

**SKIPPERS WORKSHOPS ROUND 9 - REPORT Nº 7****Workshop Date: 1<sup>th</sup> July 2019****Nº Participants: 9 (Appendix I)****Presenting Scientists: GALA MORENO, JEFFERSON MURUA****SKIPPERS WORKSHOP COMMENTS + NEW IDEAS****COLOR CODES FOR MEASURE ACCEPTANCE LEVEL****HIGH****MID-HIGH****MID****MID-LOW****LOW****SHARKS****Fishing sharks in the net****KEY POINT: ALL FAD SETS HAVE SHARKS AND CATCHING A SIGNIFICANT AMOUNT HANDLINING COULD PROVE DIFFICULT**

- Skippers were presented with the percentage of FADs in the Indian and Atlantic oceans which at least had one shark present (77 and 40 percent respectively). They indicated that in the WCPO all FADs had at least one shark present. When queried about the size of these sharks, fishers thought that there is a wide range, but most are small to medium.

- This was the first time these fishers had seen this mitigation option and were not very convinced about the option of fishing sharks in the net. They thought it would be difficult to fish a significant amount of the sharks present in the net.

**Release practices****KEY POINT: FISHERS UTILIZE HOPPERS TO RELEASE BYCATCHES, WITH NO SLOW DOWN OF THE LOADING PROCESS**

- Skippers present explained they had hoppers on board and that they always used this tool to facilitate bycatch release and to regulate the flow of tuna entering the lower deck. Fishers did not think that the hopper slowed down the loading operation and would recommend this equipment to fishers who do not have them onboard.

- The Marshall Island in the past year had been issuing heavy fines per shark landed during unloading in their waters. However, this penalty has been now removed or at least the economic quantity strongly reduced because industry was complaining that it was very difficult to spot and take out all sharks while brailling. Even if few, there are always some sharks that will go unobserved and end up in the wells.

	<ul style="list-style-type: none"> <li>- Skippers estimated that on average they will encounter 2-3 manta rays per year. Some of the fishers released the manta rays manually, however a navigator from the Caroline Fishing Company in Micronesia said to be using the cargo net release method and reported this method worked well.</li> <li>- When accidentally caught, whale sharks are released over the corks. Some skippers with several years of experience in the WCPO said they had never encountered a whale shark in their sets.</li> <li>- A few fishers complained that some Asian fleets do not play by the rules and set on whales and other prohibited species. In addition, they suspected these fleets have very poor bycatch release practices. This point could not be contrasted with observer data.</li> </ul>
<p><b>Non-entangling DFADs</b></p>	<p><b>KEY POINT: MOST FADS ARE STILL HIGH ENTANGLEMENT RISK, SEVERAL FLEETS ARE NOW UTILIZING SUBMERGED RAFT DESIGNS</b></p> <ul style="list-style-type: none"> <li>- As in other WCPO workshops, skippers' FADs seem to be all the same type with a burrito cork-built floatation and one open net continuous panel reaching 60-80 m depth. All netting used was of the high entanglement risk type, with &gt;2.5 stretched mesh sizes. Only the Korean fishers appear to have a slightly different design mixing PS panels and green netting (entangling as well), and have somewhat deeper tails reaching down to 100 m.</li> <li>- Apparently several fleets, especially Asian vessels, are now using submerged FADs (i.e. the raft lays below the sea surface), as these are harder to spot by other vessels. Theoretically submerged burrito style rafts, with tightly wrapped netting, have very little risk of turtle entanglement as individuals will not climb to rest on these submerged and narrow-shaped structures.</li> <li>- A fisher said that Trimarine had been trying lower entanglement risk FADs in the past, with the subsurface netting tied into bundles or coils, and no open net. Apparently, these FADs were not as good for aggregating tuna as those with open net panels. This skipper thought that what he called the "Spanish style" LER FADs, referring to the floating objects used by the Ecuadorian-flagged Spanish-owned vessels operating in the EPO and WCPO (e.g. Albacora, Garavilla, Ugavi) were the most efficient at accumulating tuna. These "Spanish" FADs have generally a combination of a bamboo raft wrapped in canvas and a tail with two lateral coils going down to 50-60 m, with two or three small-mesh open panels interspaced at 10-15 m intervals (see photo in Skippers Workshop Report 8.8., Appendix II, Fig. 2).</li> </ul>
<p><b>Bio-degradable FADs and FAD retrieval</b></p>	<p><b>KEY POINT: A FAD BIODEGRADABLE WORKSHOP WAS HELD WITH FISHERS PROVIDING INFORMATION ON MATERIALS, PRICES, DURABILITY AND OTHER KEY ISSUES</b></p> <ul style="list-style-type: none"> <li>- This Skippers Workshop was preceded by a specialty workshop on biodegradable FADs on the same day, in which fishers expressed their views about impacts caused by FAD structures</li> </ul>

and how to minimize them. A technical report on this meeting and the one in Philippines will be published by ISSF in the coming weeks.

