

1 **DRAFT FINDING OF NO SIGNIFICANT IMPACT**

2
3 *FOR*

4
5 **LONG RANGE STRIKE WEAPON SYSTEMS EVALUATION PROGRAM AT THE**
6 **PACIFIC MISSILE RANGE FACILITY, KAUAI, HAWAII**

7
8 **Contract No. W912BU-12-D-0027**
9 **Task Order No. CK02**

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12 This finding, and the analysis upon which it is based, was prepared pursuant to the President’s
13 Council on Environmental Quality (CEQ) regulations for implementing the procedural
14 provisions of the National Environmental Policy Act (NEPA) and its implementing regulations as
15 promulgated at 40 Code of Federal Regulations (CFR) Part 1500 (40 CFR 1500–1508), as well as
16 the U.S. Air Force Environmental Impact Analysis Process as promulgated at 32 CFR Part 989.

17
18 The Department of the Air Force has conducted an Environmental Assessment/Overseas
19 Environmental Assessment (EA/OEA) of the potential environmental consequences associated
20 with the conduct of live ordnance testing in the Pacific Ocean as part of the 86th Fighter
21 Weapons Squadron (86 FWS) Long Range Strike Weapon Systems Evaluation Program (WSEP).
22 That EA/OEA (July 2016) is hereby incorporated by reference into this finding.

23
24 **PURPOSE AND NEED (EA/OEA Section 1.3, page 1-4)**

25
26 The purpose of the Proposed Action is to authorize the 86 FWS to conduct operational
27 evaluations of long range strike weapons and other munitions as part of Long Range Strike
28 WSEP operations. Weapons include the Joint Air-to-Surface Stand-Off Missile (JASSM),
29 JASSM-Extended Range (JASSM-ER), Small Diameter Bomb-I/II (SDB-I/II), High-Speed Anti-
30 Radiation Missile (HARM), Joint Direct Attack Munition (JDAM), Laser JDAM (LJDAM),
31 Miniature Air Launched Decoy (MALD), and MALD-Jamming (MALD-J). As a military
32 readiness activity, units that participate in WSEP activities are provided a final opportunity to
33 shoot actual weapons before deploying into combat.

34
35 The need for the Proposed Action is to properly train units to execute requirements within
36 Designed Operational Capability Statements, which describe units’ real-world operational
37 expectations in a time of war. The munitions associated with the Proposed Action are not part of
38 a unit’s typical training allocations, and without WSEP operations, pilots would be dropping
39 these weapons for the first time in combat.

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41 **DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES**

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43 **Proposed Action (EA/OEA Section 2.1, page 2-1)**

44
45 The Proposed Action is to authorize the 86 FWS to conduct operational evaluations of long
46 range strike weapons in a location with adequate test capacity and instrumentation. This
47 program, referred to as Long Range Strike WSEP, would primarily employ live long range strike
48 weapon systems, along with other live and inert munitions from various aircraft, including

1 bombers and fighter aircraft. No land-based operations or construction activities are associated
2 with the Proposed Action. Operations would be conducted in accordance with approved aircraft
3 and weapons standard operating procedures and instructions. Live weapons evaluations would
4 include two fusing options: detonation at the water surface and below the water surface.

5
6 **No Action Alternative (EA/OEA Section 2.2.1, page 2-6)**

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8 Under the No Action Alternative, Long Range Strike WSEP missions would not occur at the
9 Pacific Missile Range Facility (PMRF), Kauai, Hawaii. The program would not achieve
10 objectives to evaluate air-to-ground and maritime weapon employment data, evaluate tactics,
11 techniques, and procedures in an operationally realistic environment or to determine the impact
12 of tactics, techniques, and procedures on combat Air Force training.

13
14 **Alternative 1: (Preferred Alternative) (EA/OEA Section 2.2.2, page 2-6)**

15
16 Under Alternative 1, the 86 FWS would employ weapons under all possible fusing options and
17 detonation scenarios. Alternative 1 provides the intended level of evaluation, including a
18 number of replicate operations sufficient for an acceptable statistical confidence level regarding
19 munitions capabilities. Immediate evaluations for one live JASSM/JASSM-ER and eight SDB I
20 are needed; therefore, they are the only munitions being proposed for September 2016 missions.
21 All releases would occur on the same mission day, with one weather back-up day.

