/Drydock Inspection (state if Clause 8 or 9 shall apply) Choose an item	18.	Bunken, Olis and Greases (i) Bunkers Choose an Item (i) Olit and Greases Choose an Item
19.	Documentary closing (state location or electronic method)	20.	Validity of classification certificates
21.	Notices to Sellers (name and contact details)	22.	Notices to Buyers (name and contact details)



Ship sale and purchase documentation is excellent source of information to support investigations into beneficial ownership – challenging to obtain



Sources of non-VMS Vessel Locations

Maritime Domain Awareness (MDA)

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Quick F		Bav		A.	~	k	P P P	4	1573 UNITED KINGDOM		4035	310	20	26 Last u	Count: in 7.4 se		υтс	1000 NM Charted Map	
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	TE2D4	670	1982	269	57	71 N O R T H	122	65	2274 SPAIN	4714	CRE 2827 CRE	4418 ECE TI	467 URKIYE	266	~	YET	2		
_	1275	1313	654	92	49 ^A	T L ₄ A N T		206	1806	158	945	2133	520	82 IR		25	3	cı	111 2
174 MÉXIC	2457	2931	780	37	22	0 C E A N 19	16	732		LGERIA SAHARA	LIBYA	ÊĞAbı	178SAL	DI 3310	831	247	HIMALA 28 NDIA		3
178	531	166	310 Caribbean	1332	18	17	63	242	MALI	NIG	ER CHAD	SUDAN	313	35	83 Arabian Sea	906	279	161	3 5
15	87	560	450 VENI	823	31	43	56	562	July	NIGER	in A	for the	79 ETHIOPI	81	39	295	138	486	2 6
13	19	115	COLOMBIA	542	<u></u> 101	37	49 Equat	76	198	1048	ST	the second	À	28	42	quator 61	200	347	3298
13	232	203	PERÚ	52	182	234	51	17	125	144	260 ^{R C}	ONGO	144 NZANIA	101	45	52	109	8	1087
11	12	161	196	BOLIVIA	BRAZIL	207	54	22	66	44	ANCOLA	ZAMBIA	47	79	41	142	30	17	
23	8	143 Tropic of Car	84	2		315	6	35	31	59	25 NAMIBIA	Z	102	67	219	26	20	14 Tropic o	37 Capricarn
1	6	305	78 STONY	128	452	585	34	19	36	68 Je5	208	147 OUTH	160	148	25	IND 6 0CE		-	13 3e5
	A	-	156	466 GENTINA	253	13		s о <u>∪</u> т н		69	579 ^A	S52	130	23	35	V	8	15	10
	1	-	176	313	20	*	7	T L A N T O C E A N	19	20	10	11	~ ~	14	60E	2	11	M 11	User Feedback
		47	17	336	6	- 1	4		8	۲		Jo		BB	1	AZA			dback
<u>ī</u>	T (± 88	18	Scotia Sea	1	Lat: 30	5° 48' 33.4° N	N Lon	: 109" 20' 09	9.4° W	Sources: Esr	i, TomTom, Ga	armin, FAO, NO/	VA, USGS, © O	IpenStreetMap	contributors,	Show Active	

MDA Tool Example: SeaVision (USG)

More dots does not alway equal better MDA

Last 6 hours

Common MDA Data Layers:

- AIS (Anti-collision)
- SAR (Space Radar)
- Shore Radar
- EO (Space Photos)
- VIIRS (Night lights)
- RF (Radio Frequency)
- Sightings (human eyeball)



Automatic Identification System (AIS) Primary Function = Collision Avoidance No International Mandate for Fishing Vessels to Carry/Transmit



