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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 216

[Docket No. 160413333-6721-01]

RIN 0648-BF98

Approach Regulations for Humpback Whales in Waters Surrounding the Islands of Hawaii under the Marine Mammal Protection Act

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce.

ACTION: Interim final rule; notice of availability of Environmental Assessment.

SUMMARY: We, NMFS, are issuing regulations under the Marine Mammal Protection Act (MMPA) to prevent take by protecting humpback whales (*Megaptera novaeangliae*) from the detrimental effects resulting from approach by humans within 200 nautical miles (370.4 km) of the islands of Hawaii. These regulations are necessary because existing regulations promulgated under the Endangered Species Act (ESA) protecting humpback whales from approach in Hawaii will no longer be in effect upon the effective date of a final rule published elsewhere in today's issue of the **Federal Register** that separates humpback whales into 14 Distinct Population Segments (DPSs) and identifies the "Hawaii DPS" as neither endangered nor threatened. These MMPA regulations prohibit operating an aircraft within 1,000 feet (304.8 m) of a humpback whale, approaching within 100 yards (91.4 m) of a humpback whale by any means, causing a vessel, person or other object to approach within 100 yards (91.4 m) of a humpback whale, or

approaching a humpback whale by interception (i.e., placing an aircraft, vessel, person, or other object in the path of a humpback whale so that the whale approaches within a restricted distance). The regulations also prohibit the disruption of normal behavior or prior activity of a humpback whale by any act or omission. Certain vessels and activities are exempt from the prohibition. NMFS finds that there is good cause to waive public notice and comment prior to implementation of these regulations in order to avoid a gap in protections for the whales. However, we are requesting comments on the regulations and Environmental Assessment; NMFS will subsequently publish a final rule with responses to comments and any revisions, if appropriate.

DATES: This rule is effective [*insert date 30 days after date of publication in the* ***FEDERAL REGISTER***]. Comments must be received no later than 5 p.m. on [*insert date 60 days after date of publication in the* ***FEDERAL REGISTER***].

ADDRESSES: You may submit comments, information, or data on this interim final rule and the Environmental Assessment identified by NOAA–NMFS–2016–0046, by either of the following methods:

- *Electronic Submission*: Submit all electronic public comments via the Federal eRulemaking Portal. Go to www.regulations.gov/#!docketDetail;D= NOAA–NMFS–2016–0046. Click the "Comment Now" icon, complete the required fields, and enter or attach your comments.
- *Mail*: Submit written comments to Susan Pultz, Chief, Conservation Planning and Rulemaking Branch, Protected Resources Division, National Marine Fisheries Service, Pacific Islands Regional Office, 1845 Wasp Blvd, Bldg 176, Honolulu, HI 96818, Attn: Humpback Whale Approach Regulations.

Instructions: Comments sent by any other method, to any other address or individual, or received after the end of the comment period, may not be considered by NMFS. All comments received are a part of the public record and will generally be posted for public viewing on *www.regulations.gov* without change. All personal identifying information (e.g., name, address, etc.), confidential business information, or otherwise sensitive information submitted voluntarily by the sender will be publicly accessible. We will accept anonymous comments (enter "N/A" in the required fields if you wish to remain anonymous), although submitting comments anonymously will prevent us from contacting you if we have difficulty retrieving your submission.

FOR FURTHER INFORMATION CONTACT: Susan Pultz, NMFS, Pacific Islands Regional Office, Chief, Conservation Planning and Rulemaking Branch, 808-725-5150; or Trevor Spradlin, NMFS, Office of Protected Resources, Deputy Chief, Marine Mammal and Sea Turtle Conservation Division, 301-427-8479.

SUPPLEMENTARY INFORMATION:

Background

Humpback whales occur throughout the world in both coastal and open ocean areas. They are a highly migratory species, moving between breeding grounds in tropical and subtropical latitudes and feeding grounds in temperate and polar latitudes. A large portion of the humpback whales found in the North Pacific occupy waters surrounding Hawaii annually during winter months where they engage in breeding, calving, and nursing behaviors. They are commonly found in Hawaii between October and May, with the peak season - the highest concentration of whales in the region - occurring from January through March. However, there are confirmed sightings and several anecdotal

reports of humpback whales arriving to the region as early as August and remaining in the area until as late as June.

Prior to commercial whaling, the worldwide population of humpback whales is thought to have been in excess of 125,000 individuals (NMFS, 1991), with abundance of humpback whales in the North Pacific estimated at 15,000 individuals (Rice, 1978). Between 1905 and 1960, intense commercial whaling operations targeted humpback whales worldwide and depleted the species in the North Pacific to approximately 1,000 individuals (Rice, 1978). Humpback whale abundance estimates in the waters surrounding Hawaii in the 1960s are not clear, but estimates around 1977 were as low as 895 (Darling *et al*., 1983).

In 1966, treaties under the International Whaling Commission (IWC) protected humpback whales from further harvesting by issuing a global moratorium on the whaling of the species, including in the North Pacific. The humpback whale was then listed as an endangered species in 1970 under the United States (U.S.) Endangered Species Conservation Act of 1969, which was later superseded by the ESA. Humpback whales were considered to be a depleted species under the U.S. Marine Mammal Protection Act (MMPA) of 1972 on the basis of their ESA listing. In 1992, Congress created the Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS) under the Hawaiian Islands National Marine Sanctuary Act to protect humpback whales and their habitat in Hawaii.

