Addendum to Denny Corbin, F/V Ray Ban EFP DSBG application (Agenda Item J.1, Supplemental Attachment 6) : regarding alternative DSBG-B gear.
3-10-2017
The experience of my first Pacific Management Council meeting was a pleasant and warm welcome with the opportunity to discuss my application in detail. After consideration of newly gathered knowledge regarding by-catch, my intention to model the Chugey/PIER gear exactly and other issues I propose these four clarifications to my EFP application:

#1: Based on the design developed by the PIER research team (Figure 1a & b) I propose to modify my alternative DSBG-B gear to model exactly Chugey Sepluveda's Linked Buoy Gear model with the exception that my gear will remain attached to the vessel while drifting and waiting for strike indications.

The reason for this change is to minimize hook time in the water column <90m where by-catch is prevalent.

As in my DBSG-B gear model, the gear will still remain attached to the vessel while waiting for strike indication and will utilize drift in order to stretch the gear out to minimize possible tangles, hunt for fish, provide action and save fuel. In short, my DSBG-B model will incorporate the Chugey/PIER Linked Buoy Gear Model with the exceptions that one end of the gear will remain attached to the vessel with a bite indicator consisting of a bell and spring to inform of nibbles and strikes on the vessel and bite indicators also on each link of gear. The gear will be closely watched via binoculars from the vessel and if a fish is caught on a link not directly adjacent to the vessel it will be necessary to temporarily release from one link of gear in order to capture the link showing action.

General description of gear to be used: LBG was developed to target pelagic species (Shiode et a., 2005, Beverly efficiency, augment catch rates and provide an opportunity for deployment under conditions that may not be conducive to the use of free-floating buoys. LBG has also been designed so that it can be used with (concurrent deployment) DSBG operations. As with DSBG, the Linked Buoy Gear design consists of: (1) a maximum of 30 hooks deployed simultaneously, (2) fishes during the day below the thermocline to avoid non-target species, (3) has strike detection capacity to minimize non-target impacts and (4) uses heavy weights (3.6kg) to maintain taught vertical lines that minimize potential for marine mammal entanglement.

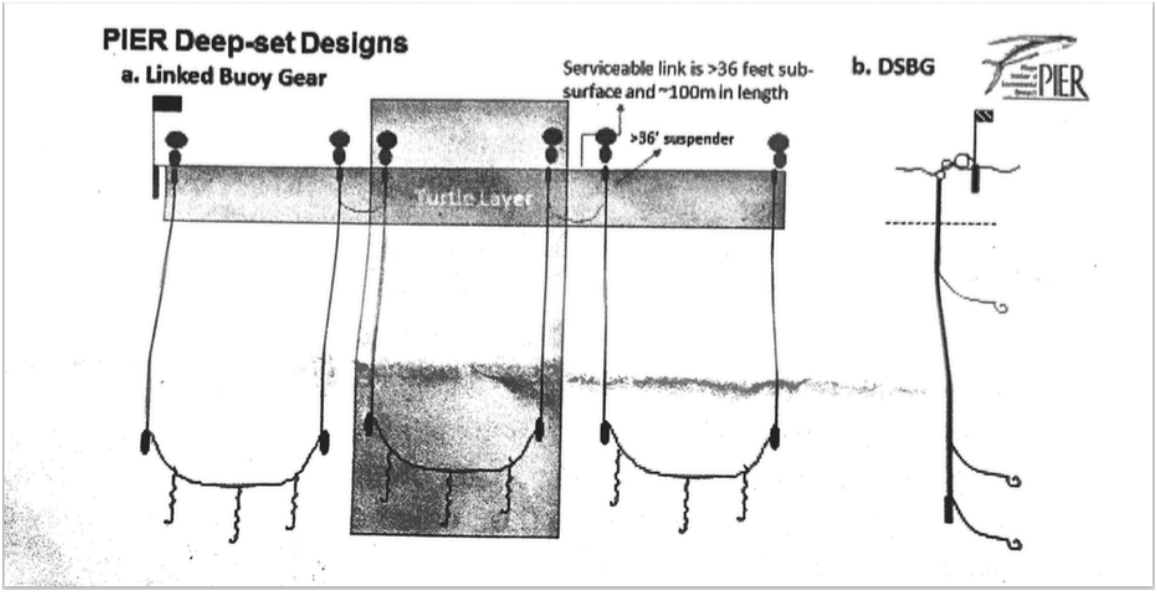

Figure 1 PIER linked buoy gear (a) is a deep-set gear type designed to fish below the thermocline during daylight hours. LBG may extend up to 5nm with a total hook count of no more than 30 (18/0 circle hooks). As with DSBG (b), all hooks must be fished >90m. Each section (1a shaded box) of LBG is referred to as a link, which can be separated for the servicing of strikes. Vessel may fish up to 10 sections of LBG simultaneously. DSBG can be used interchangeably so long as there are no more than 10 pieces of gear [linked or individual (DSBG) pieces] in the water at the same time. A piece of gear is defined as either a section or link of LBG (Figure 2) or a single piece of DSBG.

As in the PIER-DSBG EFP, any free-floating section (linked or DSBG) must have a vessel identification, a flag and some form of locating device (radar reflector/strobe).

Gear specifics: One full set of liked buoy gear shall consist of a maximum of 30 individual hooks soaked at one time over a maximum horizontal foot-print of 5nm. A full LBG compliment is comprised of 10 sections that individually extend up to 500m in horizontal length. The terminal junction of each horizontal piece shall be weighted (3.6 kg or 8lb.) and suspended by a vertical leg that is connected to a series of surface buoys that serve as a strike detection system (similar to that currently used in the DSBG design).

Each section shall be adjoined with a 100-150 m horizontal piece of mainline that is suspended at least 11m (36 feet) below the surface. At least one flag with a locator flasher or radar reflector must be affixed to one of the terminal ends.

All hooks employed in the study shall either be 16/0 or 18/0 circle hooks and bait will consist of either finish (i.e. mackerel), squid, or artificial lures. An illumination source (i.e. calumet or power light) may be used proximal to each gangion. To increase sink rates, weighted swivels and hydraulic line-shooter may also be used.

#2: Pressure Bleeding: I intend to "pressure bleed" my swordfish in order to increase quality and marketability. Pressure bleeding is a quality enhancing process used in the southeast Alaska salmon troll fishery which involves slitting the belly of the fish and pressurizing its dorsal artery with sea water. A deck hose is fitted with a 1/4" section of copper tubing which is inserted in to the dorsal artery of the fish directly behind the gill plate and adjacent top of stomach. Blood that will go rancid is then pumped out via the severed belly cavity arteries until only clear seawater remains in the circulatory system. This process is the best method of bleeding fish.

#3: Sea Anchors and Sails: assuming swordfish will bite better when confronted with a moving bait, it seems logical to assume that there will be an optimal speed of drift. Sea anchors and sails will be used to control and vary speed of drift while accurate speed records will be included with data in order to determine the best rate of drift for maximum production. It should also be noted that drifting on one end of the gear will help to stretch it out and minimize tangles caused by a large fishing running and creating snarls between linked gear sets.

#4 Tuna and Louvar: Tuna and Louvar are not a target species and will be released safely and immediately.

13: Signature of Applicant

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