- For fishers the type of material used to construct the FAD (e.g. synthetic or natural) did not determine the likelihood of aggregating tuna. In fact, if they had to choose, skippers thought that natural materials, such as palm leaves, are more attractive as they release natural oils or scents that fish detect and recognize.
- Questioned about the price of building a FAD fishers' answers ranged from 100\$ and 700\$ depending on the fishing company and fleet.
- Fishers estimated that the working life of a FAD can go from 6 months up to 2 years. FADs are regularly repaired to extend their useful lifetime.
- A captain who had previously worked in Trimarine, informed that this company had tried some biodegradable FAD prototypes with panels of thick cotton canvas in the tail, but he thought that this material rapidly broke down (within 1-2 months), thus yielding poor results in terms of durability.
- A skipper described how he would regularly retrieve his FADs from the water and store them on the boat, to later reuse some of the elements (e.g. corks, netting) in the construction of new FADs or even replant the whole FAD if still in working order in other areas. He said that storage space is not an issue as many FADs can be kept on the vessel's bow or the roof of the wheelhouse. Picked up non-reusable FAD were disposed of at port. Often, this fisherman would encounter disapproval or at least little support from his ship-owner or fellow skippers, who saw this practice as a waste of time.
- Fishers suggested metallic cable as the wait for the biodegradable FAD's tail, arguing that it was degradable and would rapidly rust and break down.

## SMALL TUNA

### Buoys with echo-sounder

#### **KEYPOINT: COMMERCIAL MULTIFREQUENCY ECHO-SOUNDERS ARE NOT YET ABLE TO DISCRIMINATE ACCURATELY BETWEEN SPECIES**

- Fishers are not able to discriminate using current echo-sounder buoys between tuna species, even though some brands have introduced two sounders operating at two different frequencies. The commercial version of these multifrequency models is still not reliable enough to inform about species composition at FADs with accuracy. Improvements in this area of fishing technology were welcome by fishers.
- At present other oceans including the Atlantic, Indian and Eastern Pacific Oceans have YFT and/or BET catch quotas (by vessel or for the whole fishery) which could act as an incentive for fishers to avoid FADs for which buoys indicate high proportions of these species. In the WCPO there are no quotas of this type.
- All skippers were using echo-sounder buoys, several indicated they work with the brand Zunibal. When asked if the instrumented buoys were reliable, some said that they information

	<p>is useful, but that biomass estimates from the echo-sounder rarely matches the real catch. In some cases, the estimated biomass does not reflect the true amount of tuna in the FAD.</p>
<p><b>Short tail FADs and net depth</b></p>	<p><b>KEY POINT: FISHERS THINK SHORT TAIL FADS WOULD BE LESS EFFICIENT THAN DEEP TAIL ONES, AS THEY DRIFT FASTER AND CHANGE TRAJECTORY EASIER</b></p> <ul style="list-style-type: none"> <li>- Fishers argued they use FADs with open panels reaching +60 m, because in the WCPO there are several water masses operating within the first 50 m below the surface. These currents change regionally and seasonally both in direction and speed. Having a large “anchoring” surface stabilizes the drift and prevents sudden variations in FAD trajectory, which make tunas abandon a FAD according to fishers.</li> <li>- Part of the fishers believed that deeper PS nets enabled catches of more bigeye tuna. Due to the deep thermocline in this region, fishers set in the dark and frequently turn on artificial lights in the FAD prior to setting to aggregate the tuna closer to the surface, so the school has less chance of escaping under the net when it is shot.</li> <li>- Some fishers thought that rather than FAD depth it is the area where they are fishing that determines the presence of BET. A captain said that larger adult tunas can be found more frequently in the central Pacific, close to the WCPFC and IATTC border, in the 145-150°W and 4°N-4°S.</li> </ul>
<p><b>Closures and FAD numbers</b></p>	<p><b>KEY POINT: MANY FISHERS WERE IN FAVOR OF FURTHER REDUCING THE NUMBER OF FADS AS IT CAN HAVE EFFECTS ON CATCHES AND SET SIZES</b></p> <ul style="list-style-type: none"> <li>- On the 1<sup>st</sup> of July, the day of the workshop, the 3-month FAD closure was starting. In the few months prior to this date, catches have been very high for most vessels, both in free schools and on FADs. Up to 40 vessels were unloading in Majuro in May, with a long cue of vessels waiting for transshipment vessels at the harbor. Much of the fish had been caught in areas close to the central Pacific, a lot coming from Kiribati waters where FAD use is frequent. Fishers complained that this overload of tuna saturating the market has led to a strong reduction in tuna prices. In a way, fishers were looking forward to the FAD closure to reduce overall catches, as it would lower the offer of tuna available to canneries and shift upwards the market price.</li> <li>- Several skippers thought that the FAD closures were a good measure for the conservation of tuna. A few fishers thought that FADs should be banned all together, calling for a return to fishing only on free schools and logs, “as it was done in the old days”. They regarded working with free schools as an art which required skill and was “more fun”, compared to fishing on FADs which they regard almost as a form of “aquaculture”.</li> <li>- A skipper commented on his personal observations that due to the increase in the number of FADs the size of the aggregations in each FAD is now smaller as schools divide more. Nowadays tunas have a much higher availability of floating substrates to which they can associate. Sets of &gt; 50 t of tuna are becoming rarer as tuna schools swimming around have more frequent encounters with FADs. Now smaller schools have less chances of aggregating</li> </ul>

