

# APPENDIX K

## IDENTIFYING THE PREFERRED ALTERNATIVE AND ENVIRONMENTALLY PREFERRED ALTERNATIVE

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*In conformance with the Council on Environmental Quality (CEQ) regulations (40 CFR 1502.14(e)), the Air Force evaluated information acquired during the RBTI environmental impact analysis process to determine the Air Force's preferred alternative. In addition, as required by 40 CFR 1505.2(b), the environmentally preferred alternative, necessary for the future Record of Decision is identified as well. The two-fold process is discussed below.*

Identification of the preferred action alternative and environmentally preferred action alternative followed independent processes. For the preferred alternative, the Air Force evaluated each action alternative to identify which one best met the operational goals of RBTI. Although each action alternative achieves RBTI operational requirements, they can be differentiated by the level of training potential and operational utility. These differences were identified during the NEPA process. Identification of a preferred alternative followed review of the technical analysis, comments received from the public and agencies, as well as input from the FAA, a cooperating agency on this EIS.

For the environmentally preferred alternative, the Air Force evaluated each of the action alternatives based on the results of the environmental analysis as well as public and agency comments on the draft EIS. This evaluation differentiated the action alternatives according to the nature and magnitude of their environmental consequences.

### Preferred Alternative

The process for identifying a preferred alternative from among the three action alternatives consisted of a two-part screening. A coarse screening was conducted, followed by a fine screening.

**Step 1: Coarse Screening.** During coarse screening, the Air Force evaluated the operational utility of each action alternative. Section 2.4 of the EIS indicates that all three alternatives met the rigorous requirements of the systematic alternative identification process in order to be carried forward for analysis in the EIS. This means they all fulfilled the operational requirements. Further evaluation, as presented in Section 2.6.3 of the EIS and summarized below, established that the expected operational outcomes of all three alternatives were similar, although Alternatives B and C would provide slightly more combat training time than Alternative D.

	Alternative B	Alternative C	Alternative D
Percent reduction in low-value transit time	67 – 71%	67 – 71%	45 – 75%
Percent increase in proportion of combat training time	20 – 26%	26 – 29%	18 – 26%

In addition, training activities in Alternative D are more likely to be adversely constrained by weather than the other two action alternatives. The northeastern New Mexico area, where Alternative D is located, is prone to afternoon thunderstorms during the summer months and severe snowstorms during the winter months potentially impairing the ability for military aircraft to train. Western Texas, where Alternatives B and C are located, receives less severe weather. This factor and the operational considerations described above resulted in eliminating Alternative D from being carried forward for fine screening. At this coarse level of consideration, Alternatives B and C had approximately equal potential for being identified as the preferred alternative. Both were carried forward for fine screening.

**Step 2: Fine Screening.** Alternatives B and C were then assessed in detail to determine the extent to which operational differences had been identified by the technical analysis, agency input, public comments, and cooperating agency (FAA) input.

Both Alternatives B and C would achieve RBTI operational goals almost equally. In terms of training value, Alternative C would provide slightly more combat training time than Alternative B. Since this difference was minor, input from the FAA was the primary tool used to differentiate between the two alternatives. The FAA indicated that the modification and increased use of the proposed Texon MOA/ATCAA within Alternative C could significantly impair IFR traffic, would require rigid management with little or no capability to support any flight changes or delayed operations, necessitate rerouting of civil and commercial aircraft using affected jet routes and federal airways, and possibly require restructuring of the airspace. Given these constraints, the operational flexibility of the proposed Texon MOA/ATCAA would be limited.

In contrast, the proposed Lancer MOA/ATCAA associated with Alternative B offers flexibility and is better suited to support the designated training activities with less potential interference to other aviation in the area. While the proposed Lancer MOA/ATCAA could require rerouting of civil and commercial aircraft, the amount of traffic would be minimal and easily accommodated by the FAA. The proposed Lancer MOA/ATCAA would allow less constrained flow into and out of the training airspace. These factors make Alternative B the more operationally preferable alternative, therefore, it has been identified as the Air Force's preferred alternative.

### **Environmentally Preferred Alternative**

Independent of the identification of the preferred alternative, the Air Force evaluated all three action alternatives to determine the environmentally preferred alternative. Similar to the operational evaluation, a two-step coarse and fine screening approach was used.

**Step 1: Coarse Screening.** This effort focused on differentiating the overall potential for environmental impacts among the three action alternatives. An assessment of the environmental analysis in the EIS, public comments, and agency input demonstrated that Alternative D, IR-153/Mt. Dora MOA, was the least preferred alternative.