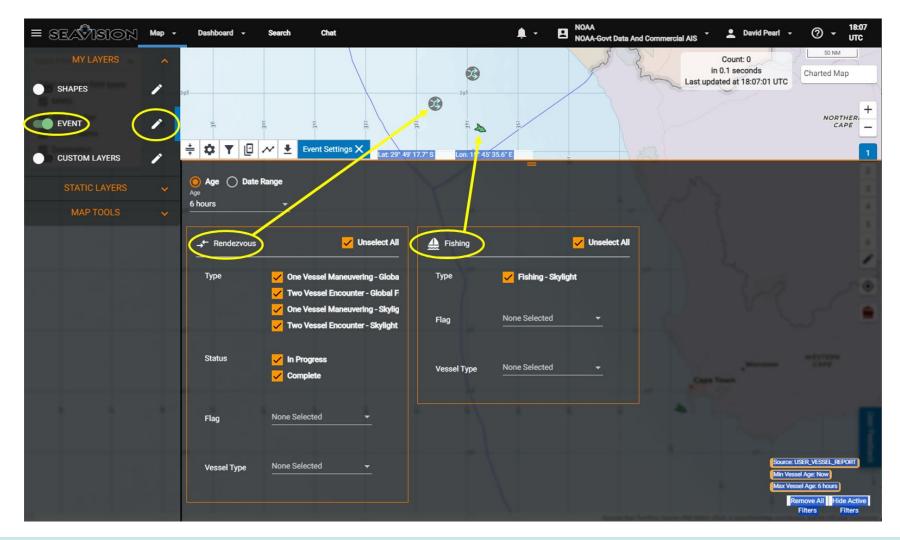
Global Fishing Watch

Skylight

Both great free sources of AIS and associated analytics (plus other MDA data layers)

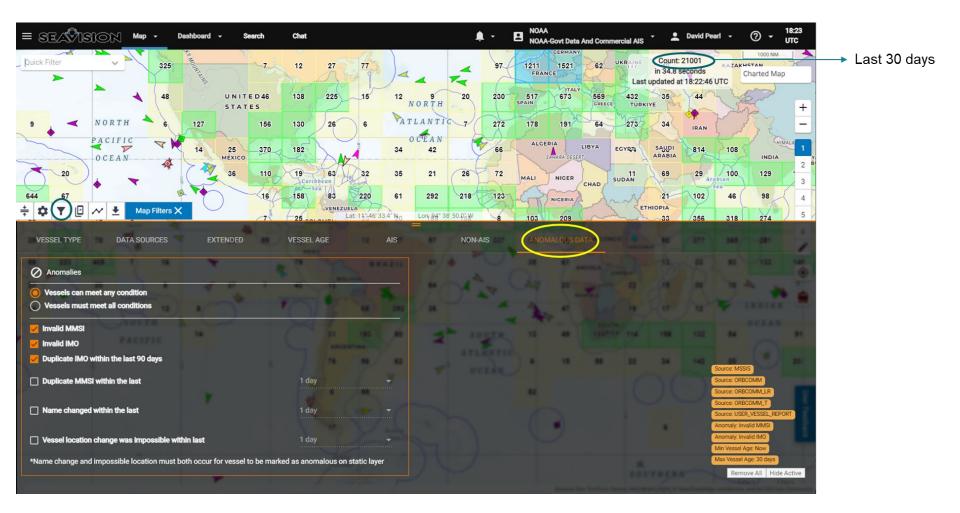


Fishing and Rendezvous Events from Global Fishing Watch and Seavison Available in SeaVision