into much larger groups under one single FAD. Other factors for a reduction in set sizes might also be at play such as setting on FADs earlier than optimal to avoid losing the FADs to other vessels or FADs drifting into fishing grounds for which they do not hold licenses.

- Another captain with previous experience in the Mexican fleet, which works primarily with dolphin set and free school sets, mentioned that the size of the aggregations of YFT schools with dolphins has decreased overtime. Many dolphin-sets are now yielding < 15 t of YFT. He believed this decrease in school size of adult YFT was associated with the heavy escalation in the use of FADs by other fleets of the EPO.

## BONY FISH AND OTHERS

### Utilization

#### **KEY POINT: WCPO FADS HAVE A LOW INCIDENCE OF BYCATCH BONY SPECIES AND THERE ARE NO WELL DEVELOPED MARKETS FOR THEM**

- Fishers commented that they do not commercialize small tuna species (e.g. bullet tuna, frigate tuna) as incidental catches of these species are very low and there is no local market available to buy them.

- Typical floating object associated bony fish bycatch species, such as dolphinfish or rainbow runners, are present sometimes at FADs. However, their quantities are very small compared to other oceans such as the Atlantic. Some of these bony fishers are released alive to leave a signal in the FAD and others may be consumed by crew.

## CPUE AND FISHING EFFICIENCY

### 1. Fishing technology, observers and FADs

#### **KEY POINT: DESPITE THE ESCALATION IN FAD USE MOST VESSELS ARE OPERATING WELL BELOW THE ACTIVE FAD LIMIT PERMITTED BY THE WCPFC**

- According to some participants the Spanish, Korean and Taiwanese fleets are the ones which have a more FAD-oriented fishing strategy in the WCPO. Although some Asian fleets have been increasing the number of FADs used in recent years, fishers thought that only the Spanish might be operating close to the 450 active FADs per vessel established by the WCPFC.

- Trials with electronic monitoring systems on PS have been conducted recently in the Pacific with the companies Garavilla (Ecuadorian fleet) and Trimarine (USA fleet).

- A skipper who had worked in the Mexican fleet before explained how fishers were paid according to the size of tuna caught. For example, SKJ between 2-5 kg was paid at half the price of >10 kg SKJ. Meanwhile, any tuna below 2 kg was not paid.

- Vessels from captains consulted in Majuro did not have helicopters. Only one of Taiwanese vessels had one in the past but stopped using it after they had a serious accident.

- Some of the fishers in a Taiwanese vessel, and probably in other fleets as well, work for long periods at sea without going home. A fisher reported having to complete a 4-year contract before being able to return home.

