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INFORMATION PAPER ON A COOPERATIVE MONITORING, CONTROL AND SURVEILLANCE ACTIVITY IN THE WESTERN AND CENTRAL PACIFIC FISHERIES COMMISSION CONVENTION AREA: OPERATION NASSE.

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26 Sept 2019

Submitted by Australia on behalf of Australia, France, New Zealand and the United States of America.

Information paper on a cooperative Monitoring, Control and Surveillance activity in the Western and Central Pacific Fisheries Commission Convention Area: Operation Nasse.

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Summary

For the past five years, Australia, France, New Zealand and beginning in 2016, the United States of America, have participated in Operation Nasse, which is a cooperative monitoring, control and surveillance (MCS) fisheries operation conducted on the high seas areas of the south west Pacific Ocean. The objective is to monitor compliance with the Conservation and Management Measures (CMMs) of the Western and Central Pacific Fisheries Commission (WCPFC). These MCS operations provide a unique opportunity for authorised inspectors to gather information on how WCPFC CMMs work in practice as well as enabling vessel operators to seek advice and information on applicable WCPFC CMMs. For example, inspectors have been proactive in educating fishers and have subsequently seen an increase in the presence and use of turtle and seabird mitigation devices, demonstrating a commitment and willingness by the fishing crews' and flag States to comply with WCPFC CMMs. In addition to other verification tools such as observers and electronic monitoring, high seas boarding and inspection (HSBI) activities also ensure that requirements relating to vessel level reporting are met. The reporting of reliable and accurate catch and effort data will remain a focus of these operations because of the importance of this information in supporting WCPFC decision making. This report highlights some key successes and identifies limitations with respect to the reporting of daily catch, effort and interactions with non-target species.

Figure 1. WCPFC flag flown on an authorised Australia patrol vessel *Source: AFMA*

Introduction

Operation Nasse (Op Nasse) is a multi-lateral MCS fisheries operation involving Australia, France, New Zealand and the United States of America. Op Nasse has been held annually for the last five years (2015- 2019) in the high seas of the south west Pacific Ocean (Figure 2).

The objective of Op Nasse is to detect and deter illegal, unreported and unregulated (IUU) fishing on the high seas. Activities include centralised coordination, aerial surveillance and undertaking boarding and inspections of fishing vessels on the high seas to verify compliance with the WCPFC's CMMs. All HSBIs activities are conducted in accordance with CMM 2006-08 - *WCPFC Boarding and Inspection Procedures*. The participating nations work together to effectively coordinate both at-sea inspections and aerial surveillance.

Op Nasse participants request WCPFC MCS information under the 2009 non-public domain data rules to assist the planning and delivery of the operation. Participants wish to take this opportunity to thank the WCPFC Secretariat for their support of Op Nasse through the provision of MCS data in accordance with WCPFC data rules. The data requested included Vessel Monitoring System (VMS), transhipment, HSBI and observer data. Participants relied on the provision of timely and reliable data to inform operational activity and to maximise the effectiveness of limited surveillance platforms.