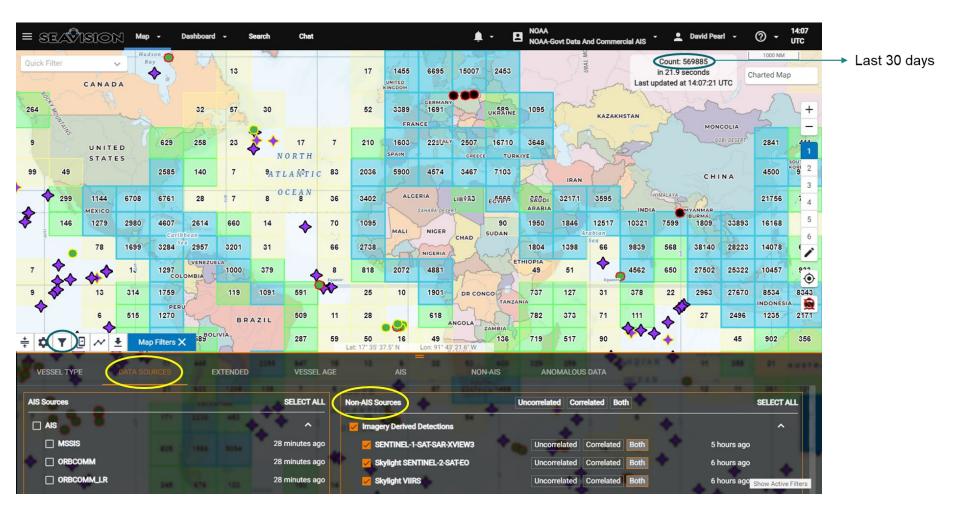


AIS Data Issues





Imagery from Satellites: SAR, EO, VIIRS





Electro Optical & VIIRS Examples

uick Filt 2 B_MSIL		Map - Dashbo		Search Chat		UNP02D	• P NOAA NOAA-Go NB_NRT.A2024095.13	vt Data And Commercial	ir	David Pearl Count: 1564 0.2 seconds ated at 18:40:19 UTC	
	SAT-EO	AIS	Delta				VIIRS	AIS	Delta		i i i i i i i i i i i i i i i i i i i
ime	2024 Apr 12 00:10:25 UTC	2024 Apr 12 00:16:58 UTC	06:33			Time	2024 Apr 04 13:12:00	0 2024 Apr 04 13:16:12			
lge	90h 30m 8s ago	90h 23m 35s ago	06:33				UTC	UTC	04.10		
	58° 20' 35" N, 167° 1' 54" E	58° 20' 33" N, 167° 1' 52" E	73 m			Age Position	269h 28m 33s ago 59° 45' 35" N, 170°	269h 24m 21s ago 59° 45' 18" N, 170°	04:12 633		
leading	•	24.5°	-°	18	15		46' 12" E	45' 51" E	m •		
Vidth	— m	16 m	— m			Heading	-	64°			
ength	— m	120 m	— m			Width Length	— m — m	9 m 57 m	— m	1	
	*	History Trail Name: Andromeda MMSI: 273378130 IMO Number: 900036 Flag: Russian Federa Vessel Type: 7-Cargo Length: 120m Beam: 16m Draft: 7.3m	tion	S2B_MSIL1C_20240323T000609_N0510. Source: SENTINEL-2-SAT-E0 Time: 2024 Mar 23 00:10:09 UTC Age: 570h 30m 24s ago Position: 59° 23' 22" N, 169° 21' 30" E Heading:* Sensor: Sentinel-2	-13E			History Trail Name: Gorin MMSI: 273611130 IMO Number: 86612 Flag: Russian Feder Vessel Type: 30-Fisi Length: 57m Beam: 9m Draft: 5.4m	ation	Source: CO SA Source: SEM	44 entinel-1-SAFSAR- XVIEW3 RELATED SENTINEL- TSAR-XVIEW3 TINEL-2-SATEO RELATED SENTINEL- SATEO
										Source: VIIF	RELATED VIIRS
Attribute	s 🗸			Attributes 🗸		Attribut	ies 🗸				DERIVED-DETECTIONS