Review of the impact summary table in the Executive Summary of the EIS (repeated below) reveals that in three of the six resource categories, the magnitude of potential impacts for Alternative D would exceed those resulting from Alternatives B and C. In the other three categories, all action alternatives were considered equal. Implementing Alternative D would result in substantial (>10 dB) increases in noise over 22 of 38 segments of proposed IR-153. In contrast, four segments in Alternative B and two in Alternative C would be subjected to similar changes in noise levels. Both

the analysis and comments from agencies indicated that Alternative D has the potential to affect more special use land management areas and threatened or endangered species due to increased aircraft noise and overflights.

Alternatives B and C each have the potential for fewer and lower magnitude environmental impacts than Alternative D. At this coarse level of consideration, Alternatives B and C had approximately equal potential for being identified as the environmentally preferred alternative.

<b>Potential Effects of RBTI Alternatives</b>					
<i>EIS Section</i>	<i>Resource</i>	<i>Alternative A</i>	<i>Alternative B</i>	<i>Alternative C</i>	<i>Alternative D</i>
4.1	Airspace and Aircraft Operations	⊗	◆	◆	◆◆ <sup>1</sup>
4.2	Land Management and Use	⊗	◆	◆	◆◆
4.3	Biological Resources	⊗	⊗	⊗	◆
4.4	Socioeconomics and Environmental Justice	⊗	⊗	⊗	⊗
4.5	Cultural Resources	⊗	⊗	⊗	⊗
4.6	Soils and Water Resources	⊗	⊗	⊗	⊗
⊗ = Negligible/inconsequential effects ◆ = Potential adverse effects ◆◆ = Magnitude of potential adverse effects <sup>1</sup> = Applies to noise					

**Step 2: Fine Screening.** This second level of screening addressed each environmental resource category, individually and cumulatively, to determine if there were environmental discriminators between the two alternatives. Although no dramatic differences were identified from either the EIS analysis or comments, a detailed interdisciplinary review revealed the relative environmental differences presented below.

*Airspace and Aircraft Operations.* Both alternatives include similar modifications to existing IR-178. Although proposed IR-178 in Alternative B would involve more total airspace, it would create less new airspace, both in total and proportionally. With respect to the MOAs/ATCAAs associated with these alternatives, the proposed Lancer MOA/ATCAA (Alternative B) would reduce the total area affected by this type of airspace, (90 percent would be composed of existing airspace), whereas modifications to the proposed Texon MOA/ATCAA (Alternative C) would increase the total area underlying MOA airspace by 25 percent (with 25 percent of the MOA comprised of new airspace). Coupled with the operational constraints and issues derived from the FAA, these factors make Alternative C less environmentally preferred in terms of airspace management.

Because of similar location, structure, and projected use, neither Alternative B or C is measurably different than the other with regard to noise, air quality, or aircraft safety.

*Land Management and Use.* Land management and uses underlying the airspace for both Alternatives B and C are relatively similar since the alternatives cover similar area. Ranching, farming, and hunting (through leases) represent the most common land management and uses. Both

alternatives overlies the same two special use land management areas and noise levels at each area increase no more than 3 dB. While population under Alternative B is greater, the establishment of more new airspace in Alternative C affects more locations not previously exposed to aircraft noise. This factor suggests that Alternative B would be slightly preferable to Alternative C.

*Biological Resources.* No substantive differences were identified between the two alternatives during the screening. Both affect almost the same area and habitats.

*Socioeconomics and Environmental Justice.* No discernible differences in socioeconomic and environmental justice impacts would result from these two alternatives. Short-term and long-term revenues from construction and operation of the emitters and electronic scoring sites would be identical and apply to the same counties.

*Cultural Resources.* The number of cultural resources potentially affected by construction of emitter and electronic scoring sites would be one less under Alternative B. Although these resources could be avoided under both Alternatives B and C, the reduced potential for effects makes Alternative B minimally preferable to Alternative C.

*Soils and Water.* No substantive differences were identified between the two alternatives during the screening. Soil loss and erosion would be minimal under each alternative, and neither would effect water use or availability.

*Cumulative Effects.* The areas affected by and the timing of both alternatives would be very similar. No known or foreseeable actions would interact with either alternative. Neither alternative could be considered environmentally preferable.

Fine screening of environmental impacts revealed minor differences in the potential consequences of Alternatives B and C. Since Alternative B offers somewhat less potential for environmental impacts, it has been identified as the environmentally preferred alternative.

In conclusion, Alternative B is environmentally preferred. Therefore, the Air Force's preferred alternative and the environmentally preferred alternatives are one in the same -- Alternative B, IR-178/Lancer MOA.