

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

This final Environmental Assessment (EA) describes the potential environmental consequences resulting from a U.S. Air Force (Air Force) proposal to establish a main operating base for the Global Hawk, an Unmanned Aerial Vehicle (UAV), at one of five Air Force bases within the contiguous United States. This proposal involves basing 18 Global Hawk aircraft (or two squadrons), and about 900 personnel at an Air Force base. This final EA was prepared by the Air Force, Headquarters Air Combat Command (HQ ACC), in accordance with the National Environmental Policy Act (NEPA), the Council on Environmental Quality (CEQ) regulations implementing NEPA, and Air Force Instruction (AFI) 32-7061; therefore, the Environmental Impact Analysis Process (EIAP) as promulgated in Title 32 of the Code of Federal Regulations (CFR) Part 989.

PURPOSE AND NEED FOR THE ACTION

Commanders in charge of combat areas, peacekeeping, and humanitarian operations around the world must be able to collect, process, and report intelligence quickly and accurately. Commanders also need the ability to obtain that data from anywhere within the territory for which they are responsible, day or night, regardless of weather. The Global Hawk fulfills the need for near real-time, on-demand images and will complement and enhance current capabilities, providing many advantages for reconnaissance and intelligence gathering.

The Global Hawk provides long endurance, on-station intelligence, surveillance, and reconnaissance operations at about 65,000 feet above mean sea level. Global Hawk collects and disseminates imagery (e.g., photographs), which directly input into the Air Force's existing airborne reconnaissance and ground-based intelligence systems.

Global Hawk comprises an essential asset for worldwide intelligence gathering and near real-time information dissemination. No other Department of Defense asset provides the current or future intelligence gathering capabilities combined with long-endurance missions offered by Global Hawk. Therefore, the purpose of the proposed action is to implement the Global Hawk program at a main operating base within the contiguous United States.

To fulfill the Global Hawk program requirements, the first beddown should be implemented at a single Air Force base within the contiguous United States. Although Global Hawk aircraft and support capabilities would be deployed to different locations worldwide, a single main base is required to provide a consistent, secure, and dedicated location for overall command, maintenance, data collection, upgrades, and training. Using a single main operating base within the contiguous United States reduces overall requirements for facilities, personnel, and equipment, thereby decreasing program costs.

PROPOSED ACTION AND ALTERNATIVES

The Air Force proposes to establish a main operating base within the contiguous United States for the Global Hawk. The proposed beddown would occur in two phases:

Global Hawk Main Operating Base Beddown EA

Initial Phase - 2001 to 2002: This initial phase would involve the beddown of up to four Global Hawk aircraft at the selected main operating base. The first set of aircraft would come from Edwards AFB in late 2001 and consist of the Global Hawks used in the on-going test and evaluation program. Accompanying these aircraft would be ground segments for launch, recovery, and mission control, up to 50 Air Force personnel, and some additional contractor support personnel. Only existing facilities or at Tinker AFB, temporary facilities, including hangars and operations buildings, would be used for the initial beddown. The Air Force expects Global Hawk to undertake actual intelligence surveillance, and reconnaissance missions and to conduct training as soon as possible during the initial beddown.

Final Build-up Phase - 2002 to 2012: In 2002, the Air Force anticipates starting the final build-up phase of the Global Hawk beddown. Available information indicates that two Global Hawk aircraft would be delivered to the main operating base each year beginning in 2002. From 2003 through 2012, two aircraft per year would be delivered to the base to form two squadrons when combined with the original four from the initial phase. This set of aircraft would form the operational wing for the Global Hawk program. Personnel needed to operate and maintain the Global Hawk aircraft and equipment would be incrementally added during this phase. An increase of 918 personnel would occur at the main operating base. Construction of facilities (e.g., hangars, dormitories) would be undertaken and the amount of construction would vary according to the base selected. Equipment, including six sets of common ground segments, would be in place and functioning at this time. With the associated personnel, Global Hawk would be fully capable of meeting all its projected mission requirements around the world.