Humpback whale abundance estimates in Hawaii have increased over time to the most recent 2006 estimate of 10,103 humpback whales (Calambokidis *et al*., 2008). The Office of National Marine Sanctuaries (ONMS) estimates that the current abundance of

humpback whales that use waters surrounding Hawaii is between 10,000 and 15,000 animals, although not all of these animals are in Hawaii at the same time during the season (ONMS, 2015).

Protections and Prohibitions

Marine Mammal Protection Act of 1972

The MMPA provides substantial protections to all marine mammals, although there are no regulations that specifically address humpback whales under the MMPA in Hawaii. Under section 102 of the MMPA, it is unlawful for any person, vessel, or other conveyance to "take" any marine mammal in waters under the jurisdiction of the United States (16 U.S.C. 1372). Section 3(13) of the MMPA defines the term "take" as "to harass, hunt, capture, or kill, or attempt to harass, hunt, capture, or kill any marine mammal" (16 U.S.C. 1362 (13)). Except with respect to military readiness activities and certain scientific research activities, the MMPA defines the term harassment as "any act of pursuit, torment, or annoyance which: (i) has the potential to injure a marine mammal or marine mammal stock in the wild (Level A harassment); or (ii) has the potential to disturb a marine mammal or marine mammal stock in the wild by causing disruption of behavioral patterns, including, but not limited to, migration, breathing, nursing, breeding, feeding, or sheltering (Level B harassment)" (16 U.S.C. 1362 (18)).

NMFS' regulations implementing the MMPA further describe the term "take" to include "the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal; and feeding or attempting to feed a marine mammal in the wild" (50 CFR 216.3). The MMPA provides limited exceptions to the prohibition on take for activities,

such as scientific research, public display, or incidental take in commercial fisheries. Such activities require a permit or authorization, which may be issued only after a thorough agency review.

Section 112 of the MMPA authorizes NMFS to implement regulations that are "necessary and appropriate to carry out the purpose" of the MMPA (16 U.S.C. 1382).

Endangered Species Act of 1973

Humpback whales have been listed as endangered under the ESA since 1970. The ESA prohibits any action that results in a take of a listed species, unless authorized or permitted. A take is defined by the ESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct" (16 U.S.C. 1531 *et seq*.). The ESA does not specifically define the term "harassment" of a listed species.

Protections for humpback whales in Hawaii were initially promulgated under the ESA, after NMFS determined that guidelines published in 1979 as a "Notice of Interpretation of 'Taking by Harassment' in Regard to Humpback Whales in the Hawaiian Islands Area" (44 FR 1113) proved ineffective in protecting humpback whales in Hawaii from tour vessel operators approaching closer than the recommended viewing guidelines. The ESA rule protecting humpback whales in Hawaii was published on November 23, 1987 as an interim regulation (52 FR 44912), and then finalized on January 19, 1995 (60 FR 3775). That rule made it unlawful to operate an aircraft within a 1,000 feet, approach by any means within 100 yards, cause a vessel or other object to approach within a 100 yards, or disrupt the normal behavior or prior activity of a humpback whale by any other act or omission. Regulations regarding implementation of

the ESA were then reorganized on March 23, 1999, and the section containing the approach regulations for humpback whales in Hawaii was changed from 50 CFR 222.31 to 50 CFR 224.103 (64 FR 14052).

Today, we publish elsewhere in this issue of the *Federal Register* a final rule to separate humpback whales into 14 DPSs and revise the species-wide listing. In that rule, the humpback whales that use the waters surrounding Hawaii as their breeding grounds are identified as the "Hawaii DPS," which is not listed under the ESA as endangered or threatened and, therefore, is no longer protected under the ESA. Because our approach regulations for humpback whales were authorized only under the ESA, these protections will no longer be in effect upon the effective date of the listing rule. Humpback whales in Hawaii would continue to be protected by approach regulations only within the boundaries of the HIHWNMS under the National Marine Sanctuaries Act (15 CFR 922.184 (a)(1)-(2) and (b)).

In the proposed listing rule, we solicited comments on whether we should continue to have approach regulations for the Hawaii humpback whales – other than in the sanctuary - if these whales are no longer listed under the ESA. We received five comments on this topic. Two of the comments were in support of continuing approach regulations for areas outside the sanctuary, and one of these comments further requested that an approach rule for the Hawaii humpback whales include an interception or leapfrog provision. One comment opposed an approach rule outside of the sanctuary, noting that the vessels do not pose a threat to the whales. As discussed in greater detail below, we disagree that vessels do not pose a threat to the whales. Finally, two comments generally supported approach regulations for humpback whales in U.S. waters.

Need for Action

The need for this action is to ensure that humpback whales are protected from take where protections from close approach do not exist or no longer apply. Because humpback whales in Hawaii will no longer be protected from take or harassment under the ESA upon the effective date of the humpback whale ESA listing rule, and because humpback whales are such charismatic species that invariably attract individuals and tour companies to interact with them, we believe regulatory protections are necessary and appropriate to prevent take, including harassment, as those terms are defined by the MMPA. Evidence cited under "Rationale for Regulations" below shows that interactions between humpback whales and vessels harass the whales, as shown by changes in behavior of the whales when closely approached, and pose a danger to humpback whales due to potential for vessel collisions. This is particularly concerning in Hawaiian waters where they breed, calve, and nurture their young. Further, preventing take fosters humpback whale health, development, and safety.