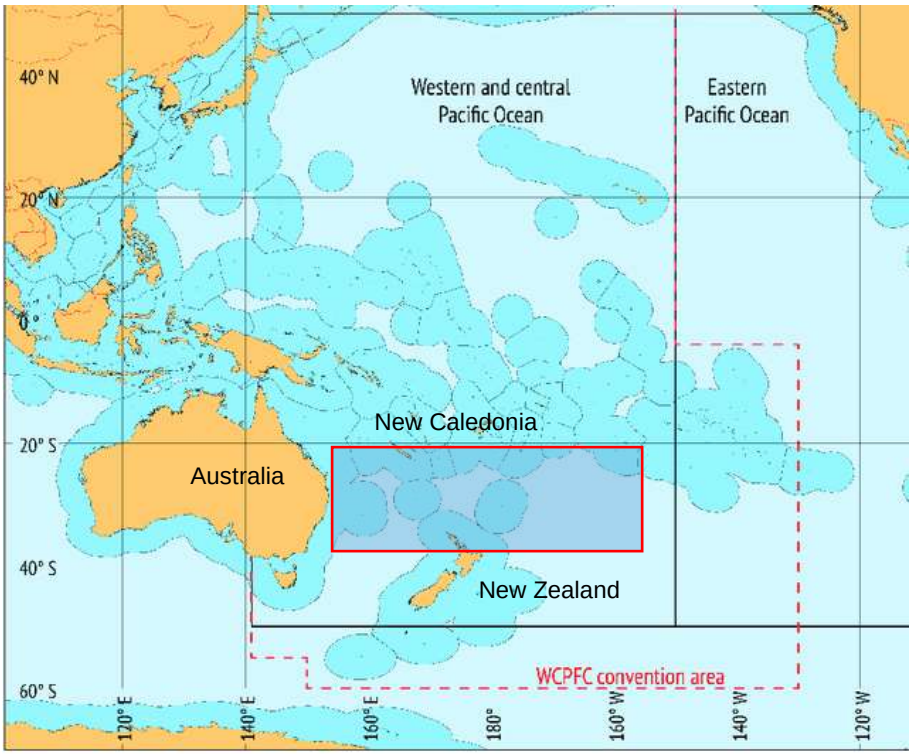


Figure 2. Op Nasse covers the areas of high seas (shaded area) in the southern Pacific Ocean located between the EEZs of the participating nations (not to scale, illustrative purposes only).

This report notes observations on a number of key CMMs:

- High Seas Boarding and Inspections

- Catch and by-catch related data
- Turtle and seabird mitigation devices

Cooperative High Seas Boarding and Inspections

During Op Nasse, participating States received a high level of cooperation from the fishing vessel operators, masters and crews. Crews consistently displayed internationally accepted principles of good seamanship by facilitating and cooperating with the inspectors conducting the boarding and inspections (Figure 4). For instance, there has been occasion where vessels have formed a queue in readiness for their vessel to be inspected by the boarding party.

Vessel masters and crews have assisted in efficient HSBIs by providing the boarding parties with the necessary fishing paperwork, made freezer holds accessible and available for inspection, explained fishing equipment and techniques, and displayed by-catch mitigation devices. This exchange and engagement provides an opportunity for both fishing vessel crews and inspectors to better understand how CMMs are implemented at the vessel level and the insights can be used to better target and inform measures.

Figure 3. Facilitating a boarding Source: AFMA

….Figure 4. Translation card for seabirds Source: AFMA

A persistent challenge experienced during these inspections is the language barriers between the fishing vessel crew and the inspectors. With each year of Op Nasse, various methods have been adopted that build upon the existing WCPFC standardised multi-language questionnaire to overcome translation and language barriers. Interpreters or multi-language translation cards have proven the most successful for HSBIs, in improving communication and obtaining higher rates of correct information (Figure 3). Improved communication has seen greater ability to gather necessary information and improve the capacity for inspectors to provide necessary education to fishers whilst embarked, particularly regarding by-catch mitigation devices. Work is continuing to ensure both multi-language and pictorial cards are available to assist inspectors when interpreters are not available.

As per the CMM, inspectors must provide a copy of the HBSI to flag States and may seek an Article 25 inspection if there is information to suggest suspected illegal activity.

