

**APPLICATION DATE:** May 23<sup>rd</sup>, 2019

**SUMMARY:**

This EFP would provide us the ability to test the effectiveness of fishing Deep-Set Buoy Gear (“DSBG”) at night. We do not intend for this to delay, or otherwise impact, the authorization of DSBG that is currently underway. We acknowledge prior experiments using DSBG at night have not been successful; but contend much has been learned about this gear type, and fishery, since those experiments. This EFP would allow us to test performance of DSBG, at night, with hooks deployed at a minimum of 300 feet. Based on our knowledge and experience fishing swordfish with DSBG and other allowable gear types, we believe this EFP will prove effective and provide much needed data about the ability to harvest swordfish and other marketable species at night. This, in turn, would help inform any future changes to the fishery allowing a nighttime component.

**INTRODUCTION:**

The Drift Gill Net (“DGN”) fleet is under much scrutiny and controversy over bycatch. There is, currently, no sufficient replacement or alternative for the nighttime harvest of swordfish and other marketable species. If the DGN fishery is legislated out of existence, domestic supply of swordfish will be impacted which will likely lead to an increased reliance on imports. Last year, cheaper imports negatively impacted the price offered for our DSBG harvested product. We believe an opportunity exists to harvest swordfish and other marketable species at night using DSBG.

Currently, there are three methods available to commercial fishermen to harvest swordfish: harpoon, DGN and DSBG. Our experience in these fisheries has informed our opinion that each of these gear types (as currently fished) work better at different times of the year and under different ocean conditions. For example, DGN is particularly effective during the months of December and January. Price offered to fishermen is also higher in December and January, which I attribute to the lack of supply from foreign nations which harvest swordfish. Daytime fishing with DSBG has not been shown effective during January, especially in areas where the DGN fishery is operating. We believe nighttime use of DSBG, during the winter months, will be effective – both in terms of catch and economics. This EFP would provide data to determine (1) the economic viability and (2) catch and bycatch rates - during nighttime hours. If this trial is proven successful, U.S. fishermen will have another option to harvest marketable species which will reduce reliance on imports and benefit the struggling fishing communities in California.

This EFP would allow us to target swordfish and other marketable species during the evening-to-daybreak hours. Prior efforts to use deep-set buoy gear (“DSBG”) at night have focused on the upper portion of the water column; and interactions with Blue sharks were excessive. Using rod-and-reel at night, we, and others, have found that blue sharks are not typically found deeper than 200 feet during these hours. A crewmember on a vessel participating in the DSBG daytime fishery has had success catching swordfish, at night, using rod and reel with the bait set at roughly 300 feet. Over the last few years, this individual has landed roughly 30 swordfish while fishing at night. His success implies that fishing DSBG at night, at depths which reduce potential interactions with nonmarketable species (blue sharks in particular), could be economically viable and environmentally safe.

In order to minimize interactions with Blue sharks, we propose our hooks be deployed at a minimum of 300 feet. We acknowledge this is not the optimal depth for targeting swordfish; but believe this will greatly reduce potential bycatch while providing an opportunity to harvest swordfish and other marketable species. Great care will be taken to ensure any Blue sharks (and other non-marketable species) incidentally hooked are released alive; but

we expect those numbers to be low given the depth we intend to fish. We understand this may inconvenience us; but we are willing to commit to this in an effort to explore additional methods of catching swordfish at night.

Fishing at night, during the hours when swordfish come to the surface, could prove an ideal time to target the species in volume. Current DSBG EFP activities, which are limited to fishing during the daytime, harvests swordfish and very little other marketable species. We believe fishing at night at depth will increase the chances of catching marketable species. This could provide additional data which speaks to the economic viability of the DSBG fishery.