Interim Final Rulemaking

The regulatory measures in this interim final rule are designed to protect humpback whales from take or harassment, as defined by the MMPA, from approach within 200 nautical miles (370.4 km) of the islands of Hawaii. Although we stress that unpermitted take of humpback whales or any marine mammals continues to be prohibited by the MMPA in any location, we believe that specific regulations aimed at approach and human interactions that result in take of humpback whales in Hawaii are warranted because: (1) humpback whales are charismatic and sought out by local community members and tourists; (2) commercial and recreational whale watchers and other tour

operators are expected to pursue humpback whales for close encounters absent protections; (3) the number of whales and humans using waters surrounding Hawaii has increased and continues to increase, thus raising the likelihood of human-whale interactions; and (4) approaching whales during the breeding, calving, and nursing season is likely to cause disturbance that could adversely affect reproduction and development of individuals. We are issuing these regulations pursuant to our rulemaking authority under MMPA sections 112(a) (16 U.S.C. 1382(a)) and 102 (16 U.S.C. 1372).

NMFS is implementing an interim final rule to ensure that there is no lapse in protection for humpback whales in Hawaii once the final ESA listing rule becomes effective. Notwithstanding this interim final rule, we are soliciting public comments on the Hawaii approach rule. NMFS will respond to any public comments in a final rule.

Scope and Applicability

Applications to all Humpback Whales

Under the MMPA, the regulations apply to all humpback whales found in the action area.

Geographic Action Area

The action area for this rule is limited to the waters within 200 nautical miles (370.4 km) from shore of the islands of Hawaii. The islands of Hawaii consist of the entire Hawaiian Archipelago, including the Main Hawaiian Islands (Hawaii, Maui, Kahoolawe, Lanai, Molokai, Oahu, Kauai, and Niihau) and the Northwestern Hawaiian Islands.

Applications to all Forms of Approach

The regulations apply to all forms of approach in water and air. Forms of approaching humpback whales include, but are not limited to, operating a manned or unmanned motorized, non-motorized, self-propelled, human-powered, or submersible vessel; operating a manned aircraft; operating an unmanned aircraft system (UAS) or drone; and swimming at the water surface or underwater (i.e., SCUBA or free diving). With this rule, we are not changing our existing approach restrictions for aircraft or other objects, including UASs. UASs are, at minimum, objects, and therefore UASs are not to approach humpback whales within 100 yards without a permit. We recognize that for many other purposes, however, UASs are considered "aircraft," and we anticipate providing further guidance on this in the future.

Approach Prohibitions

The regulation prohibits people from operating aircraft within 1,000 feet (304.8 m) or approaching by any means within 100 yards (91.4 m) of humpback whales within the action area described above (see *Geographic Action Area*). This includes approach by interception (i.e., placing an aircraft, vessel, person, or other object in the path of a humpback whale so that the whale approaches within the restricted distance), also known as "leap frogging." The regulations also prohibit disrupting the normal behavior or prior activity of a humpback whale. A disruption of normal behavior can include, but is not limited to, a rapid change in direction or speed; escape tactics such as prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities; attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movements; or the abandonment of a previously frequented area.

Exceptions

We have determined that the following specific categories are exempt from the regulations:

(1) Federal, State, or local government vessels or persons operating in the course of their official duties such as law enforcement, search and rescue, or public safety;

(2) Vessel operations necessary to avoid an imminent and serious threat to a person, vessel, or the environment;

(3) Vessels restricted in their ability to maneuver, and because of this restriction are not able to comply with approach restrictions; or

(4) Vessels or persons authorized under permit or authorization issued by NMFS to conduct scientific research or response efforts that may result in taking of humpback whales.

Rationale for Regulations

Threats from Human Interaction

Close human interaction poses a significant risk to the health and social structure of humpback whales. Because they are large and charismatic, humpback whales are often approached and observed by whale watchers and wildlife enthusiasts who are on vessels (boats), aircraft, or in the water. The interactions that ensue can result in take or harassment by causing injury or disrupting the normal behavior or prior actions of whales.

There are few studies that have directly examined the effects of approach of humpback whales in Hawaii. This may be due to lack of prioritization in research because protections from approach have been implemented in the region for 29 years, or

because longstanding approach restrictions have resulted in fewer instances of humpback whale take or harassment from approach in Hawaii than other areas that do not have approach restrictions. However, there is a large amount of research on adverse effects of human interaction and approach on humpback whales and similar species in other regions throughout the world. Below, we summarize our use of this analogous evidence to analyze management options for minimizing take or harassment of understudied humpback whales in Hawaii from approach. We also consider research from other regions that do not have approach restrictions to provide insight on future potential effects on humpback whales in Hawaii if approach regulations are no longer in effect.

Threats to humpback whales from human interaction can result from vessel interactions, which create a risk of collisions, aircraft interactions, noise, and other human interactions, such as swimming with whales, that disrupt and interfere with the whales' normal activities while they are in Hawaii. Humpback whales in Hawaii may be more susceptible to harmful effects from human interaction than other regions because disruption of breeding, nursing, and calving activities could potentially impede healthy reproduction and development of the species. Furthermore, we expect an increase in human-whale interactions as both human and whale populations continue to increase.