22
23 Follow-on years (2017–2021) would add evaluations of 10 HARM, 30 SDB II,
24 30 JDAM/LJDAM, and four MALD/MALD-J, along with six JASSM/JASSM-ER and
25 30 SDB I, annually. Missions are proposed to occur over a five-consecutive-day time period each
26 year. The weapon impact point is 44 nautical miles offshore of Kauai within the northern portion
27 of the Barking Sands Underwater Range Extension (BSURE) area. No targets would be used.
28 Weapon performance would be scored with the BSURE underwater hydrophone system. All
29 JDAM/LJDAM detonations are proposed to occur approximately 10 feet below the water
30 surface. All other live weapons would detonate at the water surface, upon impact.

31
32 **Alternative 2: (EA/OEA Section 2.2.3, page 2-9)**

33
34 Alternative 2 would authorize the same number of munitions as proposed under Alternative 1.
35 However fusing options would not include a 10-millisecond time delay for JDAM/LJDAMs,
36 which would result in surface detonations as opposed to subsurface detonations.

37
38 **ENVIRONMENTAL IMPACTS**

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40 Analysis was conducted to determine the potential impacts to the human and natural environment
41 resulting from the No Action Alternative, Alternative 1 (Preferred Alternative), and Alternative 2.
42 No significant impacts to resources have been identified (EA/OEA Chapter 3, pages 3-1 to 3-124).
43 In addition, there would be no significant cumulative impacts caused by implementation of
44 Alternative 1 (Preferred Alternative) when combined with other past, present, and reasonably
45 foreseeable actions that could affect air quality, noise impacts to the public, airspace, public safety,
46 socioeconomics, cultural resources, physical resources, and biological resources (EA/OEA
47 Chapter 4, pages 4-1 to 4-4).

1 **Air Quality (EA/OEA Section 3.1.3, pages 3-4 to 3-6)** – There would be no significant impacts
2 to air quality under any of the alternatives. Based on air emissions modeling and analysis, the
3 Proposed Action would not be expected to result in any significant increase in air emissions.
4 Furthermore, given the distance from shore where most activities associated with the Proposed
5 Action would occur, the variable wind patterns combined with fractional increases in emissions
6 and high potential for pollutant disbursement makes the possibility for adverse impacts to
7 onshore air quality very unlikely.

8
9 **In-Air Noise Impacts to the Public (EA/OEA Section 3.2.3, pages 3-8 to 3-10)** – There would
10 be no impacts to the public from in-air noise. Noise levels that exceed criteria and thresholds for
11 pain and annoyance to the public would not reach populated areas on land. Additionally, the
12 safety hazard area, established for the protection of the public, including those participating in
13 maritime transportation and commercial and recreational fishing, would prevent exposure to the
14 noise levels that correspond with the threshold of pain to the public.

15
16 **Airspace (EA/OEA Section 3.3.3, pages 3-11 to 3-13)** – There would be no significant impacts
17 to airspace utilization and capacity. The relatively small number of operations proposed on an
18 annual basis is not anticipated to stress the airspace/range capacity at PMRF. The proponent
19 would coordinate with the appropriate point of contact when scheduling specific airspace units.

20
21 **Public Safety (EA/OEA Section 3.4.3, pages 3-14 to 3-15)** – There would be no significant
22 impacts under any of the alternatives with regard to public safety. Safety measures proposed for
23 Long Range Strike WSEP missions have been implemented and effective for other similar
24 missions at PMRF for years without incident. These safety measures and range clearance
25 procedures would be observed to ensure safety of the public.

26
27 **Socioeconomics (EA/OEA Section 3.5.3, pages 3-18 to 3-19)** – There would be no significant
28 impacts to socioeconomics under any alternatives of the Proposed Action. Periodic closure of
29 portions of the Pacific Ocean could potentially impact the availability of these areas for
30 commercial and recreational activities, including commercial and recreational fishing and vessel
31 traffic, whale watching, and scientific research. Closed areas in the Pacific Ocean would not
32 approach closer than 10 nautical miles from shore. The proximity of tourist activities near shore
33 provides less incentive for recreational boaters and fishermen to travel to offshore distances in
34 the Pacific Ocean.

35
36 **Cultural Resources (EA/OEA Section 3.6.3, page 3-23)** – No impacts to cultural resources
37 would occur under the Proposed Action. Underwater detonations are not proposed within U.S.
38 territorial waters and no world heritage sites would be affected. No deep sea shipwrecks or
39 cultural features have been identified within the area of potential effects for Long Range Strike
40 WSEP missions. It is also highly unlikely that military expended materials or unexploded
41 ordnance could sink and directly impact sediments on or near cultural resources or affect any
42 shipwrecks. The Air Force presented a letter to the Hawaii State Historic Preservation Officer
43 (SHPO) on 30 March 2016, with a finding of No Effect on Historic Properties, as defined in
44 36 CFR 800.16(i). The Air Force provided documentation of this finding to the SHPO, as
45 required by 36 CFR 800.11(d). The Hawaii SHPO concurred with this finding of No Effect on
46 Historic Properties in a letter dated 20 April 2016.