Daily Catch and Effort Reporting

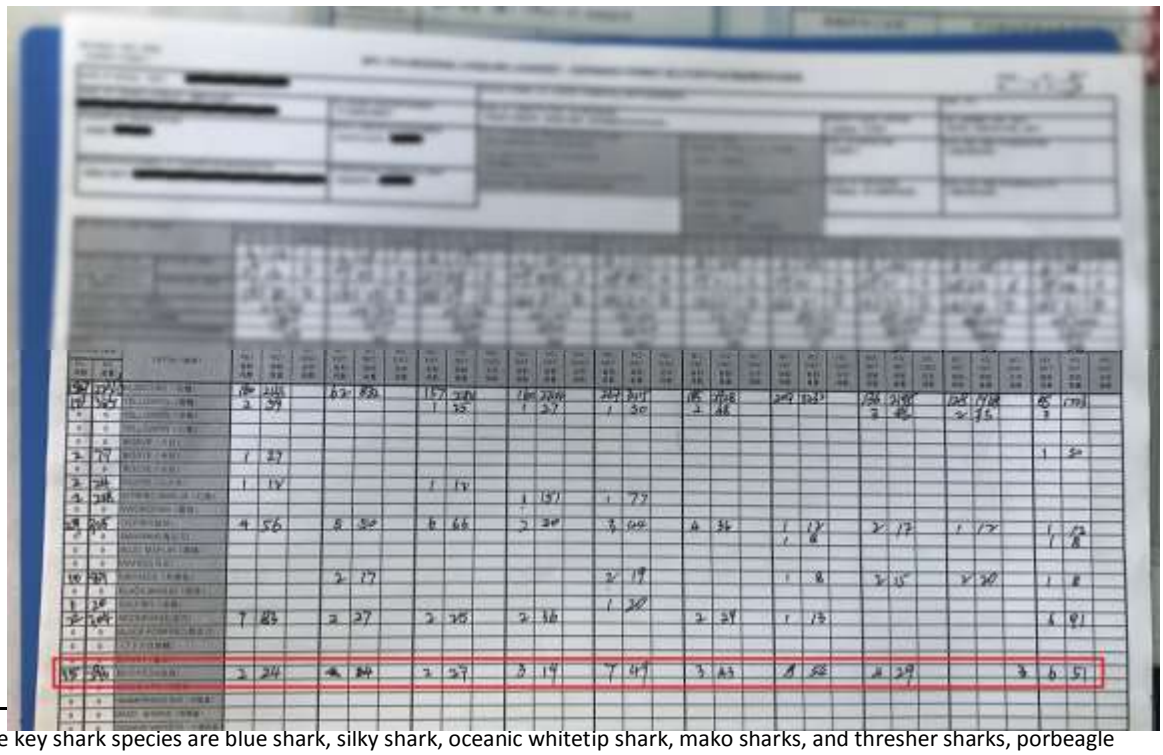
One of the highest risks to the WCPFC fishery, and a serious violation under CMM 2006-08 WCPFC Boarding and Inspection Procedures, is misreporting of catch and effort data. As such, inspectors pay particular attention to assessing compliance against CMM 2013-05 daily catch and effort reporting, and other related CMMs.

Authorised inspectors check that logbooks with catch and effort data of target species are being recorded daily and are kept on board at all times. Inspectors have welcomed and noted the use of electronic logbooks, in almost all cases the e-logs are accompanied by one or more paper records. There are however some compliance monitoring issues that pose particular challenges for inspectors:

- Multiple logbooks on a fishing vessel makes it difficult to establish which is the original, unaltered and accurate daily catch and effort report, often compounded by translation barriers such as non-English characters.
- Data standards, such as recording species FAO codes and times recorded in coordinated universal time (UTC), are not always used; and
- Electronic log sheets and paper log sheets are not identical in recorded species and numbers. E-logs provided to the inspecting state after the HSBI often do not correspond to what was in the paper logbook as observed during the HSBI.

The types and versions of logbooks that are inspected during Op Nasse are varied with the most commonly observed being the flag State or the Pacific Community (SPC) versions. There is also a notable disparity between how vessel operators record daily catch and effort in the log sheets for discards and releases, sharks, seabird interactions and turtle interactions. Inspectors have observed:

- Log sheets with a single 'bycatch' field with individual species not specified (Figure 5).
- Log sheet formats do not have dedicated fields or enough room to record non target species interactions, such as turtle or seabird (Figure 6).
- Sharks being aggregated under 'shark' and not recorded by key shark species as required under the shark CMM[1] (Figure 7); and
- Some vessel operators do not record any interactions, discards or releases because they do not consider this part of their 'catch'. Catch is not a WCPFC defined term, and this creates



[1] The key shark species are blue shark, silky shark, oceanic whitetip shark, mako sharks, and thresher sharks, porbeagle shark (south of 20°S, until biological data shows this or another geographic limit to be appropriate) and hammerhead sharks (winghead, scalloped, great, and smooth).

uncertainty for the vessels compliance status.