Vessel Interactions

Vessel approach and interactions with humpback whales can lead to behavioral changes or physical injury to the whale, which may affect energy budgets and habitat use patterns, cause displacement from preferred habitats, and affect individual and population health and fitness. Humpback whales have been found to exhibit predictable changes in behavior in response to vessels in close proximity to the animals. Behavioral responses in

humpback whales such as changes in swimming speed, respiration, diving, and social behaviors were linked to vessel numbers, speed, and proximity in waters around Maui (Bauer and Herman, 1986; Bauer *et al*., 1993). In other parts of the world, Baker and Herman (1989) found that humpback whales in Alaska responded to vessels within 4,000 m with changes in respiratory behavior (decreasing blow intervals and increasing dive times) and orientation (moving away from approaching vessels' path). They concluded that vessels repeatedly approaching humpback whales could result in abandonment of their preferred feeding areas. A study examining approach to humpback whales in Hervey Bay, Australia concluded that whales were more likely to dive when vessels were within 300 m than when they are farther away, implying that vessels in close proximity to humpback whales can elicit evasive behavior (Corkeron, 1995). Another study off New South Wales, Australia observed a response from humpback whales when approached by a whale watch vessel 40 percent of the time, with 23 percent having approached the vessel and 17 percent having avoided the vessel (Stamation *et al*., 2010). Most observed humpback whales that approached the whale watch vessels during this study elicited behaviors attributed to disruption (e.g., trumpet blows and fluke swishes), and whales that avoided the vessels were reported to have longer dive times and time submerged. Vessels that approached humpback whales within 100 m were significantly more likely to elicit an avoidance response, particularly with regard to pods with a calf. Overall, humpback whales that were approached by whale watch vessels had a higher dive time, higher time submerged, and fewer surface activity behaviors than whales that were observed from the shore without vessels present, and pods with calves were more sensitive to vessel approach than pods without calves (Stamation *et al*., 2010).

In yet other situations, humpback whales became quickly habituated to human activity when repeatedly exposed to vessel traffic in the North Atlantic (Watkins, 1986). Habituation to human activity in Hawaii can lead to an increase in encounters between humans and whales, making whales more susceptible to physical injury from vessel strikes. This may especially be true for young humpback whales that are at an impressionable stage in development; 63.5 percent of vessel collisions between 1975 and 2011 in Hawaii involved calves and juveniles (Lammers *et al*., 2013). Regardless of whether humpback whales are eliciting evasive or incautious behavior, it is evident that behavioral harassment (take) of whales can occur with vessel approach.

Because humpback whales annually migrate over extremely long distances, energy budgeting is crucial for the health and reproduction of the species. A recent study by Braithwaite *et al*. (2015) measured the effects of vessel disturbance on energy use of humpback whales during migration. They concluded that overall energy use in migrating humpback whales increases when disturbed by encounters with approaching vessels. It is rare that humpback whales feed in waters surrounding Hawaii, so these animals are reliant on limited fat stores to provide energy for their breeding, calving, and nursing activities in the region. Any deficiency in the conservation of energy can be detrimental to these essential reproductive behaviors. Excessive energy use can be particularly taxing on pregnant and postpartum humpback whale females and their calves. An exorbitant amount of energy is needed to give birth to and nurse newborn calves (Darling 2001). An increase in energy use because of vessel disruptions in waters surrounding Hawaii can have negative implications for the health of mothers and the growth potential of calves (Braithwaite *et al*., 2015).

Reports of humpback whale harassment are common in Hawaii. NOAA Office of Law Enforcement (OLE) documented hundreds of complaints concerning harassment of humpback whales around Hawaii between 2007 and 2014. Although the locations of reported harassments to NOAA-OLE were not always precise, there were numerous complaints in areas outside the HIHWNMS.

Humpback whales may be particularly sensitive to human interaction in Hawaii during their breeding, calving, and nursing behaviors. Because the relationship between adults, particularly mothers, and calves early in the calves' lives is an integral stage in the social development of the species, disrupting the mother-calf relationship can hinder the behavioral development of humpback whale calves (Cartwright, 1999; Darling, 2001; Glockner-Ferrari and Ferrari, 1985). Aggressive behavior on the part of male whales and lack of awareness by males, as well as females avoiding these males, potentially make whales more susceptible to vessel strikes. Male humpback whales often display aggressive behavior during courting activities in the Hawaii breeding grounds (Darling *et al*., 1983; Tyack and Whitehead, 1983; Baker and Herman, 1984; Glockner-Ferrari and Ferrari, 1985; Clapham *et al*., 1992). Although aggressive behavior by humpback whales towards humans is uncommon, an increase in interactions with humans could potentially create more stress for animals that are already in a combative state (Baker and Herman, 1984; Bauer and Herman, 1986). Furthermore, males engaging in competitive behaviors and females avoiding aggressive advances from one or more males may not be fully cognizant of approaching vessels. Female whales have even been observed leading pursuing males closely to vessels in order to thwart their advances to mate (Glockner-Ferrari and Ferrari, 1985). Females protecting newborn calves and male escorts

maintaining mating status with post-partum females with calves have also been observed displaying aggressive behaviors towards intruders, including humans (Darling, 2001). Aggressive courting and mating behaviors by both male and female humpback whales can increase the risk of vessel strikes. Restrictions against approaching whales while in this vulnerable state would lessen hazards for whales and humans.