Based on the Air Force's alternative identification and evaluation process, five bases met the requirements needed to fulfill the proposed action:

1. Beale AFB, California;
2. Edwards AFB, California;
3. Ellsworth AFB, South Dakota;
4. Tinker AFB, Oklahoma; and
5. Wright-Patterson AFB, Ohio.

Each of these five alternatives is analyzed in this EA as a potential site for the Global Hawk main operating base. Beale AFB has been selected as the Air Force's preferred location for establishment of the Global Hawk main operating base. The EA also analyzes the no-action alternative, as required by NEPA and CEQ regulations. No action means the Air Force would not beddown Global Hawk at one of the five alternative bases at this time.

SUMMARY OF ENVIRONMENTAL CONSEQUENCES

This EA provides an analysis of the potential environmental consequences resulting from implementing one of the six alternatives. Ten resource categories received a thorough interdisciplinary analysis to identify potential impacts. Table ES-1 summarizes and compares the results of the analysis for each alternative according to the ten resource categories. According to the analysis in this EA, implementation of the proposed action at any one of the five alternative bases would not result in significant impacts in any resource category. Implementing any of these alternatives would not substantially change baseline conditions in the affected environment for each base.

Table ES-1
Comparison of Alternatives by Resource (page 1 of 2)

Resource	Beale AFB	Edwards AFB	Ellsworth AFB	Tinker AFB	Wright-Patterson AFB	No-Action Alternative
4.2 Airspace Management and Air Safety						
Airspace Management	2.4% increase in airfield operations. Monitoring by Sacramento TRACON and Oakland ARTCC would provide equivalent level of safety.	2.4% increase in airfield operations. Global Hawk would climb and descend entirely within special use airspace.	2.3% increase in airfield operations. Ellsworth AFB RAPCON and Denver ARTCC would provide radar coverage for equivalent level of safety to 18,000 feet MSL.	2.2% increase in airfield operations. Oklahoma City TRACON and Fort Worth ARTCC could provide equivalent level of safety if the Global Hawk uses prescribed departures and approaches.	3.0% increase in airfield operations. Dayton TRACON and Blue Ash military radar unit could provide equivalent level of safety if the Global Hawk uses prescribed departures and approaches.	No change to airspace management or safety operations. Beale: 51,825 Edwards: 52,607 Ellsworth: 54,600 Tinker: 57,000 Wright-Patterson: 40,251
Air Safety	Global Hawk would not measurably contribute to potential for BASH. Global Hawk projected mishap rate less than dominant aircraft (U-2).	Global Hawk would not measurably contribute to potential for BASH. Global Hawk projected mishap rate could increase the overall base mishap rate.	Global Hawk would not measurably contribute to potential for BASH. Global Hawk projected mishap rate could increase the overall base mishap rate.	Global Hawk would not measurably contribute to potential for BASH. Global Hawk projected mishap rate could increase the overall base mishap rate.	Global Hawk would not measurably contribute to potential for BASH. Global Hawk projected mishap rate could increase the overall base mishap rate.	Bird Aircraft Strikes between 14 (Beale AFB) and 15 (Tinker AFB) per year. Class A Mishap rate between 0.19 (Tinker AFB) and 7.17 (Beale AFB).
4.3 Noise and Land Use						
Noise	No change to baseline noise levels.	No change to baseline noise levels.	No change to baseline noise levels.	No change to baseline noise levels.	No change to baseline noise levels.	Acres affected by noise: Beale: 31,287 Edwards: 41,064 Ellsworth: 33,558 Tinker: 12,986 Wright-Patterson: 6,322
Land Use	Construction would affect 2.3 acres/consistent with all plans. No increase in areas affected by noise.	Construction would affect 1.7 acres/consistent with all plans. No off base residential areas affected by noise.	Construction would affect 1.3 acres/consistent with all plans. No increase in areas affected by noise.	Construction would affect 5.5 acres/consistent with all plans. No increase in areas affected by noise.	Construction would affect 1.8 acres/consistent with all plans. No increase in areas affected by noise.	Residential acres affected by 70 DNL or greater: Beale: 97 Edwards: -0- Ellsworth: 656 Tinker: 322 Wright-Patterson: 11
4.4 Human Resources						
	Global Hawk operations would add up to 755 indirect jobs and \$146 million in revenue.	Global Hawk operations would add up to 1,144 indirect jobs and \$173 million in revenue.	Global Hawk operations would add up to 1,580 indirect jobs and \$150 million in revenue.	Global Hawk operations would add up to 1,738 indirect jobs and \$170 million in revenue.	Global Hawk operations would add up to 1,186 indirect jobs and \$148 million in revenue.	Median Household Income: Beale: \$35,353 Edwards: \$33,912 Ellsworth: \$33,011 Tinker: \$33,616 Wright-Patterson: \$37,475