## **NEXT SKIPPERS WORKSHOPS: MANTA (ECUADOR) AUGUST 2019**

### Conclusions from the Round 9 ISSF Skippers Workshop in Majuro (Marshall Islands) 2019:

- ALL FAD SETS HAVE SHARKS AND CATCHING A SIGNIFICANT AMOUNT IN THE NET COULD PROVE DIFFICULT
- FISHERS HAVE HOPPERS TO RELEASE BYCATCHES AND REPORT NO SLOW DOWN IN LOADING SPEED
- MOST FADS ARE STILL HIGH ENTANGLEMENT RISK, SEVERAL FLEETS ARE NOW UTILIZING SUBMERGED RAFT DESIGNS
- A FAD BIODEGRADABLE WORKSHOP WAS HELD WITH FISHERS PROVIDING INFORMATION ON MATERIALS, PRICES, DURABILITY AND OTHER KEY ISSUES
- COMMERCIAL MULTIFREQUENCY ECHO-SOUNDERS ARE NOT YET ABLE TO DISCRIMINATE ACCURATELY BETWEEN SPECIES
- FISHERS THINK SHORT TAIL FADS WOULD BE LESS EFFICIENT THAN DEEP TAIL ONES, AS THEY DRIFT FASTER AND CHANGE TRAJECTORY EASIER
- MANY FISHERS WERE IN FAVOR OF FURTHER REDUCING THE NUMBER OF FADS AS IT CAN HAVE EFFECTS ON CATCHES AND SET SIZES
- DESPITE THE ESCALATION IN FAD USE MOST VESSELS ARE OPERATING WELL BELOW THE ACTIVE FAD LIMIT PERMITTED BY THE WCPFC
- WCPO FADS HAVE A LOW INCIDENCE OF BYCATCH BONY SPECIES AND THERE ARE NO WELL DEVELOPED MARKETS FOR THEM
- FISHERS IN A TAIWANESE VESSEL, AND PROBABLY IN OTHER FLEETS AS WELL, WORK FOR LONG PERIODS AT SEA WITHOUT GOING HOME. A FISHER REPORTED HAVING TO COMPLETE A 4-YEAR CONTRACT BEFORE BEING ABLE TO RETURN HOME.

## Appendix I – Participant Lists ISSF Skipper Workshop General Santos (Philippines) 27 June 2019

Name	Profession	Vessel	Company
Bruce Robson	Skipper	Marielle	CFC
Mario Radulic	Skipper	Marielle	CFC
Deng Zhao Wong	Skipper	Wnkak	PPF
Pan Jun Jie	Fleet Manager		SHANGHAI KAICHUANG DEEP SEA FISHERIES CO.
Cheng Xu Li	Fleet Manager		PPF
Orion Hernandez	Skipper	Mathawmarfach	Diving Seagull
Berry Muller	Fisheries Manager		MIMRA
Beau Bigler	Fisheries Manager		MIMRA
Jose Luis Zamora	Skipper	Salomon Topaz	NFD