Vessel Collisions

Collisions between vessels and whales often result in life-threatening trauma or death for the cetacean. The impact is frequently caused by forceful contact with the bow or propeller of the vessel. Vessel strikes of humpback whales are typically identified by evidence of massive blunt force trauma (fractures of heavy bones and/or hemorrhaging) in stranded whales, and propeller wounds (deep slashes or cuts) and fluke/fin amputations on stranded or live whales (Wiley and Asmutis, 1995).

There is substantial evidence indicating vessel strikes with whales are increasing both globally and in Hawaii (Laist *et al*., 2001; De Stephanis and Urquiola, 2006; Panigada *et al*., 2006; Douglas *et al*., 2008; Carrillo and Ritter, 2010; Lammers *et al*., 2013). Lammers *et al.* (2013) estimated that reports of vessel collisions (i.e., any physical contact between a humpback whale and a vessel) increased 20-fold between 1976 and 2011 in the waters surrounding Hawaii, particularly between 2000 and 2011. There were 68 confirmed reports of vessel collisions during this timeframe, and 63 percent of the collisions involved calves and subadults (Lammers *et al*., 2013). Between 2007 and 2012, there were 39 confirmed reports of vessel collisions with humpback whales near Hawaii; 11 of these collisions were determined to be serious injuries (i.e., injury that will likely result in mortality, 50 CFR 229.2) and another 11 were proportionally prorated as serious

injuries per the NMFS process for distinguishing serious from non-serious injury of marine mammals (NMFS, 2012; Bradford and Lyman, 2015). According to a database managed by the HIHWNMS, there were 76 reports of whale-vessel contacts in waters surrounding the Main Hawaiian Islands between 2002 and 2015, with a large majority of them occurring in the four islands region between Maui, Molokai, Lanai, and Kahoolawe. Of the vessel collisions where the status of the vessel's movement could be determined (i.e., either normal transiting or more directly approaching humpback whales), 17 percent of reports (11 of 66, 10 undetermined) indicated that the vessel was operating in a more directed approach of a humpback whale (Ed Lyman, personal communication, April 29, 2016).

The increase in reported vessel strikes with humpback whales in Hawaii in recent years can likely be attributed to multiple factors. An extensive awareness campaign and Hotline number were initiated in 2003 and likely contribute to the increased number of reports. However, Lammers *et al*. (2013) compiled a summary of all reported vessel collisions in Hawaii between 1975 and 2011 and concluded that increasing numbers of humpback whales in Hawaii was an important contributor to the trend. Tour vessels (e.g., whale watching, diving, snorkeling boats, etc.) comprised 61 percent of vessel collisions with humpback whales. Because the behavior of these vessels typically places them in close proximity to humpback whales, vessel collisions may have increased over time as the tour industry comparably expanded. It is important to note that tour vessels typically have a high number of passengers, and this may increase the likelihood of reporting a vessel collision.

Although more than half of reported vessel collisions with humpback whales in Hawaii in recent years occurred within the boundaries of the HIHWNMS, there have been a substantial number of vessel collisions outside Sanctuary waters. According to a database on reports of animals in distress managed by the HIHWNMS, 37 percent (28 of 76) of reported vessel collisions between 2002 and 2015 occurred outside the boundaries of the Sanctuary (Ed Lyman, HIHWNMS, personal communication, April 7, 2016). Many of the collisions outside the Sanctuary occurred in concentrated boat traffic and popular whale watching areas, such as the south shore of Oahu near Honolulu Harbor and the leeward side of Kauai. If legal protections from approaching humpback whales are not implemented outside the HIHWNMS, vessel collisions could significantly increase, especially with an increasing humpback whale population and increasing human-based use of the ocean in Hawaii.

Vessel collisions with humpback whales can also cause significant damage to vessels and result in serious harm to or death of passengers (e.g., Laist *et al*., 2001; Neilson *et al*., 2012). Human injury and death have occurred on several incidents involving humpback whale collisions with boats in Hawaii. According to a database of human interactions managed by the HIHWNMS, 9.2 percent (7 of 76) vessel collisions with humpback whales between 2002 and 2015 involved injuries to passengers or crew; this figure does not include injuries sustained when vessels moved suddenly to avoid collisions (Ed Lyman, personal communication, April 7, 2016). Notable incidents of serious harm include a young child dying in 2003 from head trauma sustained after a close interaction with a humpback whale off of Oahu (DePledge, 2003), and one woman

in 2001 and another in 2015 hospitalized after vessel collisions with humpback whales off of Kauai (DePledge, 2003; D'Angelo, 2015).

Aircraft Interactions

Aircraft flown in proximity to humpback whales in Hawaii have been shown to elicit a behavioral response. Smultea *et al*. (1995) reported that humpback whales near Kauai, particularly pods with calves, responded to low flying planes by increasing swim speeds and changing direction. General accounts of disturbance of humpback whales in Hawaii and other regions caused by a range of sources, including helicopter tours, were highlighted in a workshop that reviewed and evaluated whale watching programs (Atkins and Swartz, 1989). Other reports have also discussed cases of disturbance of humpback whales in Hawaii resulting from helicopters and other aircraft (Shallenberger, 1978; Tinney, 1988).