Figure 5. Log sheet without by-catch differentiated *Source: AFMA*

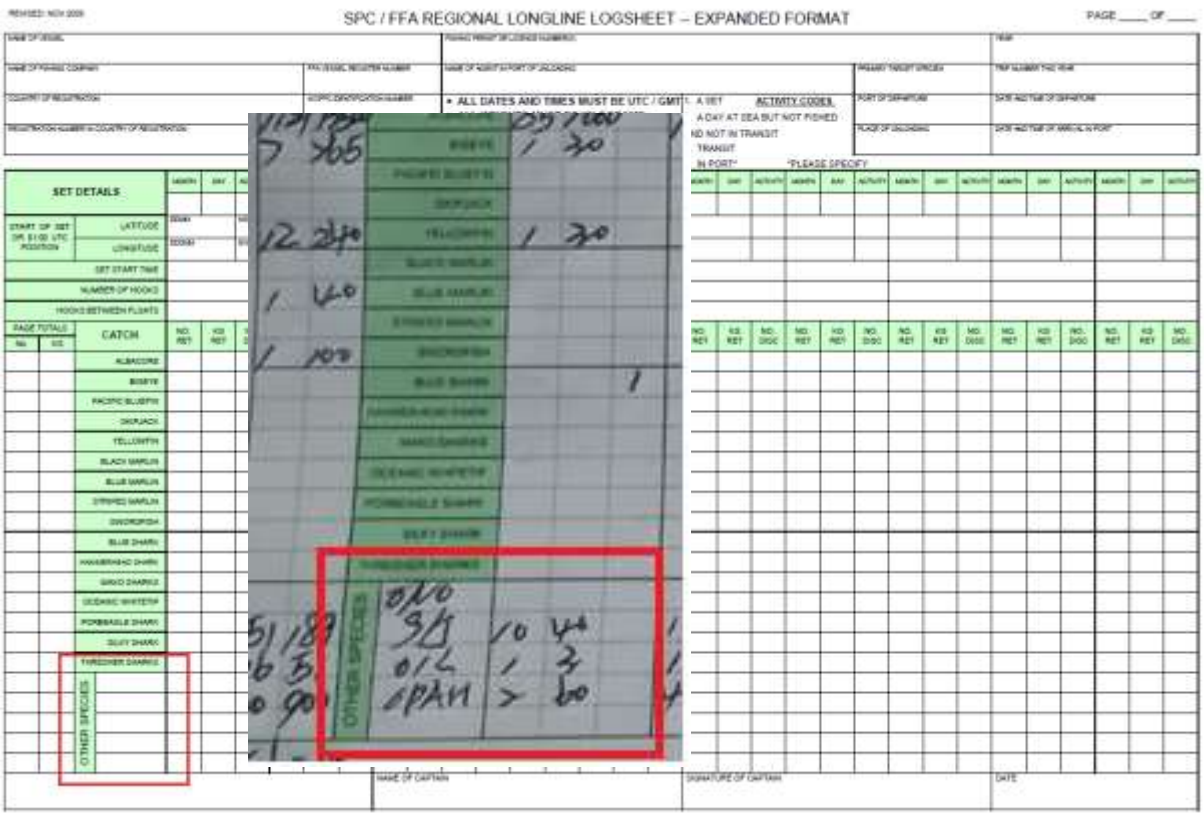


Figure 6. Logbook with no room to record turtle and seabird interaction *Source: AFMA*