## Appendix II – ISSF Skipper Workshop General Santos 2019 group photo



## Appendix III- ISSF Skipper Workshop Participants since 2010 by stakeholder group

WS	LOCATION	DATE	SKIPPER	CREW	SHIP OWNERS	FLEET MANAGERS	FLEET REP.	GOV. OFFICIALS	SCIENTISTS	TOTAL
1.0	SUKARRETA (SPAIN)	27/11/2009	15	1	1	1	6	1	0	25
1.1	MANTA (ECUADOR)	18/09/2010	56	18	1	0	1	0	0	76
1.2	PANAMA CITY (PANAMA)	22/09/2010	6	6	1	0	0	3	6	22
1.3	ACCRA (GHANA)	10/11/2010	2	0	0	0	2	21	6	32
1.4	SUKARRETA (SPAIN)	13/12/2010	32	0	0	0	6	0	5	43
1.5/1.6	MAHE (SEYCHELLES) /PORT LOUIS (MAURITIUS)	1-19/02/2011	11	5	0	0	1	0	0	17
1.7	PAGO PAGO (AMERICAN SAMOA)	05/03/2011	2	0	2	1	4	3	2	14
1.8	MAUIRO (MARSHALL ISLANDS)	22/06/2011	2	1	0	0	1	1	0	5
1.9	PONFEEI (MICRONESIA)	24/06/2011	3	1	0	0	4	0	0	8
2.1	ACCRA (GHANA)	14/03/2012	2	0	0	2	18	6	0	28
2.2	MAHE (SEYCHELLES)	21-18/05/12	5	2	0	0	1	0	0	8
2.3	PAGO PAGO (AMERICAN SAMOA)	11/06/2012	3	2	0	0	3	0	2	10
2.4	GENERAL SANTOS (PHILIPPINES)	08/09/2012	26	4	0	1	3	0	21	55
2.5	BINTUNG (INDONESIA)	11/09/2012	20	0	0	0	0	25	3	48
2.6	JAKARTA (INDONESIA)	13/09/2012	13	1	0	0	0	10	3	27
2.7	MANTA (ECUADOR)	26-27/09/2012	17	4	4	0	1	0	1	27
2.8	SUKARRETA (SPAIN)	06/10/27/11-5/12/2012	87	3	2	2	9	0	6	109
3.1	ACCRA (GHANA)	08/05/2013	13	0	2	1	18	7	0	41
3.2	LIMA (PERU)	05/08/2013	0	0	2	2	16	2	15	37
3.3	MANTA (ECUADOR)	08/08/2013	37	5	0	3	4	1	0	50
3.4	PANAMA CITY (PANAMA)	22/08/2013	2	0	2	1	7	0	7	19
3.5	SUKARRETA (SPAIN)	07/11-10/12/2013	44	6	2	2	5	0	0	59
4.1	BUSAN (KOREA)	14/02/2014	8	9	0	1	10	3	12	43
4.2	KAOHSIUNG (TAIWAN)	18/02/2014	1	0	0	6	12	0	0	19
4.3	CANGAS (SPAIN)	28-29/05/2014	20	10	0	0	0	0	0	30
4.4	ACCRA (GHANA)	15/07/2014	7	6	10	9	11	4	1	48
4.5	MANTA (ECUADOR)	13/08/2014	35	1	0	0	1	0	3	40
4.6	JAKARTA (INDONESIA)	15/08/2014	21	2	0	0	1	1	3	28
4.7	GENERAL SANTOS (PHILIPPINES)	05/09/2014	24	6	0	0	2	0	2	34
4.8	SUKARRETA (SPAIN)	18/09-14/10/2014	52	5	0	1	3	1	1	63
4.9	PAGO PAGO (AMERICAN SAMOA)	15-20/10/2014	8	1	0	0	4	0	1	14
5.1	MANZANILLO (MEXICO)	12/01/2015	34	20	1	1	2	4	1	62
5.2	MAZATLAN (MEXICO)	14/01/2015	65	46	0	1	1	4	1	118
5.3	SAN DIEGO (USA)	12/02/2015	5	0	0	1	3	0	0	9
5.4	TEMA (GHANA)	08/05/2015	10	5	2	9	18	0	1	45
5.5	JAKARTA (INDONESIA)	19/06/2015	8	14	1	0	5	0	4	32
5.6	BINTUNG (INDONESIA)	22/06/2015	21	13	0	0	1	1	2	38
5.7	SIBOLGA (INDONESIA)	25/06/2015	22	15	0	0	0	1	1	39
5.8	LIMA (PERU)	11/06/2015	10	5	1	1	16	3	6	42
5.9	MANTA (ECUADOR)	14/08/2015	83	8	3	8	6	0	0	108
6.10	BUSAN (KOREA)	15/09/2015	8	0	0	1	8	2	25	44
6.11	CONCARNEAU (FRANCE)	13/10/2015	14	6	0	2	2	0	2	26
6.12	SUKARRETA (SPAIN)	8-26-30/10/2015	49	5	4	1	2	0	0	61
6.1	SHANGHAI (CHINA)	06/04/2016	10	0	0	6	5	0	6	27
6.2	TEMA (GHANA)	04/05/2016	8	6	2	5	20	4	1	47
6.3	VIGO (SPAIN)	29/07/2016	51	23	0	1	0	0	0	75