In order to actively tend the gear in the dark, the current deep-set buoy gear configurations (both Standard and Linked) will be altered to be visible at night - (See Attachment B). Deploying a solid green light, designed to stick at least two-feet out of the water, with floats on the strike indicator buoy will help with active gear-tending. The housing for the light will be waterproof; and the lights will be battery powered and similar to those used to illuminate bait for traditional DSBG fishing daylight hours. The configuration has been designed in such a way that when a strike occurs, the light will either be:

- Pulled along the surface of the water (swordfish); or
- Pulled under water (non-swordfish)

At night, the lights will be visible from distance and once a strike is indicated, the strobe and radar reflector will enable us to quickly tend to that gear. Wind speeds are typically reduced during nighttime hours and our lights should be easily seen from our proposed gear footprint of 5 miles. We do not plan on fishing when wind speeds exceed 25 knots; as it would not be safe and could impact our ability to actively tend the gear. For those nights when weather is up (but less than 25 knots), we will have access to gyro-stabilized binoculars to assist in our gear tracking. Additionally, we plan to actively patrol our buoy line to ensure a quick-as-possible response when a strike is indicated. This style indicator buoy configuration is already being used in other parts of the United States. Having radar reflectors and strobes on every upline, are added for redundancy and safety, and will help prevent gear loss. Actively Tending the gear will ensure all non-marketable species will be released alive and in good health. A nighttime fishery at a depth of 300 feet-plus should have similar low bycatch numbers and rates as the fishery using current DSBG configurations during the day.

I would like to apply for a two-year Exempted Fishing Permit, which will give me sufficient time to collect data on composition of catch (swordfish, other marketable species and bycatch) which will inform the viability of a potential night-time fishery. It will also allow me to fish during peak drift gillnet season and be able to compare catch rates and percentages with the DGN fleet. As expected, 100% observer coverage will be part of this EFP until deemed unnecessary by NMFS.

**Applicants:**

1. Nathan Perez

Phone No: 858-232-2027

Email: NathanJPerez@gmail.com

Address: 3158 Brilene Lane, San Diego, CA 92111

Commercial Fishing Permits Held: General Gill Net, Drift Gill Net, Harpoon, Crewmember Trap

**Commercial Fishing Experience:**

	Years of Experience	Gear Type, Type of participation (Capt, crew, vessel owner, etc)
DSBG	4	Captain and crew aboard F/V Gold Coast Captain aboard F/V Bear Flag 2 Crew on F/V Three Boys
Other swordfish gear	15	Drift Gill Net and Harpoon
Other gear type(s)	5	Market squid, General Gill Net (White Sea Bass), Trap Fisheries - crewmember

2. Thomas Carson

Phone No: 949-887-1926

Email: [Info@BearFlagFishCo.com](mailto:Info@BearFlagFishCo.com)

Address: 407 31<sup>st</sup> Street, Newport Beach, CA 92663

Commercial Fishing Permits Held: Harpoon, Swordfish

**Commercial Fishing Experience:**

	Years of Experience	Gear Type, Type of participation (Capt, crew, vessel owner, etc)
DSBG	4	Owner of Bear Flag 2 which participated in the fishery in 2018 Purchased DSBG caught fish from EFP participants since 2015 – included is marketing the fish as DSBG caught and fishermen who caught it
Other swordfish gear	Harpoon – 16 yrs	Harpooned – 4 years as Captain; 13 as crew
Other gear type(s)	20	Rod and Reel yellowtail, white sea bass, tuna (bluefin, yellowfin and albacore), swordfish, dorado and California halibut

**Number of Vessels:** 1

Vessel Name: Bear Flag 2

Registration Number: 558683

Name of Operator: Nathan Perez

Commercial Fishing Permits Held: Swordfish – Harpoon, General

**Neither Nathan nor Thomas have current/pending state or federal violations in any commercial fishery**

**Duration:** Two (2) years

**Intended DSBG Configuration:** Linked and/or Standard

See Attachments A and B for diagrams showing:

(1) configuration of the gear as it would be fished; and

(2) presentation of the lighted strike indicator both when the gear is set and when a strike is indicated.

**We intend to target swordfish but any other marketable species, caught incidentally, will be retained and sold.**

**Fishing Area and Effort:**

Area	Number of Vessels/Vessel Names	Estimated fishing effort in number of days or sets
Southern California Bight (Pt Conception to the U.S. – Mex. Border)	1 – Bear Flag 2	180 days
Central California (Point Reyes to Pt Conception)	1 – Bear Flag 2	90 days
Northern California (42 <sup>o</sup> latitude to Point Reyes)		
Oregon (Columbia River to 42 <sup>o</sup> latitude)		

**Additional information:**

Nathan has extensive experience fishing DSBG (both Standard and Linked). His past experience with the gear type (and in the DGN fishery) makes him ideally suited to test the use of LBG at night.