Several studies targeting other species and/or other regions also provide evidence that aircraft can disrupt large whales. In their review on the effects of man-made noise on whales, Richardson and Würsig (1997) claim aircraft overflights with altitudes as high as 400 m can elicit specific reactions (e.g., sudden dives or turns and occasional tail or flipper slaps) from both baleen and toothed whales; however, behaviors can vary depending on species, animal activity, and water depth. Various behavioral responses from sperm whales were observed in response to aircraft throughout different parts of the world, including in waters near Kauai, where they reacted to aircraft at about 250 m in altitude and 360 m in horizontal distance (Smultea *et al*., 2008). Short-term behavioral responses (e.g., short surfaces, immediate dives or turns, changes in behavior state, vigorous swimming, and breaching) were observed in both bowhead and beluga whales

when closely approached by helicopters and fixed-wing aircraft. Most reactions occurred within 150 m altitude and 250 m lateral distance of helicopters and 182 m altitude and 250 m (but up to 460 m) lateral distance of fixed-wing aircraft (Patenaude *et al*., 2002). Aircraft that hover or repeatedly pass over whales at altitudes low enough to affect the whales are thought to cause significantly more disruption than aircraft that briefly pass directly over or to the side of whales (Richardson and Würsig, 1997).

Aircraft are explicitly cited by NMFS as a potential instrument of take under the MMPA regulations, which state that take can include "the negligent or intentional operation of an aircraft or vessel, or the doing of any other negligent or intentional act which results in disturbing or molesting a marine mammal" (50 CFR 216.3). Other regulations and notices have interpreted approach to humpback whales by aircraft in Hawaii as a form of harassment. Current approach regulations promulgated under the ESA (50 CFR 224.103; regulations that will no longer apply upon the effective date of the ESA humpback whale listing final rule) and in the HIHWNMS (15 CFR 922.184) restrict operating aircraft within 1,000 feet (304.8 m) of humpback whales in Hawaii and Sanctuary waters. A response to a comment in the November 23, 1987, interim rule "Approaching Humpback Whales in Hawaiian Waters" further clarified the restricted area around the whale to aircraft as "a 1,000 foot aerial dome over a whale" (52 FR 44912). This 1,000 foot perimeter was implemented in the final rule humpback whale approach rule on January 19, 1995 (60 FR 3775).

Regions outside Hawaii have also implemented aircraft operations near whales or other marine mammals, supporting the widely-accepted need to protect whales from this type of disturbance. Approach regulations for North Atlantic right whales published on

February 13, 1997, restrict approach by aircraft conducting whale watching activities within 500 yards (457.2 m) of a whale, and require aircraft to take a course away from the whale and immediately leave the area at a constant airspeed if within 500 yards (457.2 m) (50 CFR 224.103(c)). It is also prohibited to fly motorized aircraft at less than 1,000 feet (304.8 m) over marine mammals in the Channel Islands National Marine Sanctuary (15 CFR 922.71), the Greater Farallones National Marine Sanctuary (15 CFR 922.82), or in specified regions of the Monterey Bay National Marine Sanctuary (15 CFR 922.132). Approach regulations for all cetaceans in Australia require that helicopters do not approach within 500 m and all other aircraft do not approach within 300 m (National Parks and Wildlife Amendment (Marine Mammals) Regulation 2006 (Cth) No 271 (57)). New Zealand has similar rules for approaching wildlife, in that it is unlawful to operate aircraft from a horizontal distance of 150 m from any marine mammal, 200 m from any baleen or sperm whale mother-calf pair, and 300 m from any marine mammal if three or more vessels or aircraft are already positioned to enable passengers to watch the animals (Marine Mammals Protection Regulations 1992 s 18(g, h) and s 19(d)).

Human-Related Noise

Humans introduce sound intentionally and unintentionally into the marine environment for navigation, oil and gas exploration and acquisition, research, military activities, and many other reasons. Noise exposure can result in a range of impacts to whales, from little or none to severe, depending on the source, level, distance between the source and the receptor, characteristics of the animal (e.g., hearing sensitivity, behavioral context, age, sex, and previous experience with sound source), time of day or season, and various other factors. In marine mammal populations, noise can seriously disrupt

communication, navigational ability, and social patterns. Humpback whales use sound to communicate, navigate, locate prey, and sense their environment. Both anthropogenic and natural sounds may cause interference with these functions.

Understanding the specific impacts of sounds on humpback whales is difficult. However, it is clear that the geographic scope of potential impacts is vast as low-frequency sounds can travel great distances under water, and these sounds have the potential to reduce the space that whales use for communication (i.e., communication space). For example, shipping was predicted to reduce communication space of singing humpback whales in the northeastern United States by eight percent (Clark *et al*., 2009). Other detrimental effects of anthropogenic noise include masking and possible temporary threshold shifts. Masking results when noise interferes with cetacean social communication, which may range greatly in intensity and frequency. Some adjustment in acoustic behavior is thought to occur in response to masking. For instance, humpback whale songs were found to lengthen during low-frequency active sonar activities (Miller *et al*., 2000). This altered song length persisted two hours after the sonar activities stopped (Fristrup *et al*., 2003). Researchers have also observed diminished song vocalizations in humpback whales during remote sensing experiments 200 km away from the whales' location in the Stellwagen Bank National Marine Sanctuary (Risch *et al.*, 2012). Hearing loss can also be permanent if the sound is intense enough, although effects vary greatly across individuals. This and other factors make it difficult to determine a standardized threshold. Humpback whales do not appear to be frequently involved in strandings related to noise events. However, there is one record of two whales found dead with extensive damage to the temporal bones near the site of a 5,000 kg

explosion that likely produced shock waves responsible for the injuries (Ketten *et al*., 1993; Weilgart, 2007).