Global Hawk Main Operating Base Beddown EA

Table ES-1
Comparison of Alternatives by Resource (page 2 of 2)

Resource	Beale AFB	Edwards AFB	Ellsworth AFB	Tinker AFB	Wright-Patterson AFB	No-Action Alternative
4.5 Physical Resources						
<i>Air Quality</i>	Does not exceed <i>de minimis</i> levels for NO _x , VOCs, 2-3% increase in VOCs, SO _x , PM ₁₀ , CO and NO _x less than 0.2% of county emissions.	Does not exceed <i>de minimis</i> levels for NO _x , VOCs, PM ₁₀ , 2-3 % increase in VOCs, SO _x , PM ₁₀ , 4% increase in CO and NO _x .	In attainment, 1-15% increase in VOCs, SO _x , PM ₁₀ . Less than 0.2% of county CO and NO _x emissions.	In attainment, 1-4% increase in VOCs, SO _x , PM ₁₀ , 3% increase in CO and NO _x .	Does not exceed <i>de minimis</i> for NO _x , VOCs, 1% increase in VOCs, SO _x , PM ₁₀ , 2-3% increase in CO and NO _x .	Beale: maintenance for ozone. Edwards: serious/severe nonattainment for ozone, moderate nonattainment for PM ₁₀ . Ellsworth: attainment Tinker: attainment Wright-Patterson: maintenance for ozone
<i>Hazardous Materials and Hazardous Waste</i>	Global Hawk would add 0.2% to hazardous waste; no change in management.	Global Hawk would add 0.4% to hazardous waste; no change in management.	Global Hawk would add 5% to hazardous waste; no change in management.	Global Hawk would add 0.02% to hazardous waste; no change in management.	Global Hawk would add 0.6% to hazardous waste; no change in management.	Annual Hazardous Waste (lbs): Beale: 1,145,789 Edwards: 604,014 Ellsworth: 45,838 Tinker: 9,337,400 Wright-Patterson: 379,179
<i>Soils and Water Resources</i>	Air Force would minimize erosion and implement BMPs.	Air Force would minimize erosion and implement BMPs.	Air Force would minimize erosion and implement BMPs.	Air Force would minimize erosion and implement BMPs.	Air Force would minimize erosion and implement BMPs.	Potential for soil erosion: Beale: moderate Edwards: moderate Ellsworth: moderate Tinker: moderate Wright-Patterson: severe
4.6 Natural Resources						
	No effects on Threatened and Endangered species, wetlands, or sensitive habitat.	No effects on Threatened and Endangered species, wetlands, or sensitive habitat.	No effects on Threatened and Endangered species, wetlands, or sensitive habitat.	No effects on Threatened and Endangered species, wetlands, or sensitive habitat.	Two Threatened and Endangered species or species of concern would be avoided by construction.	Most bases are highly developed; usually have areas set aside for species/habitats.
4.7 Cultural Resources						
	No significant cultural resources affected.	No significant cultural resources affected.	No significant cultural resources affected.	No significant cultural resources affected.	No significant cultural resources affected.	All bases have archaeological and architectural surveys.
5.0 Cumulative Resources						
	No cumulative effects.	No cumulative effects.	No cumulative effects.	No cumulative effects.	No cumulative effects.	No cumulative effects.