**Data Gaps:**

- Active tending:
  - This EFP is designed to test effectiveness of DSBG at night in terms of catch rate(s) and interactions with non-marketable species.
  - This EFP will test usefulness of lighted strike indicators to allow for active tending of gear at night. We propose a five-mile footprint to evaluate and determine the appropriateness of such. We believe the lighted strike indicator will allow us to quickly respond to strikes.
- Gear Conflicts/number of vessels:
  - Interactions with other commercial fishing vessels and/or CPFVs will be recorded
  - Reports on range of radar reflector(s) will be recorded; as will be reports on visibility of the strobe.
- Gear Configuration: (See Attachments A and B)
  - See Attachment for a detailed drawing of gear configuration. In short:
    - a. Gear Configuration (See Attachment A). The gear will follow the Council’s adopted DSBG configuration definitions with the exceptions of:
      - The shallowest hook will be at a minimum of 300ft depth below the ocean surface.
      - A, minimum, eight-pound weight (in this case a lead ball) will be attached to each strike indicator by a 300-foot piece of line. This will ensure baited hooks are deployed at depth.
      - The upline will be, at minimum, 2.5mm
      - We intend to use 3.2mm mono for the mainline and suspender
    - b. Lighted Strike Indicator (See attachment B):
      - While deployed and fishing, the solid green indicator light (roughly 2 feet tall) will be sticking out of the water in a close to perpendicular fashion.
      - When a strike is indicated, the light will either be (1) Pulled along the surface of the water (swordfish); or pulled under water (non-swordfish)
- Concurrent gear use:
  - Use of hand-held hook-and-line gear to opportunistically target tunas, California yellowtail, dorado, or other marketable species during the night.

**Reporting Requirements and Observer Coverage:**

- You must maintain and logbook for reporting catch and other operational information (such as time and location of catch) in a format specified by National Marine Fisheries Service
  - Up to 100% observer coverage may be required on your EFP trips
  - Data gathered as part of the EFP will be publicly available
- I acknowledge the above conditions, and verify that I am willing and able to cover the cost of any level of observer coverage required under permit terms and conditions.

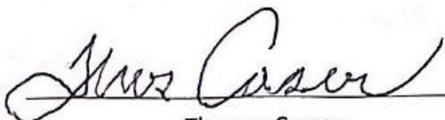
**If you are unable to cover the entire cost of the observer coverage requirement, please explain what portion you may be able to cover and identify other sources of funding which may be available to help you cover your observer costs.**

While the Applicants understand that observer coverage is a necessary part of any EFP; based on Nathan’s vast experience in the fishery, we would ask that trips where Nathan is aboard would fall under Level 2 observer coverage. Alternatively, we would ask that Nathan fall under Level 1 observer coverage for five (5) sets, instead of the normal ten (10) sets for new applicants.

There may be trips where we use the gear both during the day and at night. We remain committed to complying with any and all observer requirements place on this EFP – and the previously issued EFP which authorizes us to fish DSBG and LBG during daylight hours. We don’t expect a single observer to be able to observe both types of activities and are willing to work with the Agency in developing a workable plan.