Synthetic Aperture Radar (SAR) Examples

uick Filte	er ✓ 048e2e07b1778c42e		_ ×			cedce7d	1a2a836a2ec593c3c	± 6	_ ×	🤇 cf4a780a1dba45dd26074592 🛨 🛱 _ 🗙 arted Map
xView		ge should be analyzed	_				v3 - beta version. Ima ty to rule out it is pos	ge should be analyze sible land.	d for	xView3 - beta version. Image should be analyzed for validity to rule out it is possible land.
	SAT-SAR	AIS	Delta	•			SAT-SAR 2024 Mar 28	AIS 2024 Mar 28	Delta	Source: SENTINEL-1-SAT-SAR- XVIEW3
	2024 Mar 24	2024 Mar 24		20		Time	16:16:44 UTC	16:13:43 UTC	03:01	Time: 2024 Apr 05 04:39:38 UTC Age: 254h 18m 41s ago
ïme	04:39:38 UTC	04:41:27 UTC	01:49		Honolulu	Age	434h 41m 35s ago	434h 44m 36s ago	03:01	Position: 20° 15' 32" N, 158° 41' 24"
ge	542h 18m 41s ago	542h 16m 52s ago	01:49	132	61	Position	19° 44' 3" N, 156° 12' 27" W	19° 44' 20" N, 156° 12' 22" W	524	W
osition	20° 39' 52" N, 158° 46' 47" W	20° 39' 48" N, 158° 46' 44" W	153 m		21N	Heading		12.5°	m •	Heading: —° 21N 22N
eading	40 47 W	231.55°	· · ·		~	Width	— m	50 m	— m	
lidth	— m	6 m	— m			Length	— m	289 m	— m	Attributes 🔨
ength	— m	22 m	— m	of 15			CORRELATED			Beam Mode: IW Documentation: https://iuu.xview.us/detections
		History Trai Name: Sea Moon I MMSI: 367128430 IMO Number: 0 Flag: United States America Vessel Type: 30-Fis Length: 22m	s of		25		dis 20 Million	History Trai Name: Emerald Princess MMSI: 310531000 IMO Number: 933: Flag: Bermuda - Ur Kingdom of Great Britain and Northe Ireland Vessel Type: 6-) 3151 nited	Object Type: Fishing vessel Platform: Sentinel-1A Polarization: VV&VH Predicted Length (m): 31 Processing Level: IW_GRDH_1S Resolution: 20 meters Scene Name: S1A_IW_GRDH_1SDV_20240405T043938_20240405T044007. Start Time: 2024-04-05T04:39:38.789Z Stop Time: 2024-04-05T04:40:07.797Z Vessel Prob: 0.923 Source: SENTINEL-1-SAT-SAF XVIEV3
	Y 🛛 ~ ±	Beam: 6m Draft: — Map Filters X						Passenger Length: 289m		SATSAR-WIEW3 IMAGERV/DER/VED/DETECTIO Date Range: FROM: Now- BACK days Remove All Hide Ac Filters Filters