6.4	MANTA (ECUADOR)	03/08/2016	33	17	0	2	3	0	1	56
6.5	POSORJA (INDONESIA)	05/08/2016	8	5	0	1	0	0	0	14
6.6	JAKARTA (INDONESIA)	05/09/2016	27	0	0	1	3	0	0	31
6.7	BINTUNG (INDONESIA)	07/09/2016	27	1	1	0	0	1	10	40
6.8	KENDUWANG (INDONESIA)	08/09/2016	22	0	1	0	1	2	10	35
6.9	SENDA (INDONESIA)	16/09/2016	21	0	0	0	6	0	0	27
6.10	SIBOLGA (INDONESIA)	14/09/2016	15	0	0	7	1	2	0	25
6.11	BANDA ACEH (INDONESIA)	16/09/2016	23	0	0	0	8	0	0	31
6.12	QUY NHON (VIETNAM)	17/09/2016	42	0	0	0	13	0	3	58
6.13	SUKARRETA (SPAIN)	24-28/10/2016	42	5	1	0	3	0	1	52
6.14	MAGORRA (PORTUGAL)	04/12/2016	4	19	0	0	2	0	1	26
7.1	MANTA (ECUADOR)	10-11/10/2017	95	16	0	1	3	0	2	117
7.2	TEMA (GHANA)	21/02/2017	22	20	1	5	6	1	1	56
7.3	SAN DIEGO (USA)	17/03/2017	7	1	2	4	3	1	1	19
7.4	MAUIRO (MARSHALL ISLANDS)	01/04/2017	5	4	0	0	2	0	0	11
7.5	PONFEEI (MICRONESIA)	06/04/2017	8	6	1	0	2	0	2	19
7.6	KENDUWANG (INDONESIA)	03/04/2017	23	9	0	0	0	4	0	36
7.7	MAZATLAN (MEXICO)	02/04/2017	20	8	0	0	0	3	0	31
7.8	TUMANGA (MALAYSIA)	07/04/2017	35	6	0	0	0	1	0	42
7.9	AMBON (INDONESIA)	11/04/2017	22	1	0	0	0	4	0	27
7.10	INDOSHAN (CHINA)	01/08/2017	8	1	0	4	8	0	3	24
7.11	VIGO (SPAIN)	10/08/2017	24	68	0	0	0	0	0	92
7.12	SIBOLGA (INDONESIA)	04/09/2017	16	19	0	3	0	0	0	38
7.13	LABRALDI (INDONESIA)	22/09/2017	23	4	1	1	0	2	0	31
7.14	JAKARTA (INDONESIA)	19/09/2017	33	3	0	0	0	0	0	36
7.15	LIMA (PERU)	28/9/2017	14	8	0	1	8	3	4	38
7.16	MANTA (ECUADOR)	04/10/2017	29	41	0	0	0	1	1	72
7.17	CONCARNEAU (FRANCE)	09/10/2017	27	7	0	1	1	0	2	38
8.1	SUKARRETA (SPAIN)	18-20/10/2018	46	16	0	3	1	0	1	67
8.2	TEMA (GHANA)	26-27/02/2018	22	30	4	4	10	5	2	77
8.3	MAUIRO (MARSHALL ISLANDS)	12/04/2018	15	6	0	1	4	1	0	27
8.4	PONFEEI (MICRONESIA)	17/04/2018	7	4	1	0	0	0	0	12
8.5	BINTUNG (INDONESIA)	07/05/2018	32	7	0	0	1	9	2	51
8.6	PRIGI (INDONESIA)	09/05/2018	19	1	0	0	3	8	0	31
8.7	PKALONGAN (INDONESIA)	11/05/2018	18	21	0	0	0	4	2	45
8.8	DIAR DENEGAL	11/05/2018	4	3	0	3	3	0	2	18
8.9	VIGO (SPAIN)	16/07/2018	29	60	0	0	0	0	0	89
8.10	MANTA (ECUADOR)	14/08/2018	65	58	1	3	6	0	2	135
8.11	PANAMA CITY (PANAMA)	16/08/2018	6	0	0	0	2	3	1	12
8.12	SAN DIEGO (USA)	20/08/2018	9	0	3	0	3	0	0	15
8.13	YAGUI (JAPAN)	29/08/2018	1	0	0	0	17	0	11	29
8.14	LIMA (PERU)	03/10/2018	17	5	0	1	9	7	15	54
8.15	CONCARNEAU (FRANCE)	15/10/2018	17	2	0	3	2	0	0	24
8.16	SUKARRETA (SPAIN)	15-21/11/2018	41	23	0	2	7	0	2	75
9.1	TEMA (GHANA)	26/02/2019	22	22	22	22	22	22	22	222
9.2	MANTA (ECUADOR)	09/04/2019	18	23	1	5	11	2	4	64
9.3	JAKARTA (INDONESIA)	03/05/2019	7	16	0	3	0	4	0	30
9.4	SIBOLGA (INDONESIA)	06/05/2019	14	4	0	2	0	9	2	31
9.5	MAZATLAN (MEXICO)	10/06/2019	11	5	0	1	2	0	1	20
9.6	GENERAL SANTOS (PHILIPPINES)	27/06/2019	8	3	2	4	10	4	1	32
9.7	MAUIRO (MARSHALL ISLANDS)	01/07/2019	5	0	0	2	0	0	1	8
	TOTAL		2090	843	85	165	448	200	258	3897