Humpback whales in Hawaii are likely exposed to moderate levels of underwater noise resulting from human activities, which include commercial and recreational vessel traffic, pile driving from coastal construction, and activities in Naval test ranges. Boat noise might affect humpback whale singing behavior by altering the rhythm or increasing the tempo of songs (Norris, 1994). Noise is also the likely major contributor of reported behavioral changes of humpback whales in Hawaii with regard to aircraft disturbance (Shallenberger, 1978; Tinney, 1988; Atkins and Swartz, 1989; Smultea *et al*., 1995). Overall, population-level effects of exposure to underwater noise in Hawaii are not well established, but exposure is likely chronic. As vessel traffic and other in-water activities are expected to increase in Hawaii, the level of this threat is also expected to increase.

Increase in Human-Whale Interactions as Both Populations Increase

The humpback whale population in Hawaii is increasing (Darling *et al*., 1983; Baker and Herman, 1987; Calambokidis *et al.*, 1997; Cerchio 1998; Mobley *et al*., 2001; Calambokidis *et al*., 2008). The human population is also increasing (U.S. Census, 2015). As both populations increase, the probability of humans interacting with humpback whales in Hawaii will likely increase. Increasing numbers of humpback whales in Hawaii also increase the likelihood of encountering whales outside the HIHWNMS, in areas where whales would not have the benefit of continued protection from approach if not ESA-listed. Current ESA approach restrictions (which will no longer be in effect upon the effective date of the ESA listing rule) limit opportunities to lawfully approach humpback whales, thus establishing a safe perimeter around whales. If whales are not

protected by approach restrictions, this would erase this perimeter and increase the danger attributed to being in proximity to whales. With an increasing humpback whale population in Hawaii, eliminating approach regulations is a cause for concern with regard to both human and whale safety.

As a result of human population growth and demand for new products and tourist destinations, ocean recreation in Hawaii is increasing. The value of the tour boat industry has increased by 300 percent from 1984 to 2003 (Markrich, 2004). Whale watching has also increased in recent years from 52 operators in 1999 to an estimated 117 companies currently offering tours specific to whale watching (Hoyt, 2002; Internet search, February 2016).

As the number of people, tourism, and ocean-based activities increases in Hawaii, the number of interactions between humans and humpback whales is also likely to increase. If humpback whales are not protected by approach regulations in Hawaii, unrestricted access to whales outside the HIHWNMS would likely result in more encounters with commercial whale watching and recreational vessels, thus resulting in increased take of whales, while placing the safety of both humans and whales in jeopardy.

Public Comments and Public Hearings

We are soliciting comments on this interim final rule and the supporting Environmental Assessment (see **ADDRESSES**). No public hearings have been scheduled but public hearings can be requested. Requests for public hearings must be made in writing (see **ADDRESSES**) by [*insert date 30 days after date of publication in the **FEDERAL REGISTER***]. If a public hearing is requested, a notice detailing the specific

hearing location and time will be published in the *Federal Register* at least 15 days before the hearing is to be held. Information on the specific hearing locations and times will also be posted on our Web site at: *http://www.fpir.noaa.gov/PRD/prd_humpback.html.*

References Cited

A complete list of all references cited in this interim final rule can be found at *http://www.fpir.noaa.gov/PRD/prd_humpback.html* or *www.regulations.gov*, and is available upon request from the NMFS Pacific Islands Regional Office in Honolulu, HI (see **FOR FURTHER INFORMATION**).

Classification

National Environmental Policy Act (NEPA)

NMFS has prepared an Environmental Assessment pursuant to NEPA (42 U.S.C. 4321 *et seq*.) to support this rule. The Environmental Assessment contains an analysis of two no action alternatives and two action alternatives. There are a number of elements that were common to both of the action alternatives analyzed, including the preferred alternative described in this document and a number of exceptions that would apply to these alternatives. The Environmental Assessment is available for review and comment on the NMFS Pacific Islands Region website at *http://www.fpir.noaa.gov/PRD/prd_humpback.html.*

Executive Order 12866

This interim final rule has been determined to be not significant for purposes of Executive Order 12866.

Paperwork Reduction Act

The purpose of the Paperwork Reduction Act is to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, and other persons resulting from the collection of information by or for the Federal government. The interim final rule includes no new collection of information, so further analysis is not required.

Coastal Zone Management Act

NMFS has determined that this rule will be implemented in a manner consistent, to the maximum extent practicable, with the enforceable policies of the approved coastal zone management program of the State of Hawaii. The consistency determination has been submitted for review to the responsible State agency under section 307(c)(1) of the Federal Coastal Zone Management Act of 1972.