Chat Feature

NOAA	■ NOAA Community Channel Search Chat Messages	
David Pearl	Mon Dec 16 2019	
Online	NOAA Marine Pollution Desk Monday, Dec 16, 2019, 1:05PM	
	Paul Lee at Satellite Analysis Branch (Marine Pollution Desk) with NESDIS here!	
ti	Thu Apr 16 2020	
Chat Settings	J Joseph Sienkiewicz Thursday, Apr 16, 2020, 5:52PM Hello. My team and I are attempting to create custom polygon boundaries using the SeaVision API tool and specific latitude and longitude points. However, we do not know what input format is needed to enter in the points to create the shape successfully in the API. The boundary example in the API tutorial only includes a single corner point, but we will	
Translation Settings	have several (10-20 points).	
Language: Spanish 🔻	Also, we want to know if this custom boundary/polygon we make will become a shape listed within our account? We are hoping to be able to add it to our map and set up alerts for it once it is made. Thank you.	
Disclaimer	Sat May 16 2020	
Cross Community Settings Chat with users across all communities Public mode enabled. Users from other communities may discover and contact you Chat Download Settings	Saturday, May 16, 2020, 7:41AM Hey Joseph, Brendan here from NCCOS Biogeography Branch. I was able to generate a shape polygon for Grays Reef NMS and other Sanctuaries by looking at the specific boundary coordinates of GIS .shp files in ArcPro. Under the My layers tab, make sure Shapes are on, then select the edit tool and draw a rough outline of the polygon. GR only has four points so it was fairly easy. Next, double click the new shape to open up shape properties. You will be able to edit the dimensions of your shape here and enter DMS lat/long coordinates. there is a settings function that allows you to change units including just displaying degrees, degrees/minutes or DMS, however it is not capable to change to decimal degrees. You can also add points to change your polygon from their if you need to be more accurate. The more complex sanctuary boundaries are tedious. Once you have your shape created you can use it in the rules, alerts, and warnings, but make sure you remember to turn on the shapes in order to see it on the map view.	
Export Chat History Cross Community + David Pearl	Hola Joseph, soy Brendan de la Subdivisión de Biogeografía del NCCOS. Pude generar un polígono con forma para Grays Reef NMS y otros santuarios observando las coordenadas límite específicas de los archivos.shp de SIG en ArcPro. En la pestaña Mis capas, asegúrese de que las formas estén activadas y, a continuación, seleccione la herramienta de edición y dibuje un contorno aproximado del polígono. GR solo tiene cuatro puntos, así que fue bastante fácil. A continuación, haga doble clic en la nueva forma para abrir las propiedades de la forma. Aquí podrás editar las dimensiones de tu forma e introducir las coordenadas de latitud y longitud del DMS. Hay una función de configuración que te permite cambiar las unidades, incluida la visualización de grados, grados/minutos o DMS, pero no puede cambiar a grados decimales. También puedes añadir puntos para cambiar tu polígono con respecto a los suyos si necesitas ser más preciso. Los límites más complejos del santuario son tediosos. Una vez que haya creado	
	la forma, podrá utilizarla en las reglas, alertas y advertencias, pero asegúrese de no olvidar activar las formas para poder verla en la vista del mapa.	
Community	Saturday, May 16, 2020, 7:44AM	
NOAA	Plantiday, May 10, 2020, 1994W I am currently trying to add in kml, csv, and geoJSON files as well but have not had any luck and just get an error message. If I figure out how to resolve this I can provide my notes on here so that it will be easier to add boundary polygons. if anyone has run into this problem and found a solution please feel free to reach out via brendan.guthrie@noaa.gov. Joseph, I hope that answers your question and please reach out if you would like any more help! Cheers, BG	
Persona		
😰 NOAA-Govt Data and Commercial AIS	Write a message	
Direct Messages +		



Rules/Alerts

= SEANSION Map -	Dashboard - Search Chat . NO	AA AA-Govt Data And Commercial AIS 🔹 💄 David Pearl 👻 🕐 🗸 19:19 UTC
	Create New Rule	×
Active Rules (0)	1 Name Your Rule	C
My Rules Persona Commun	Choose How To Evaluate Your Conditions	VE AS LIST MAP RESULTS SETTINGS
	Set Up Your Conditions	W DA VE C SP sults
Disabled Rules (1)	IDENTIFICATION V CHARACTERISTICS V	
C Filter by rule name or creator My Rules Persona Commun		ADD CONDITION
No Data	HISTORY DERIVED PROPERTIES LIST ANOMALIES Source:	User Feedback
	SAVE YOUR RULE	