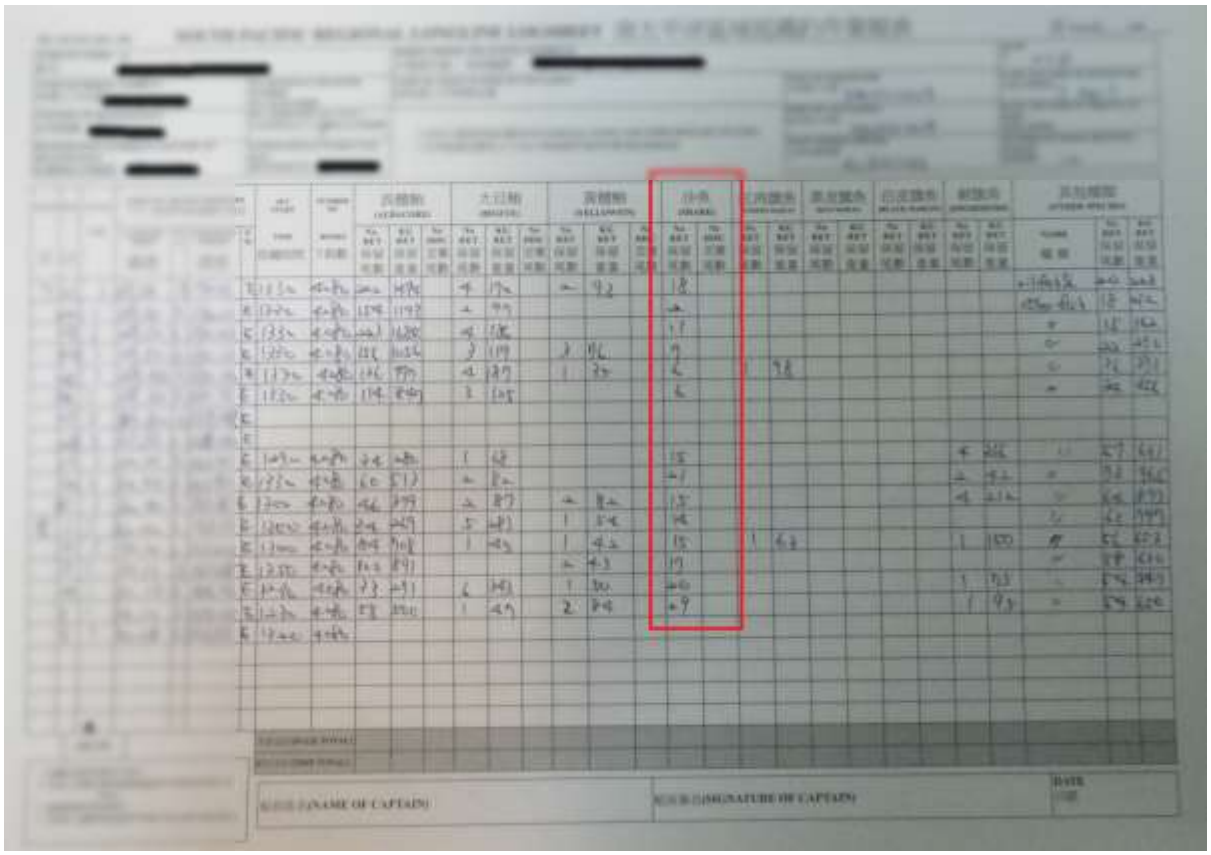


Figure 7. 'Shark' aggregated in log sheet *Source: AFMA*

Inspectors take DNA samples of processed fish on board the fishing vessel in order to validate catch reporting (Figure 8). The DNA samples are sent post boarding to laboratories for analysis and the DNA results are then compared to copies of logbook records taken at the time of the boarding. Any discrepancy is reported to the flag State for further investigation. DNA sampling has exposed misreporting in relation to Southern bluefin and Pacific bluefin tuna on board when this catch was not recorded or represented in the daily catch and effort logbooks.

Unreported or misreporting of interactions, discards and released species as part of operational level catch and effort data distorts the overall reported levels and distributions of fishing mortality on both target and non-target species. This is a particular concern for species where data is limited like sharks and bluefin tunas. On a large scale, this behaviour undermines the science and therefore WCPFC's management framework.