1 **Physical Resources (EA/OEA Section 3.7.3, pages 3-24 to 3-26)** – There would be no
2 significant impacts to physical resources from the Proposed Action. Metals associated with
3 weapons and other explosive byproducts that would be introduced into the water column would
4 be quickly dispersed by waves, currents, and tidal action and would eventually be distributed
5 throughout the surrounding open ocean waters. Explosive material that is not consumed in a
6 detonation could sink to the substrate and bind to sediments. However, the quantity of such
7 materials is expected to be inconsequential. Direct physical impacts to the seafloor could occur
8 due to military expended materials and detonation shock waves. Calculations of the maximum
9 radius of a gas bubble from the most impactful detonation scenario proposed under Long Range
10 Strike WSEP missions indicate that the explosive bubble radius would not extend to the seafloor
11 and, thus, would not cause sediment displacement or cratering. Additionally, adverse impacts to
12 water resources from fuel releases are not anticipated.

13
14 **Biological Resources (EA/OEA Section 3.8.3, pages 3-95 to 3-124)** – There would be no
15 significant impacts to biological resources under any alternatives of the Proposed Action. Marine
16 mammals and sea turtles could be exposed to noise or pressure levels resulting in mortality,
17 injury, or harassment. The 86 FWS has requested an Incidental Harassment Authorization for
18 2016 missions, a Letter of Authorization for 2017–2021 missions under the Marine Mammal
19 Protection Act (MMPA) and a Biological Opinion under the Endangered Species Act (ESA).
20 Marine fish may be injured or killed by detonations, but the number is expected to be negligible
21 relative to overall populations. Detonations would not significantly affect benthic communities.
22 Known hardbottom habitats and artificial reefs would be avoided. Essential fish habitat would
23 not be significantly impacted. No impacts to marine birds, including ESA-listed and migratory
24 species, are expected.

25 26 **MANAGEMENT PRACTICES (EA/OEA Section 5.0, pages 5-1 to 5-2)**

27
28 No special operating procedures or mitigations would be required to mitigate impacts to resource
29 areas, except for biological resources. Management practices applicable to biological resources
30 consist of mitigation measures required by the NMFS as a result of consultations under the ESA
31 and MMPA.

32 **Mitigation Measures for Protected Marine Species**

- 33 ● Protected species (i.e., marine mammals and sea turtles) aerial surveys must be conducted
34 before each mission.
- 35 ● If a protected species is observed in the impact area, weapon release would be delayed
36 until one of the following conditions is met:
 - 37 ○ The animal is observed exiting the impact area,
 - 38 ○ The animal is thought to have exited the impact area based on its course and
39 speed, or
 - 40 ○ The impact area has been clear of any additional sightings for a period of
41 30 minutes.

- 1 ● Post-mission surveys would begin immediately after the mission is complete and the
2 Range Safety Officer declares the human safety area is reopened.
- 3 ● Post-mission surveys would be conducted by the same aircraft and aircrew that conducted
4 the pre-mission surveys and would follow the same patterns as pre-mission surveys but
5 would focus on the area down current of the weapon impact area to determine if
6 protected species were affected by the mission (observation of dead or injured animals).
- 7 ● During post-mission surveys, if an animal is found to have been injured or otherwise
8 adversely impacted, the National Marine Fisheries Service (NMFS) will be notified
9 immediately. Additional consultation with the NMFS may be required prior to
10 conducting the next mission.

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12 **PUBLIC NOTIFICATION**

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14 A public notice was published in *The Garden Island* and the *Honolulu Star Advertiser* on 27 July
15 and 30 July 2016, inviting the public to review and comment on the Draft EA/OEA and Draft
16 Finding of No Significant Impact. The public comment period closed on 26 August 2016, and
17 [TBD] public comments were received.

18

19 **FINDING OF NO SIGNIFICANT IMPACT**

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21 Based on my review of the facts and the environmental analysis contained in the attached
22 EA/OEA, and as summarized above, I find that the proposed decision of the Air Force to conduct
23 live ordnance evaluations in the Pacific Ocean as part of the 86 FWS Long Range Strike WSEP,
24 will not have a significant impact on the human or natural environment; therefore, an
25 environmental impact statement is not required. This analysis fulfills the requirements of the
26 NEPA, the President’s CEQ, and 32 CFR Part 989.

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28 _____
29 Jennifer L. Kilbourne, Colonel, USAF
Chief, Civil Engineer Division

Date