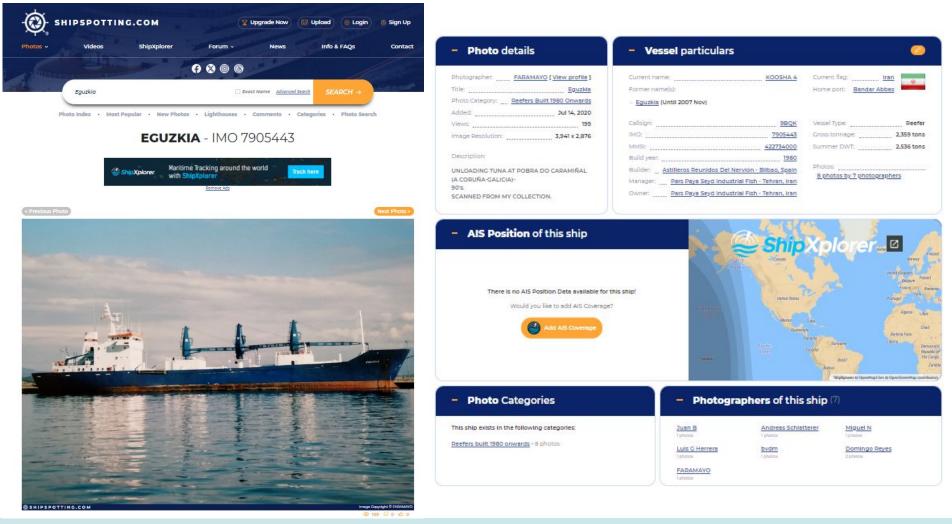
Examples: Commercial MDA Tools



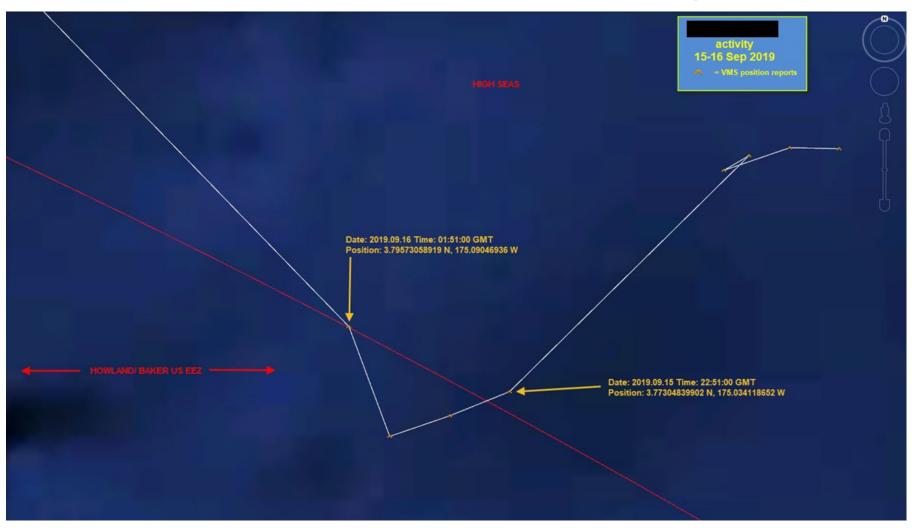


Vessel Hobbyist Site Example

ShipSpotting.com (<u>https://www.shipspotting.com/</u>)