Executive Order 13132, Federalism

Executive Order 13132 requires agencies to take into account any federalism impacts of regulations under development. It includes specific directives for consultation in situations in which a regulation will preempt state law or impose substantial direct compliance costs on state and local governments (unless required by statute). Neither of those circumstances is applicable to this interim final rule; therefore this action does not have federalism implications as that term is defined in E.O. 13132.

Information Quality Act (IQA)

Pursuant to Section 515 of Public Law 106-554 (the Information Quality Act), this information product has undergone a pre-dissemination review by NMFS. The signed

Pre-dissemination Review and Documentation Form is on file with the NMFS Pacific Islands Regional Office (see **ADDRESSES**).

Regulatory Flexibility Act

This interim final regulation is exempt from the requirements of the Regulatory Flexibility Act because NMFS has determined that notice and public comment would be impracticable and against the public interest.

Administrative Procedure Act

There is good cause to waive the prior notice and public comment requirement of the Administrative Procedure Act, and make this rule effective immediately upon publication in the **Federal Register**. This rule would prohibit the approach of humpback whales by aircraft within a 1,000 feet (304.8 m) and by any means within 100 yards (91.4 m), including to cause a vessel, person or other object to approach within 100 yard (91.4 m), and approach a whale by interception (placing an aircraft, vessel, person or other object in the path of a humpback whale so that the whale approaches within 1000 feet of the aircraft or 100 yards of the vessel, person or object). Approach regulations reflecting the above prohibitions have existed in Hawaii for 29 years, except the interception and exceptions provisions are new. Further, NMFS published in the **Federal Register** a proposed revision to the humpback listing in April 15, 2015 and, as dicussed above, requested comments on whether approach regulations under the MMPA should be considered if the proposed Hawaii DPS is finalized, as this DPS would no longer be listed or protected under ESA regulations.

Unregulated approach of humpback whales in Hawaii by aircraft, vessel, persons, or other means would likely lead to increased take of humpback whales. Upon the

effective date of the ESA listing final rule, there will be a lapse in protections for the Hawaii DPS of humpback whales if these approach regulations under the MMPA are not in place. Because we have an obligation to uphold the regulatory objectives of the MMPA, and leaving humpback whales in Hawaii without approach regulations would result in increased take and consequent noncompliance with the statute, NMFS finds it impracticable and contrary to the public interest to have prior notice and comment.

For the reasons stated above, NMFS believes protections for Hawaii humpback whales are necessary and appropriate during the time the ESA listing determination becomes effective and the humpback whales begin to return to waters surrounding Hawaii in September.

List of Subjects in 50 CFR Part 216

Administrative practice and procedure, Marine mammals.

Dated: August 30, 2016.

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Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs,

National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 216 is amended as follows:

PART 216- REGULATIONS GOVERNING THE TAKING AND IMPORTING OF MARINE MAMMALS

1. The authority citation for 50 CFR part 216 continues to read as follows:

Authority: 16 U.S.C. 1361, *et seq*., unless otherwise noted.

2. In subpart B of part 216, add § 216.19 to read as follows:

§ 216.19 Special restrictions for humpback whales in waters surrounding the islands of Hawaii.

(a) *Prohibitions.* Except as noted in paragraph (b) of this section, it is unlawful for any person subject to the jurisdiction of the United States to commit, to attempt to commit, to solicit another to commit, or to cause to be committed, within 200 nautical miles (370.4 km) of the islands of Hawaii, any of the following acts with respect to humpback whales (*Megaptera novaeangliae*):

(1) Operate any aircraft within 1,000 feet (304.8 m) of any humpback whale;

(2) Approach, by any means, within 100 yards (91.4 m) of any humpback whale;

(3) Cause a vessel, person, or other object to approach within 100 yards (91.4 m) of a humpback whale;

(4) Approach a humpback whale by interception (i.e., placing an aircraft, vessel, person, or other object in the path of a humpback whale so that the whale approaches within 1,000 feet (304.8 m) of the aircraft or 100 yards (91.4 m) of the vessel, person, or object); or

(5) Disrupt the normal behavior or prior activity of a whale by any other act or omission. A disruption of normal behavior may be manifested by, among other actions on the part of the whale, a rapid change in direction or speed; escape tactics such as

prolonged diving, underwater course changes, underwater exhalation, or evasive swimming patterns; interruptions of breeding, nursing, or resting activities, attempts by a whale to shield a calf from a vessel or human observer by tail swishing or by other protective movements; or the abandonment of a previously frequented area.

(b) *Exceptions*. The prohibitions of paragraph (a) of this section do not apply to:

(1) Federal, State, or local government vessels or persons operating in the course of their official duties such as law enforcement, search and rescue, or public safety;

(2) Vessel operations necessary to avoid an imminent and serious threat to a person, vessel, or the environment;

(3) Vessels restricted in their ability to maneuver, and because of this restriction are not able to comply with approach restrictions; or

(4) Vessels or persons authorized under permit or authorization issued by NMFS to conduct scientific research or response efforts that may result in taking of humpback whales.

(c) *Affirmative defense*. (1) In connection with any action alleging a violation of this section, any person claiming the benefit of any exemption, exception, or permit listed in paragraph (b) of this section has the burden of proving that the exemption or exception is applicable, or that the permit was granted and was valid and in force at the time of the alleged violation.

(2) [Reserved]

[FR Doc. 2016-21277 Filed: 9/6/2016 4:15 pm; Publication Date: 9/8/2016]