

EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

Introduction

The United States Army has proposed to transform from the Current Force to a Future Force during the next 30 years. This transformation would affect most aspects of the Army's doctrine, training, leader development, organizations, installations, materiel, and Soldiers. As part of this action, the Army has proposed to transform the 172nd Infantry Brigade (Separate) [172nd SIB] at Fort Wainwright (FWA) and Fort Richardson (FRA), Alaska, into a Stryker Brigade Combat Team (SBCT) by May 2005.

The National Environmental Policy Act of 1969 (NEPA), CFR 1500-1508, and the *Final Rule Environmental Effects of Army Actions* and its implementing regulations require the Army to assess the environmental impacts of transformation. This Environmental Impact Statement describes the purpose and need for transformation of the 172nd SIB, decision to be made, comparison of alternatives, environmental consequences, and issues of concern.

Purpose and Need

The purpose of the proposed action is to convert the 172nd SIB in Alaska to an SBCT. Currently the 172nd SIB is a light infantry force that is designed for rapid responsiveness and mobility. Transformation to an SBCT would strengthen the capabilities of the 172nd SIB to a full spectrum force without compromising its ability to respond quickly. In addition, transformation would provide critical information to the long-term development of the Future Force.

The 172nd SIB was selected for transformation because its location and current structure would be compatible with the Army Vision. The minimal transformation standards that the proposed action and alternatives must meet are: proximity to critical areas of interest for the United States, capability to execute full spectrum military missions, and close association with sea and air bases in Alaska.

The following are USARAK's objectives for transformation:

- Provide training infrastructure to sustain combat readiness.
- Provide infrastructure to meet rapid deployment requirements.
- Provide UAV support and maintenance facilities.
- Provide a port staging area for SBCT sea deployment.
- Ensure USARAK provides support for interim and future Army transformation requirements.

Transformation would also require construction of five SBCT-related facilities including a new barracks facility, a mission support training facility, and a Port of Anchorage deployment staging area at FRA; company operations facilities at FWA; and a UAV maintenance facility at Donnelly Training Area (DTA). These facilities would provide infrastructure required for transformation.

Location

The lands that would be affected are located in the state of Alaska. Proposed locations for changes include FWA, which includes Tanana Flats Training Area (TFTA), Yukon Training Area (YTA), DTA (formerly Fort Greely) and the outlying Gerstle River and Black Rapids training areas. Transformation would also affect FRA. These lands are depicted in Figure ES.1.

Identification of the Preferred Alternative

The Army's preferred alternative is Alternative 4 – Transform the 172nd SIB and USARAK, including new infrastructure and an Airborne Task Force.

Alternatives Analyzed in Detail

Alternative 1 – No Action

Alternative 3 – Transform 172nd SIB and Add New Infrastructure

Alternative 4 – Transform 172nd SIB, Add New Infrastructure and Airborne Task Force (Preferred Alternative)

Alternatives Considered and Eliminated

Alternative 2 (Transformation of 172nd SIB with No New Infrastructure) was considered and eliminated from further study because the purpose and need of the proposed action of transformation would not be fulfilled. An entire SBCT would not be able to be stationed in one location due to inadequate supporting infrastructure. This would also prevent USARAK from executing full spectrum military missions, falling short of both general Army objectives and USARAK goals for transformation.

Other alternatives were considered and eliminated from further study because they were outside the scope of this analysis as determined by the Department of the Army. These included converting the 172nd SIB to an SBCT and stationing a second, new SBCT in Alaska; converting the 172nd SIB to an SBCT and stationing an airborne brigade in Alaska; and finally, the alternative of using lands to support division-level training events by outside units whose equipment would be housed in Alaska.

Major Conclusions: Discussion of Three Alternatives Considered in Detail

Stationing – Under the No Action Alternative, 6,577 Soldiers would be stationed at FWA and FRA. Stationing would increase to about 7,610 under Alternative 3 and 7,912 under Alternative 4.

Construction – Although 33 USARAK mission-essential projects would proceed under the No Action Alternative, no SBCT-essential facilities would be constructed. Under Alternative 3 and Alternative 4, five new SBCT-essential projects would be constructed. These include the company operations facilities at FWA; UAV maintenance support facility at DTA; and the Port of Anchorage staging area, mission support training facility, and barracks at FRA.

Training – The training mission would remain the same as current if the No Action Alternative was selected. Under this alternative, approximately 9.4 million rounds of munitions, 67,000 km² of maneuver space, and 31,600 maneuver impact miles (MIMs) would be required. For Alternative 3, munitions requirements would increase by 52%, maneuver space by 80%, and MIMs by 400%. Munitions would increase by 83% under Alternative 4, maneuver space

requirements would be 106% higher, and MIMs would increase by 410%. Note that no new impact areas would be established under Alternatives 1, 3, or 4.

Systems Acquisition – Small arms would remain similar to today under the No Action Alternative. About 1,180 vehicles would be required, with HMMWVs and the all-terrain SUSVs used more frequently. Under Alternative 3, small arms requirements would increase by 99%. In addition, 121 anti-tank systems and 7 demolition systems would be acquired. Approximately 1,600 vehicles would be needed, including 322 Strykers. With Alternative 4, small arms acquisitions would increase 132% compared to the No Action Alternative. About 1,840 vehicles would be required with Alternative 4, including 322 Strykers. Alternatives 3 and 4 would also require the acquisition of 4 UAVs.

Land Acquisition – No land acquisition is planned, regardless of alternative.

Deployments – The frequency and size of large-scale deployments (battalion and brigade level) could increase under Alternative 3 or Alternative 4, compared to the No Action Alternative. Under current training doctrine, deployment would not increase on a unit basis (e.g., individual platoon unit deployments would remain at four times a year regardless of alternative). However, the number of units, to include platoon, company, and battalion, would increase under the proposed action. Therefore, the total number of unit deployments and miles would increase.

Institutional Matters – Institutional matters can be described as the plans and programs that may affect the biological, physical, and socioeconomic environment at USARAK. Under the No Action Alternative, programs such as the Sustainable Range Program, Range Management, Integrated Training Area Management (ITAM), and Environmental Management (described in Appendix H) would remain under current management and would be funded as money is available. Although the Sustainable Range Program would be implemented under Alternatives 1, 3, or 4, under Alternative 4 the Sustainable Range Program, Range Management, ITAM, and Environmental Management would be fully funded and implemented. These programs would enhance and improve the management and conservation of USARAK's environmental and cultural resources.

Issues of Concern

Verbal and written comments received from the public and agencies during the scoping period were used to help determine specific issues of concern to the public. Potential issues were determined to be significant to the analysis of the proposed action if they fell within the scope of the proposed action, suggested different actions or mitigation, or influenced the decision on the proposed action. Impact analysis was completed for each significant issue to determine the consequences of the alternatives. Based on public and agency comments, the significant issues of concern analyzed in this EIS are:

Access (Issue A) – Impacts on access to fishing or hunting opportunities and recreational activities, especially wildlife viewing and airboating. The impacts of military activities on access to stocked lakes were also identified as public concerns.

Traffic (Issue B) – Impacts of Army vehicle convoys on highway safety and potential risks of accidents, increased Army vehicle drive times on local highways, and the potential degradation of highways and unpaved roads from military vehicles.

Wildlife and Habitat (Issue C) – Impacts to wildlife, fish, and their habitats. The species of greatest concern were large game mammals, especially bison and moose.

Maneuver (Issue D) – Impacts of military vehicles to off-road areas, primarily on soils and wetlands.

Fire Management (Issue E) – Impacts of military training on forest fires and the ability to put out fires on military lands.

Cultural Resources (Issue F) – Impacts of maneuvers and exploded ordnance on cultural resources.

Environmental Consequences

This EIS evaluates impacts to the following resources and issues: air quality, geology resources, soil resources (Issue D), surface water, groundwater, wetlands (Issues C and D), vegetation, wildlife and fisheries (Issue C), threatened or endangered species and species of concern, fire management (Issue E), cultural resources (Issue F), socioeconomics, public access and recreation (Issues A and C), subsistence, noise, human health and safety (Issue B), environmental justice, infrastructure, and cumulative impacts.

Impacts to these resources and issues are evaluated using quantitative, descriptive, or qualitative methods, depending on the detail of information available for each.

The qualitative terms used to evaluate impacts to resources are generally defined as:

- None – No measurable impacts are expected to occur.
- Minor – Impacts are expected to occur; impacts would be measurable and may have slight effects on resource.
- Moderate – Impacts are expected to occur; impacts would be noticeable and would have a measurable effect on resource.
- Severe – Impacts are expected to occur; impacts would be obvious and would have serious consequences to resource.
- Beneficial – Only beneficial impacts are expected to occur.

The first two qualitative impact categories (none and minor) are considered insignificant. The second two categories (moderate and severe) are considered significant. Mitigation measures have been developed to offset impacts.

Air Quality – Transformation could cause minor impacts to air quality at DTA and FRA. Fugitive dust from construction or training could result in decreased visibility on Army lands, as well as off post. Any impacts would be temporary. Emissions from other factors including stationary air emissions, use of vehicles, or other mobile sources would not cause significant impacts to air quality.

Geology Resources – No impacts to geologic resources would be expected from transformation.

Soil Resources (Issue D) – Soil resources could be impacted from construction and training. Construction of new facilities at FWA Main Post, DTA, and FRA would result in removal of soil at the facility sites, and the construction process could cause temporary soil loss due to wind and water erosion. Impacts from maneuver and weapons training could occur at each post. Off-road use of the Stryker vehicle could cause compaction, erosion, and damage to permafrost. Damage from high explosive weapons could occur with increased use of these devices, but damage would be sustainable and limited to impact areas only. Compared to the No Action Alternative, impacts

under Alternatives 3 and 4 would probably increase to moderate levels at FWA and DTA, and possibly moderate to severe levels at FRA during the interim phase (2005-2010).

Surface Water – Impacts to surface water could result from stationing, construction, training, and systems acquisition. Increased troop numbers could cause greater demand for water and create non-point source pollution. Construction impacts would result from erosion and possibly emissions. Maneuver (with the newly acquired Stryker vehicle) and weapons training could increase erosion into water, as well as increase the potential for contaminants or pollutants to enter the waterways. Factors analyzed in this EIS include bankside erosion, surface flow, channel morphology, sedimentation, stream width, water temperature, and water chemistry. Impacts to most of these resources would not be significant. However, bankside erosion impacts from transformation could increase from minor to moderate at TFTA, YTA and DTA. At FRA impacts from sedimentation could become moderate during the interim phase if Alternative 4 was selected.

Groundwater – Groundwater resources could be affected due to stationing, construction, training, and systems acquisition. Increased troop numbers could cause a greater demand for groundwater withdrawal, alter the flow of groundwater, or cause degradation of the resource. Construction activities could cause disturbance and affect local ground structure. Increased training impacts from the Stryker vehicle could adversely affect groundwater quality. Factors analyzed in this EIS included groundwater flow, groundwater chemistry, persistence, and water use. However, no significant impacts would be expected from these factors.

Wetlands (Issues C and D) – Transformation could cause adverse impacts due to stationing, construction, training, and systems acquisition. Higher numbers of troops could increase demands on wetlands due to training or recreation. There is potential for construction damage, especially from sedimentation, to wetlands at FWA Main Post and DTA. Training with the newly acquired Stryker vehicle could cause increased impacts to wetland resources. Potential types of damage include loss of vegetative cover, rutting or compaction of wetland soils, loss of permafrost, and susceptibility to contamination from pollutants. The impacts could increase from 0-4 acres per year to 20-40 acres per year at FWA Main Post, TFTA, YTA, DTA, and FRA. The increase would result in a moderate impact to wetland soil resources.

Vegetation – Impacts to vegetation could occur due to stationing, construction, training, and systems acquisition. Greater numbers of troops could increase damage to vegetation, especially from training or recreation. Construction projects at the cantonment areas at FWA Main Post and FRA would not affect naturally vegetated sites. Construction of the UAV maintenance facility at DTA could impact approximately 0.5 acres of natural vegetation. Factors analyzed in this EIS include vegetative cover and forest resources. Changes in maneuver and artillery training could cause long-term impacts to vegetative cover. Increased training levels and use of the newly acquired Stryker vehicle could increase MIMs by more than 400%, and this would result in greater damage rates to vegetation. Forest resources at FWA and DTA would be moderately impacted due to fire and insect infestations, but impacts at FRA would be minor.

Wildlife and Fisheries (Issue C) – Wildlife and fisheries could be impacted from stationing, construction, training, systems acquisition, and deployment. Increased personnel on USARAK lands could cause greater recreational impacts to wildlife and fisheries. Construction at FWA Main Post and FRA would be limited to previously disturbed sites inhabited by urban-adapted wildlife. However, construction of the UAV maintenance facility could impact a small portion of natural habitat at DTA in an area that could be used by bison and moose as well as predators (e.g., wolves and bears). Increased training intensities could result in higher disturbance rates for

wildlife. Noise and movement of vehicles and troops in wildlife habitat would be the factors most likely to disturb wildlife. Increased use of high explosive weapons could impact local populations of moose and waterfowl (including trumpeter swans) in the Alpha Impact Area at TFTA. Several other priority bird species could also be affected by habitat alteration or training. Maneuver training at DTA could increase disturbance rates of wolf, moose, grizzly bear, caribou, and bison, and the impacts could potentially be moderate to these species, as well as several priority bird species. At FRA increased training could result in moderate impacts to wolverine, grizzly bear, black bear, and several priority bird species. Deployments could result in temporarily increased noise levels near airports, and possible increased disturbance and mortality to wildlife near highways. Any impacts to fisheries resources are not expected to be significant at any USARAK posts.

Threatened or Endangered Species and Species of Concern – No federal or state threatened, endangered or proposed plant or animal species are found within or near lands used by USARAK. Two federally delisted species, the American peregrine falcon and the arctic peregrine falcon, are infrequent visitors to FWA and DTA. Several species of concern are found on USARAK posts. These species are susceptible to the same types of impacts as vegetation and wildlife. No significant impacts are expected to occur to species of concern.

Fire Management (Issue E) – Fire management could be impacted by stationing and training. Increased stationing could create a slight increase in fire risk from recreational activities. Training can cause fires through the use of incendiary devices, field burning, vehicle use, trash burning, and warming fires in bivouac areas. Factors relating to fire risk analyzed in this EIS include rounds of ammunition fired and training days. The rounds of ammunition fired are expected to increase at FWA, DTA, and FRA. Major weapons range user days are expected to decrease slightly at FWA and DTA, but increase substantially at FRA. Fire risk would remain minor at TFTA, but would increase from minor to moderate at FWA Main Post, YTA, DTA, and FRA.

Cultural Resources (Issue F) – Cultural resources could be affected by increased stationing, construction, training, and systems acquisition. The increase in use and traffic on USARAK lands could cause degradation and disturbance to cultural resources. Cultural resources and historic properties or districts could be impacted from proposed construction projects. Under transformation the intensity and spatial extent of training would increase, and this could result in greater rates of damage to cultural resources. Use of the Stryker vehicle could cause more damage to previously undisturbed sites. In this EIS, impacts to prehistoric and historic sites, districts, and traditional properties are analyzed. At FWA impacts to prehistoric and historic sites and districts are probable, and the impacts could be severe, regardless of alternative. Impacts to prehistoric sites, districts, and cultural properties could also be severe at DTA; however, no impacts to historic properties would be expected. No impacts would be expected to prehistoric sites at FRA. Minor impacts to historic properties could occur, but the impact would be the same under each alternative.

Socioeconomics – Socioeconomics would be affected by stationing, training, construction, systems acquisition, and deployment. Increases in troops and support personnel would add about \$59 million, combined, to the local economies in Fairbanks and Anchorage under Alternative 3 and about \$230 million under Alternative 4. During the interim phase, an additional \$136 million would be generated. Transformation could result in increased training intensity and duration, possibly reducing recreational access to USARAK lands. Construction activities, projected at \$30 million for FRA and FWA combined, would generate approximately \$59 million in economic activity in the Fairbanks and Anchorage areas. Long-term deployments could cause increased demand on social services. Factors evaluated in this EIS include regional economic activity,

housing, public and social services, public schools, public safety, and recreational activities. While minor impacts could occur to some of the other factors, the positive impacts realized from increased regional economic activity would cause the overall socioeconomic impact of transformation to be beneficial in the areas surrounding FWA, DTA, and FRA.

Public Access and Recreation (Issue A) – Public access and recreation would be affected by stationing, training, construction, and systems acquisition. Increased stationing of troops at (FWA) could crowd interior fishing and hunting opportunities. The SBCT training regime may require more frequent closures for military purposes. Construction projects could affect local game populations, and new ranges could reduce recreational opportunities or areas. Acquisition and use of the Strykers could increase the trail system on USARAK lands, allowing more extensive access and recreation. In this EIS, impacts to access methods (including ORV, ground, air, and boat), recreation types (including hunting, fishing, trapping, trail use, and camping), and time and area available are all analyzed. Impacts to time availability, hunting, fishing and trapping at FWA are possible but would be minor. These same impacts are probable at DTA and would be minor to moderate. Impacts to time availability and hunting at FRA are probable and also would be minor to moderate.

Subsistence – Subsistence may be affected by stationing, construction, training, and systems acquisition. Increased stationing at FWA might impact regional game populations, forcing increased competition with subsistence. Range construction might also affect wildlife populations: moose and bison could benefit from clearing, but forest species might be negatively affected. Training closures would limit resource harvest on USARAK lands for subsistence and might affect local game populations. Acquisition and use of the Stryker is expected to require expansion of the USARAK trail system, which would allow greater subsistence access on USARAK lands. In this EIS, impacts to trails, off-limits areas, time availability, and resource availability are analyzed. Impacts to roads and trails would be beneficial. Impacts to time availability and resource availability would be minor to moderate.

Noise – Increased noise levels could result from construction, training, systems acquisition, and deployment. Construction activities would contribute to temporary and localized increases in noise levels. The primary source of noise from training would result from use of munitions, in particular, large caliber weapons (>20mm). The Stryker vehicle and UAV could also contribute to increased noise levels, but any effects would be local and short term. Noise levels during deployments would increase near airfields, but the effect would be short term, and it would not contribute significant annual noise levels. In this EIS, high noise levels (Zone II and III levels) were analyzed on training lands, cantonment areas, and off post. At FWA Zone II and III levels off post increase from 165 acres under the No Action Alternative to about 340 acres under Alternatives 3 and 4. These would not be in residential areas or in areas where there are schools, hospitals, and offices. No lands off post at DTA would be affected by Zone II or III noise levels. At FRA, Zone II and III noise levels could increase from about 2,500 acres off post to over 3,500 acres. The areas impacted would be over uninhabited lands. No residential areas, schools, hospitals, or offices would be impacted by Zone II and III noise levels.

Human Health and Safety – Human health and safety would be affected by stationing, construction, training, deployment, and systems acquisition. Increased stationing could involve greater quantities of hazardous materials used and stored on USARAK properties. Construction that involves renovation or removal of old buildings could accelerate the reduction of lead and asbestos on FWA and FRA. Training increases could lead to increases in unexploded ordnance and inadvertent releases of petrochemicals. Under current training doctrine, deployment would not increase on a unit basis (e.g., individual platoon unit deployments would remain at

four times a year regardless of alternative). However, the number of units, to include platoon, company, and battalion, would increase under the proposed action. Disparity between USARAK convoy speed and civilian traffic is now exacerbated with the recent speed limit increase to 65 mph. The addition of Stryker vehicles to Alaskan highways during convoys is not expected to affect roadway degradation. Acquisition and use of the Strykers are expected to require greater quantities of petrochemicals and solvents. Impacts to traffic, hazardous materials, asbestos, lead-based paint, pesticides, radon, contaminated sites, and unexploded ordnance are analyzed in this EIS. Impacts to asbestos and lead-based paint at FWA would be beneficial. Impacts to traffic, hazardous materials, contaminated sites, and unexploded ordnance are possible at FWA but would be minor to moderate. The same impacts are expected at DTA. Impacts to asbestos and lead-based paint at FRA would be beneficial. Impacts to traffic, hazardous materials, contaminated sites, and unexploded ordnance are possible at FRA, and impacts would be minor to moderate.

Environmental Justice – Transformation could cause adverse impacts from stationing, construction, training, systems acquisition, and deployment activities. Minor to moderate environmental justice impacts to low-income and Alaska Native populations near DTA could occur under Alternatives 3 and 4. Populations near FWA or FRA would be unaffected or could experience minor impacts. Moderate impacts from activities at DTA include impacts to local Tribes associated with cultural sites. Possible impacts to the accessibility of USARAK lands could affect subsistence activities (Section 4.15, Subsistence). An increase in the number of troops stationed at FWA would likely increase competition for wildlife resources between local subsistence users and sport hunters and fishers.

Infrastructure – Impacts to USARAK infrastructure associated with transformation may result from stationing, construction, training, systems acquisition and deployment. Increased stationing at FRA and FWA may place a slight strain on current housing, community and installation support infrastructure. However, proposed construction projects would improve the capacity of all aspects of USARAK infrastructure to accommodate the influx of personnel. Increased personnel would result in greater training range and maneuver area requirements while deployment would impact transportation and installation support facilities. Systems acquisition would mostly affect installation support facility infrastructure, particularly maintenance facilities. Under transformation, beneficial impacts would be expected to transportation and installation support facilities infrastructure at FWA, DTA and FRA, with additional benefits to housing infrastructure at both FWA and FRA. Minor impacts to community facilities would be expected at FWA and FRA. Minor to moderate impacts to training ranges and maneuver training land at FWA, DTA, and FRA. No impacts to housing and community facilities at DTA and no impacts to USARAK airspace and airfields at FWA, DTA, and FRA would be expected. Overall, expected impacts to USARAK infrastructure at all three installations would be minor.

Cumulative Impacts – In the cumulative impacts analysis FWA, DTA and the Gerstle River and Black Rapids training area are analyzed in the context of the interior Alaska region of interest, and FRA is analyzed within the south-central/Anchorage area region of interest. Past, current and future impacts on USARAK lands are also considered. Cumulative impacts are described in terms of military activities, infrastructure, land management, use of renewable natural resources, and communities. USARAK does contribute to cumulative impacts in these regions, and past, current, and future activities will contribute to cumulative impacts. However, analysis of impacts in relation to established thresholds indicates they do not appear to cause significant adverse effects to the resources and issues evaluated in this EIS.

Comparison of Alternatives 3 and 4

Both alternatives would result in transformation from the Current Force to an SBCT. In general, Alternative 4 would result in slightly higher numbers of personnel and equipment, but construction projects would remain the same. Training intensities would be slightly higher under Alternative 4.

A primary difference between Alternatives 3 and 4 would result from the institutional matters. For Alternative 3, institutional matters relating to range management, ITAM, environmental management, and sustainable range management would remain essentially the same as the No Action Alternative. However, with Alternative 4, these programs would be fully implemented, resulting in improved environmental management on USARAK lands.

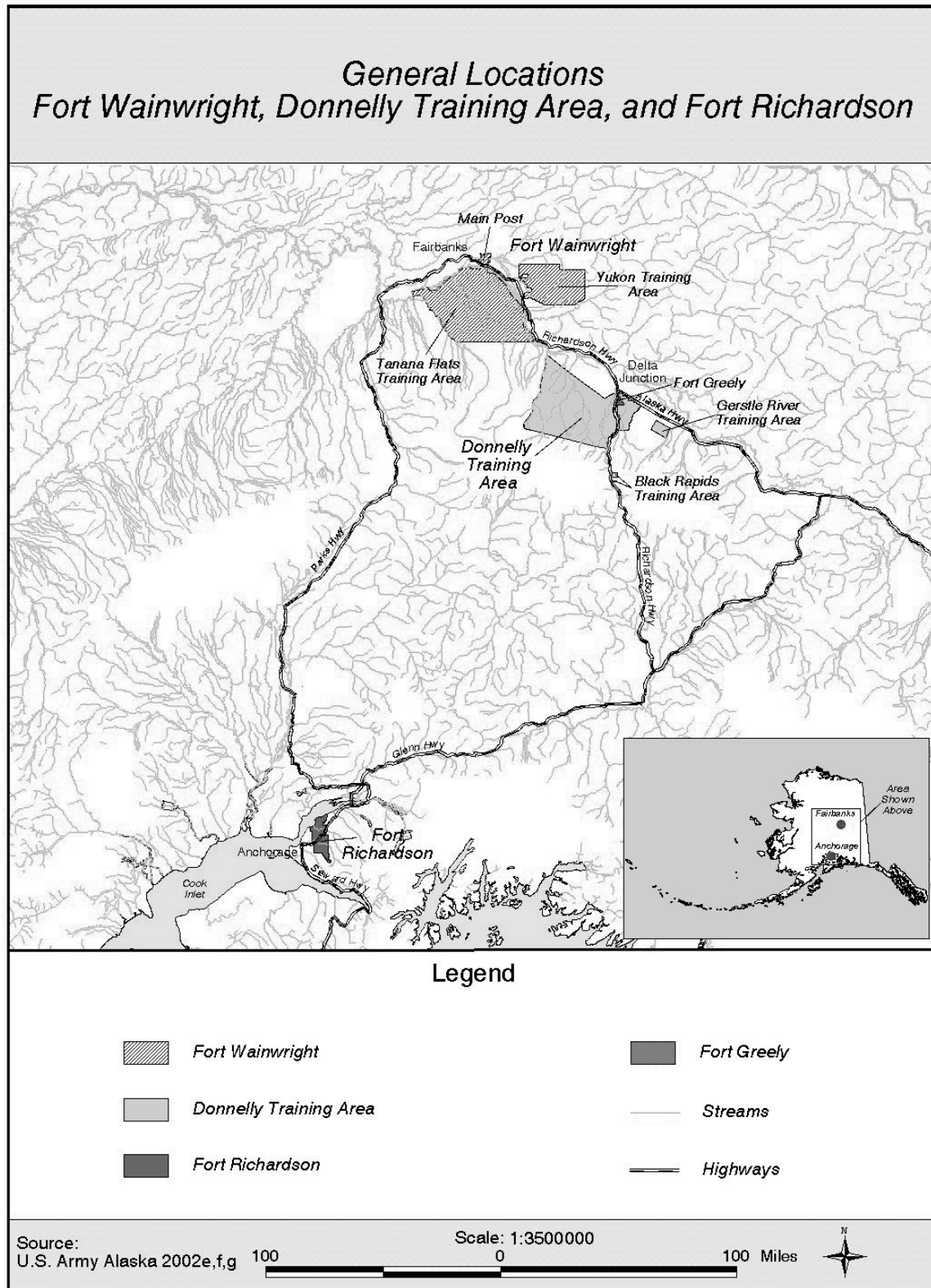


Figure ES.1 General Locations of Fort Wainwright, Donnelly Training Area, and Fort Richardson.