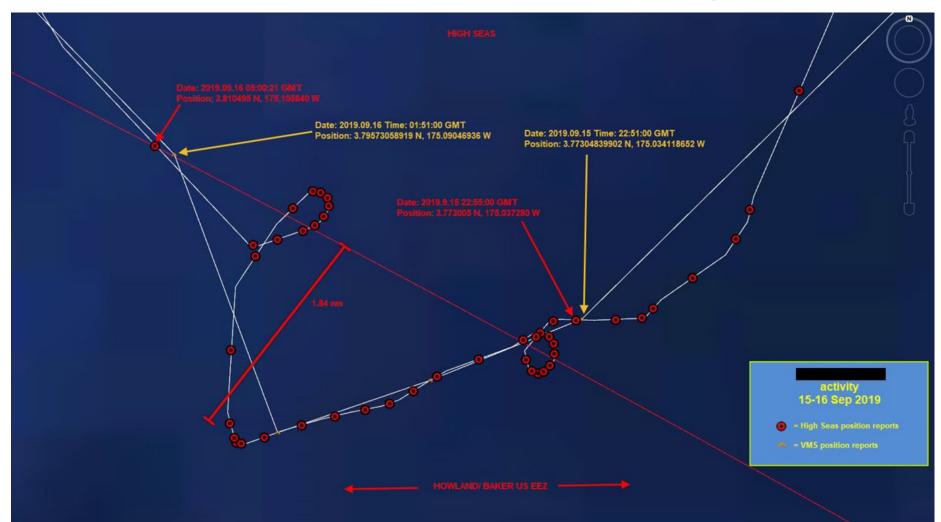
VMS data layer = 1st red flag





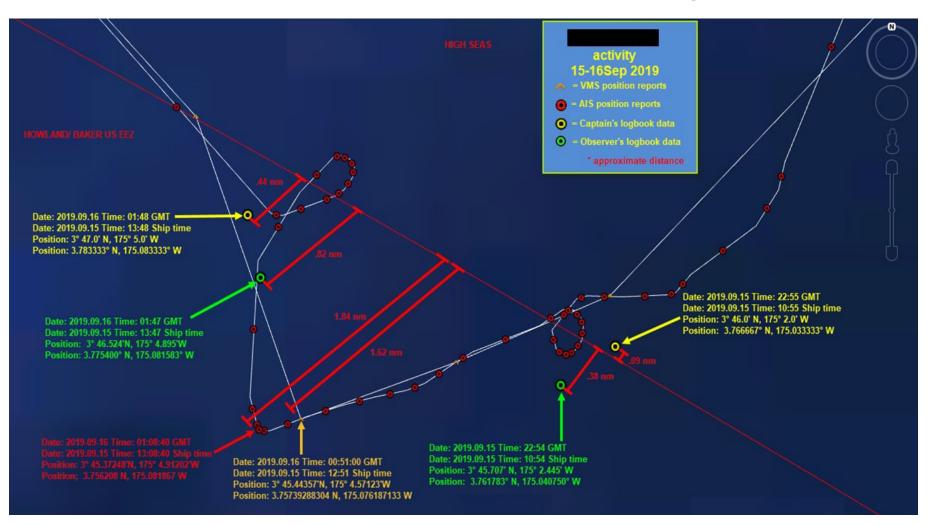
AIS data layer = 2nd red flag





VMS + AIS data layers = Big **RED** Flag: Further investigation needed!





MDA data + Strong Investigation + Legal Framework = \$\$\$ Fine



Summary: Vessel Information Sources

- No single "magic" source
 - Need to check information from multiple sources
 - Need to combine information to reveal new insights
- Intellectual rigor
 - Need to consider factors that contribute to false impressions (alternative hypothesis)
- Need for information sharing
 - Between partner countries
 - Between different agencies within countries



Quick reference guide:

TMT Combined IUU Vessel List: https://www.iuu-vessels.org/iuu S&P/IHS SeaWeb: https://www.spglobal.com/marketintelligence/en/mi/products/sea-web-vessel-search.html Lloyd's List Intelligence: <u>https://www.lloydslistintelligence.com/</u> IMO GISIS: <u>https://gisis.imo.org/Public/Default.aspx/</u> Equasis: https://www.equasis.org/EquasisWeb/public/HomePage UN FAO Global Info Exchange System: https://psma-gies.fao.org/ UN FAO Global Record: https://www.fao.org/global-record/information-system/en/ UN FAO Fishing Vessel Finder: https://www.fao.org/fishery/en/collection/fv RFMO/RFB Links: <u>https://www.fao.org/fishery/en/organization/search</u> Consolidated List of Authorized Tuna Vessels: https://tuna-org.org/vesselpos.htm SeaVision: <u>https://info.seavision.volpe.dot.gov/</u>

Global Fishing Watch: <u>https://globalfishingwatch.org/</u>

Skylight: <u>https://www.skylight.global/</u>



The End



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