

## **5.0 CUMULATIVE EFFECTS AND IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

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### **5.1 CUMULATIVE EFFECTS**

Council on Environmental Quality (CEQ) regulations stipulate that the cumulative effects analysis in an EA should consider the potential environmental impacts resulting from “the incremental impacts of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency or person undertakes such other actions” (40 Code of Federal Regulations 1508.7). Recent CEQ guidance in *Considering Cumulative Effects* affirms this requirement, stating that the first steps in assessing cumulative effects involves defining the scope of the other actions and their interrelationship with the proposed action. The scope must consider other projects that coincide with the location and timetable of the proposed action and other actions. Cumulative effects analysis must also evaluate the nature of interactions among these actions.

**Military Actions.** Recent past military projects in the region include the expansion of German Air Force Operations at Holloman AFB, New Mexico (United States Army Corps of Engineers [USACE] 1998), a cooperative program at Cannon Air Force Base (AFB) to train Republic of Singapore Air Force personnel (Air Force 1998), the Realistic Bomber Training Initiative (RBTI) (Air Force 2000), Joint Training Exercise (JTX) Roving Sands (USACE 1994), and the reconstruction of Cannon AFB runways that resulted in the temporary relocation of Cannon AFB aircraft to Nellis AFB, Nevada. All of these past or ongoing actions were included as part of the baseline activities associated with the base in the analysis of the proposed action.

The German Air Force operations at Holloman AFB are distant enough from Cannon airspace that there is currently, and would continue to be, minimal use of Cannon airspace. A combined U.S. Air Force/Republic of Singapore squadron at Cannon AFB uses some of the same airspace as the proposed action (Pecos Military Operations Area [MOA]/Air Traffic Control Assigned Airspace [ATCAA] and Visual Routes [VRs]-100/125). However, no change in existing airspace use by the program would occur as a result of the proposed action. RBTI links military airspace and ground-based training in support of aircrews from Barksdale AFB and Dyess AFB. No change in existing RBTI use of Cannon airspace would occur as a result of the proposed action. JTX Roving Sands is an annual air defense exercise sponsored by the United States Army. This exercise has included Cannon AFB aircraft and airspace. No change would occur in this occasional use under the proposed action. The reconstruction of Cannon AFB runways is not associated with the proposed action, but is noted here as a recent past action.

**Non-Military Actions.** The airspace evaluated in this environmental assessment (EA) covers a broad region under which there are numerous ongoing or proposed non-military actions. Examples include existing and new non-military air traffic, management and development of public lands, and private land development. Section 3.1.3 describes the coordination of overlapping airspace in the vicinity of the proposed action. Such coordination between military and non-military airspace uses is expected to continue.

The Roswell Airport has upgraded its radar, although not under ROI airspace. Previously the Roswell Airport radar was not affected by chaff use over Melrose AFR and chaff used under this proposed action is designed not to interfere with Air Traffic Control Radar throughout the National Airspace System. Therefore, it is unlikely that the proposed defensive training would affect Roswell Airport’s upgraded radar system.



The proposed action does not involve construction or other on-the-ground actions, and is not expected to interact with projects developed on land under airspace. Such projects include the planned construction of the Bosque Redondo Memorial at Fort Sumner to commemorate the “Long Walk” of some 8,000 Navajo People from their homeland to life in captivity at Bosque Redondo during the 1860s. The Memorial will include an exhibit space, resource rooms and educational facilities as a forum for interpretation of the fort and surrounding reservation (Museum of New Mexico 2001).

## **5.2 IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES**

Irreversible and irretrievable resource commitments are related to the use of nonrenewable resources and the effects that the uses of these resources have on future generations. Irreversible effects primarily result from the use or destruction of a specific resource (e.g., energy and minerals) that cannot be replaced within a reasonable time frame. Aircraft training operations would continue the existing consumption of non-renewable resources such as the gasoline used in vehicles and jet fuel used in aircraft. Chaff and flares also would be expended. These uses are not expected to significantly affect environmental resources.