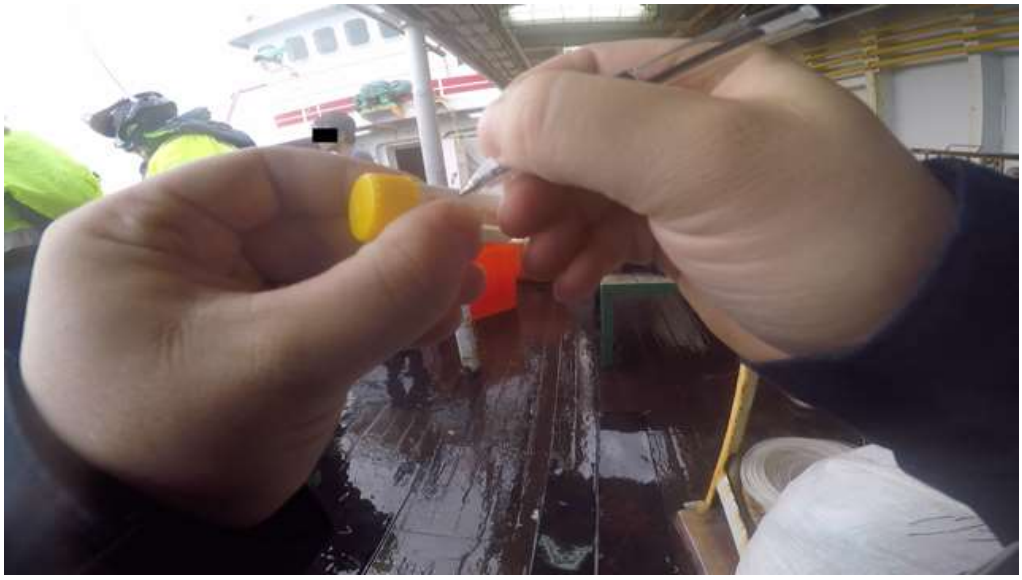


Figure 8. DNA sampling *Source: AFMA*

Bycatch mitigation - Sea turtles

During HSBIs for CMM 2008-03 conservation and management of sea turtles, inspectors can determine the presence/absence, and to some degree the use of turtle mitigation devices on board, circle hooks, whether interactions are recorded in logbooks, if shallow setting is taking place and the type of bait being used.

Inspectors have seen a marked increase in the quality of the equipment used to handle and promptly release sea turtles caught or entangled in accordance with WCPFC Guidelines.

- Some fishing vessels carry specifically designed turtle mitigation kits (dip nets, line cutters and de-hookers).

It has been observed that some fishing vessels carry new and unwrapped turtle mitigation kits (Figure 9). Some of these kits have been located in the wheelhouse and cabin areas, and are not readily available to crews on the working deck. Inspectors provide education and awareness raising to crews to ensure they understand how to use the equipment in order to provide incidentally caught turtles the greatest chance of survival. The flag State is also advised through the provision of the HSBI report.

Figure 9. Fishing vessels are required to carry sea turtle bycatch mitigation devices such as dip nets, line cutters and de-hookers. This vessel could be considered compliant as the gear is present, but it is clear that the gear has not been used and is not stored in a location that facilitates its use. Source: AFMA

Bycatch mitigation – Seabirds

Inspectors check for compliance with CMM 2018-03 to mitigate the impact of fishing for highly migratory fish stocks on seabirds. This CMM is applicable to fishing vessels that have fished south of 30°S (25°S from 2020) in the same trip that the HSBI is conducted. During HSBIs, inspectors collect

information on areas fished and the sea bird bycatch mitigation measures employed by the fishing vessel, such as tori lines, tori poles, line weighting and night setting.

Inspectors have seen a gradual improvement in the design of tori lines over the years (Figures 10 – 12). This year was particularly promising with the length of the tori lines, as well as the brightness and length of streamers, vastly improved (Figure 12). However flag States are asked to work closely with their fleets in ensuring that all tori lines and tori poles meet the specifications outlined in CMM 2018-03 to mitigate the impact of fishing for highly migratory fish stocks on seabirds .

Bait box strapping and flagging tape are the most commonly observed material used for tori line streamers (Figure 10 - 11). Although the repurposing of material as tori line streamers is encouraging to see, material such as bait box strapping is not suitable because it does not meet the CMM specifications and ultimately has the potential to introduce plastic into the marine environment.

Night setting should be recorded in the fishing vessel logbook. To be considered compliant under the night setting criteria, a fishing vessel must only set or retrieve fishing line between nautical dusk and dawn. Currently, VMS location data is used to correlate against logbook data, as fishing vessel operators are only required to record the start time of each set in their daily catch and effort log sheet. There is no provision or requirement for the fishing vessel to declare the end time of each set. Recording the end time of each set would be a useful addition to log sheets for compliance purposes.

Figure 10. Op Nasse 2017 observed tori line with short streamers made from bait box straps. This tori line did not meet CMM specifications Source: AFMA

Figure 11. Op Nasse 2018 observed tori line made from rope and flagging tape. This tori line did not meet CMM specifications. Source: AFMA

Figure 12. Op Nasse 2018 An inspector measures a tori line for compliance specifications. Source: AFMA