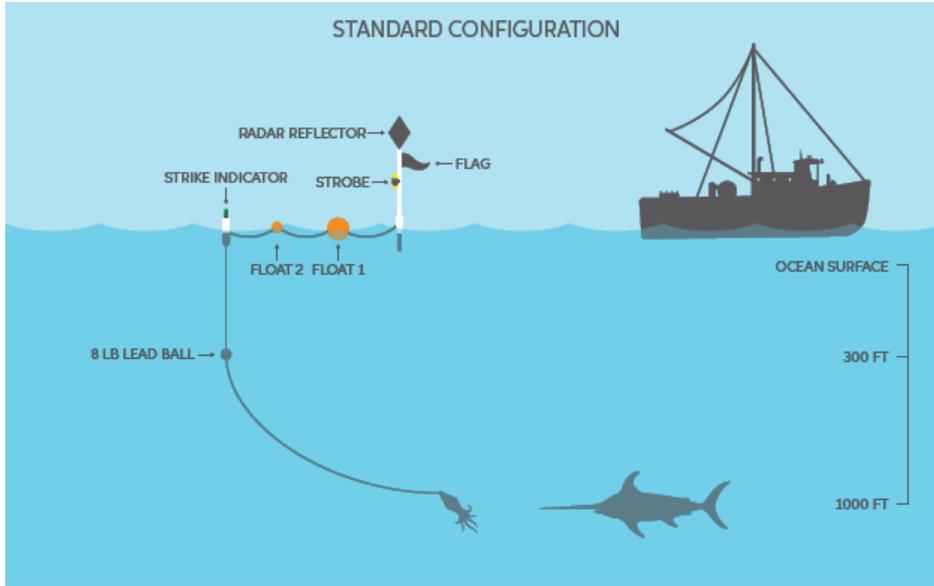
**Applicants Signatures:**

  
Nathan Perez

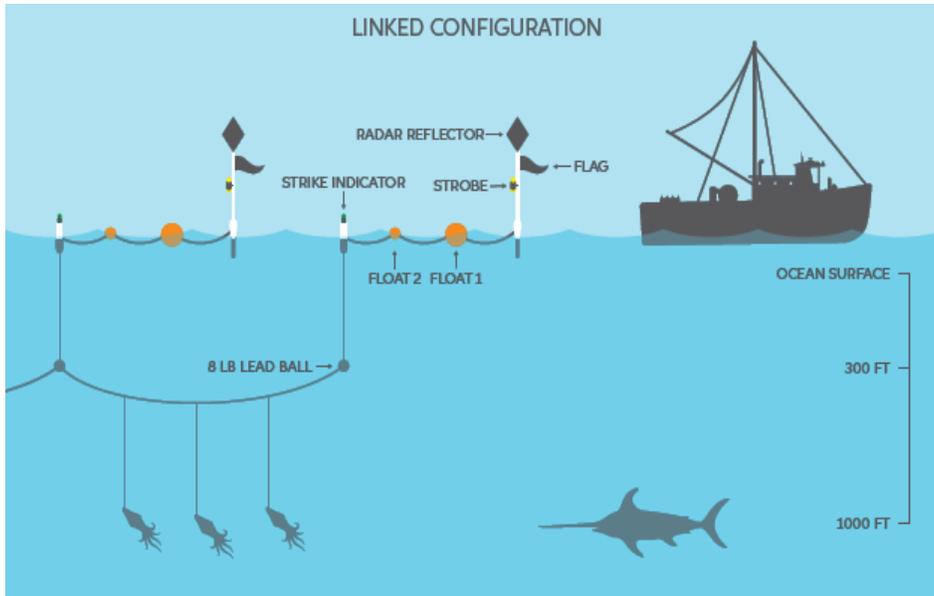
  
Thomas Carson

# ATTACHMENT A – GEAR CONFIGURATION

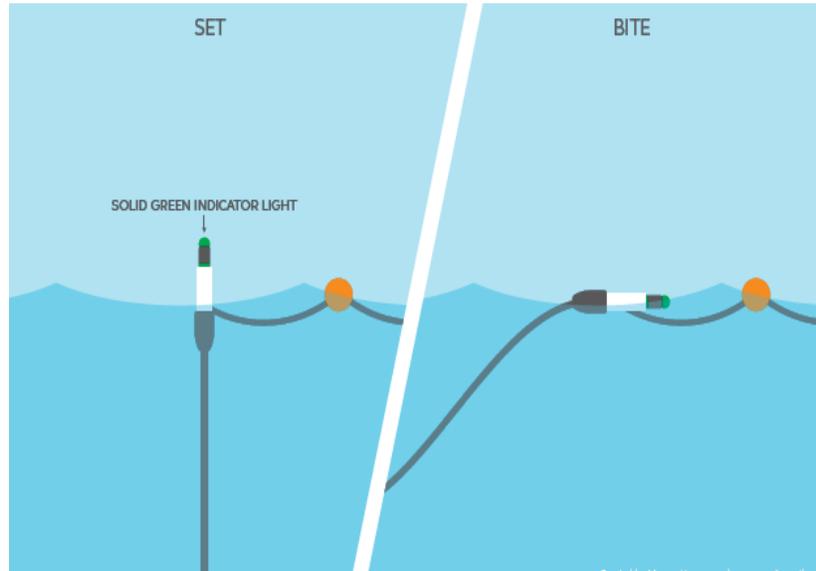
Standard



Linked



## ATTACHMENT B – STRIKE INDICATOR



Deployed:



Strike indicated:

