## APPENDIX C AIRSPACE MANAGEMENT

The following provides a description of how airspace is managed by the Federal Aviation Administration (FAA) as it relates to those types of airspace used by the Air Force. It explains the process followed when the Air Force proposes airspace modifications for both Military Operations Areas (MOAs) and Military Training Routes (MTRs). In addition, this appendix offers specific information on IR-178, both existing (Alternative A) and proposed (Alternatives B, C, and D).

As is described in the RBTI EIS (Sections 1.4.1 and 2.1.1), MTRs are three-dimensional highways in the sky, having height (altitude) as well as length and width. Aircraft follow these routes within the assigned altitudes and width. Under RBTI, proposed IR-178 (Alternatives B and C) and proposed IR-153 (Alternative D) segments have an assigned width and height; Tables C-1 through C-3 provide these altitudes (both floor and ceiling) and width of the existing and proposed MTR segments.

## **Processing Airspace**

FAA Order 7400.2D prescribes policy, criteria, and procedures applicable to Special Use Airspace (SUA). This order applies to all regional and field organizations involved in rule making and non-rule making actions associated with this airspace. FAA Order 1050.1D establishes policy and procedure and assigns responsibility for assuring agency compliance with environmental procedures set forth in the Council on Environmental Quality (CEQ) regulation for implementing the procedural provisions of the National Environmental Policy Act (NEPA). FAA Order 1050.1D, Appendix 3, describes the FAA's environmental responsibilities in relation to SUA. FAA Order 7490.XX, which is in draft form and in agency coordination, incorporates many of the practical environmental review steps taken in the process of establishing and modifying special use airspace. This draft document, which is more specific than FAA Order 1050.1D, Appendix 3, is used by the Southwest Region Air Traffic Division as a practical guide to the FAA review process.

SUA falls into two categories. One category consists of airspace subject to rule making actions relating to restricted and prohibited areas. The other category consists of airspace subject to non-rule making actions related to alert areas, controlled firing areas, offshore warning areas, and MOAs. MOAs are established to separate and/or segregate certain nonhazardous military activities from aircraft flying under Instrument Flight Rules (IFR) and to identify these activities for aircraft flying under Visual Flight Rules (VFR). Final approval authority for MOAs rests with the Airspace and Rules Division (ATA-400), Headquarters FAA.

When a MOA proposal is submitted to the FAA Regional Air Traffic Division, the regional FAA office reviews the proposal from an aeronautical perspective and conducts a preliminary review of the proponent's environmental documentation. Since the FAA is the approval authority for SUA actions, it cannot take a position on any particular SUA proposal prior to the completion of the NEPA and aeronautical processing phases. When the regional FAA office is notified early in the environmental process and asked by the military to participate in NEPA meetings and scoping actions, the regional FAA Air Traffic Division designates the FAA representatives and encourages participation in the NEPA process.

According to CEQ guidelines, the FAA has the discretion to adopt an environmental assessment or an environmental impact statement prepared by the military, provided that the FAA independently

reviews the document and assesses whether it meets the standard for adequacy under NEPA, CEQ regulations, and the FAA's own regulations. In adopting the document, the FAA must assume responsibility for the scope and content of the document or prepare its own supportive environmental documents and issue an independent decision document. It is important to note that the FAA usually does not begin the environmental review process until there is a formal airspace proposal submitted. In the majority of past cases, the FAA has not been informed of the proponent's initiation of NEPA actions until the environmental documentation has been sent to the regional office along with the airspace proposal.

Environmental Programs Division (ATA-300) of the FAA was established to assist and support the review process for airspace actions. In addition, each FAA region has a trained environmental specialist in its Air Traffic Division who initiates the environmental review process for military SUA proposals and examines environmental documentation coming from that region. This regional review ensures that applicable impact categories and any specific FAA environmental concerns are considered in the documents. Concurrent with the regional review, the ATA-300 office begins the review process with information forwarded by the region and from the military proponent.

During the process, the FAA regional office has the following responsibilities:

- Examining document format;
- Confirming that the proposed airspace falls within the area that was environmentally assessed and that justification for the proposal is included;
- Reviewing the timeliness, level of controversy, and whether public and interagency involvement has been encouraged or sought by the proponent;
- Analyzing public comments and interagency letters related to airspace issues;
- Ensuring that the concerns raised during public comment have been addressed;
- Determining whether cumulative impacts from a regional perspective are addressed; and
- Ascertaining whether decision documents are reflective of the actions being proposed.

The regional specialist may either coordinate directly with the military proponent or coordinate within the FAA to ATA-300 regarding any questions or comments about the documentation. When ATA-300 has concerns with the proponent's environmental documentation or efforts, it will transmit these concerns back to the regional office, which will then forward these concerns to the proponent for answers or comments. This review process may cause delays in the approval process, with some actions taking much longer than a year to resolve. ATA-300 coordinates environmental actions and works with Headquarters FAA Environmental Law Branch (AGC-620) to determine the ultimate sufficiency of environmental actions taken by the proponent.

MTRs are neither rule making nor non-rule making actions, nor are they categorized as SUA. FAA Order 1050.1D makes reference to SUA but not to MTRs. These routes are considered in FAA Order 7610.4H as Special Military Operations. Chapter 11 of this order prescribes policy, criteria, and administrative and operating procedures pertaining to routes for military training conducted below 10,000 feet Mean Sea Level (MSL) and in excess of 250 knots indicated airspeed. There are two main types of MTRs: Instrument Routes (IRs) and Visual Routes (VRs). IRs allow Instrument Flight Rules (IFRs) separation from other known air traffic and VRs allow flight under Visual Flight Rules (VFRs). IRs and VRs have different actions, procedures, and/or processes for approval.

IR requirements are validated by the appropriate military major command and are coordinated with FAA Air Route Traffic Control Centers for aeronautical concurrence. Once the routes are formally proposed, they are forwarded to the appropriate military major command headquarters for review and environmental certification. Formal proposals are reviewed at the FAA Regional Air Traffic Division. FAA Order 7610.4H states that the regional Air Traffic division shall:

- Coordinate all proposals with other interested FAA divisions;
- Determine when proposals will increase the burden on civil users of the navigable airspace and coordinate those proposals with the appropriate civil aviation user groups; and
- Approve or disapprove the proposal and notify the regional military representative, in writing, within 45 days of receipt of the original proposal.

These requirements are aeronautically focused, with no reference to environmental review. This order also states that the FAA Regional Air Traffic Division is the final approval authority for all IR proposals and revisions. Regional offices have historically viewed this role as approval based upon aeronautical effects. The review of the environmental documentation is not prescribed or assigned to the FAA regional Air Traffic Division by order; however, this review is normally made to assure that the military's environmental process has been addressed.

Final approval authority for the establishment of VRs rests with the appropriate military major command headquarters. FAA Order 7610.4H states that the FAA Regional Air Traffic Division in whose area the route originates shall submit the approved FAA form 7110-4 to the National Flight Data Center, so that it can be issued via the National Flight Data Digest for charting and description in appropriate Flight Publications. As with IRs, the review of the VR's environmental documentation is not prescribed or assigned to the FAA Regional Air Traffic Division; however, this review is normally made to ensure the military's environmental process has been addressed. Also, MTR environmental documents are not normally retained in the FAA regional offices, since the MTR programs rest with the military.

## **Altitude Structure**

| Table C-1. Study Area, Alternative A: No-Action |                               |         |   |       |                    |                               |         |   |            |
|---|-------------------------------|---------|---|-------|--------------------|-------------------------------|---------|---|------------|
| Existing<br>IR-178                              | IR-178 Altitude<br>(Feet AGL) |         | IR-178 Width Either<br>side of Centerline<br>(NM) |       | Existing<br>IR-178 | IR-178 Altitude<br>(Feet AGL) |         | IR-178 Width Either side<br>of Centerline<br>(NM) |            |
| Segment   | Floor                         | Ceiling | Left  | Right | Segment            | Floor                         | Ceiling | Left  | Right      |
| AB  | 1,000                         | 15,000  | 6   | 6     | AKAL               | 200                           | 7,000   | 4   | 4          |
| BC  | 400                           | 15,000  | 6   | 6     | ALAM               | 200                           | 7,000   | 4   | 4          |
| CD  | 200                           | 9,000   | 6   | 6     | AMAN               | 200                           | 7,000   | 4   | 4          |
| DE  | 200                           | 9,000   | 6   | 6     | ANAO               | 200                           | 7,000   | 4   | 4          |
| EF  | 200                           | 9,000   | 6   | 6     | AOAP               | 500                           | 7,000   | 3   | 3          |
| FG  | 200                           | 9,000   | 6   | 6     | APAQ               | 200                           | 7,000   | 3   | 3          |
| GH  | 200                           | 9,000   | 6   | 6     | AQAR               | 600                           | 7,000   | 3   | 3          |
| HI  | 200                           | 8,000   | 5   | 10    | ARAS               | 200                           | 7,000   | 4   | 4          |
| IJ  | 200                           | 8,000   | 10  | 10    | ASAT               | 7,000 MSL                     | 11,000  | 4   | 4          |
| JK  | 200                           | 7,600   | 10  | 10    | AI1XX              | 200                           | 7,000   | 4   | 4          |
| KL  | 200                           | 7,200   | 8   | 10    | AE1BA              | 500                           | 7,000   | 4   | 4          |
| LM  | 600                           | 7,200   | 8   | 10    | BABB               | 200                           | 6,000   | 4   | 4          |
| MN  | 600                           | 6,000   | 4   | 6     | BBBC               | 200                           | 6,000   | 4   | 4          |
| NO  | 200                           | 6,000   | 4   | 6     | BCBD               | 200                           | 6,000   | 4   | 4          |
| OP  | 600                           | 6,000   | 4   | 6     | BDBE               | 200                           | 7,000   | 4   | 4          |
| PQ  | 600                           | 7,000   | 4   | 6     | BEBF               | 200                           | 7,000   | 4   | 4          |
| QR  | 200                           | 7,000   | 4   | 6     | BFBG               | 600                           | 7,000   | 4   | 4          |
| RS  | 200                           | 7,000   | 4   | 6     | BGBH               | Surface                       | 7,000   | R5104/5   | R5104/5    |
| ST  | 200                           | 7,000   | 4   | 3     | BHBI               | 200                           | 7,000   | centerline  | centerline |
| TU  | 500                           | 7,000   | 4   | 3     | BIBJ               | 600                           | 7,000   | centerline  | centerline |
| UV  | 900                           | 7,000   | 4   | 5     | BJBK               | 600                           | 7,000   | centerline  | centerline |
| VW  | 900                           | 7,000   | 4   | 5     | BKBG1              | 200                           | 7,000   | centerline  | centerline |
| WX  | 200                           | 7,000   | 4   | 5     | AIXW               | 200                           | 7,000   | 4   | 4          |
| XY  | 200                           | 7,000   | 4   | 3     | XWXX               | 7,000 MSL                     | 10,000  | 4   | 4          |
| YZ  | 200                           | 7,000   | 4   | 3     | OCA                | 200                           | 6,000   | 4   | 6          |
| ZAA   | 200                           | 7,000   | 3   | 4     | CACB               | 200                           | 5,000   | 4   | 6          |
| AAAB  | 1,200                         | 7,000   | 4   | 4     | CBCC               | 400                           | 5,000   | 6   | 6          |
| ABAC  | 200                           | 7,000   | 4   | 4     | CCCD               | 700                           | 5,000   | 6   | 6          |
| ACAD  | 200                           | 7,000   | 4   | 4     | CDCE               | 700                           | 7,000   | 6   | 6          |
| ADAE  | 200                           | 7,000   | 4   | 4     | CECF               | 200                           | 7,000   | 6   | 4          |
| AEAF  | 500                           | 7,000   | 4   | 4     | CFCG               | 200                           | 7,000   | 6   | 4          |
| AFAG  | 200                           | 7,000   | 4   | 4     | CGCH               | 200                           | 7,000   | 6   | 4          |
| AGAH  | 500                           | 7,000   | 4   | 4     | CHCI               | 7,000 MSL                     | 9,000   | 4   | 4          |
| AHAI  | 200                           | 7,000   | 4   | 4     | CICJ               | 9,000 MSL                     | 11,000  | 4   | 4          |
| AIAJ  | 200                           | 7,000   | 5   | 3     | CJCK               | 11000 MSL                     | 11,000  | 4   | 4          |
| AJAK  | 200                           | 7,000   | 5   | 3     |                    |                               |         |   |            |

| Alte               |                     |                |  |       | udes and W         |  | interment      | , 2  |       |
|--------------------|---------------------|----------------|--|-------|--------------------|--|----------------|--|-------|
| 7 1100             | ernative B:         | IR-178/L       | ancer MO   | 4     | Al                 | lternative C                           | : IR-178/Te    | exon MOA   | L     |
| Proposed<br>IR-178 | Altitude (Feet AGL) |                | Proposed IR-178<br>Width Either Side of<br>Centerline (NM) |       | Proposed<br>IR-178 | Proposed IR-178<br>Altitude (Feet AGL) |                | Proposed IR-178<br>Width Either Side<br>of Centerline (NM) |       |
| Segment            | Floor               | Ceiling        | Left   | Right | Segment            | Floor                                  | Ceiling        | Left   | Right |
| AB                 | 400                 | 15,000         | 6  | 6     | AB                 | 400                                    | 15,000         | 6  | 6     |
| BC                 | 400                 | 15,000         | 6  | 6     | BC                 | 400                                    | 15,000         | 6  | 6     |
| CD                 | 400                 | 9,000          | 6  | 6     | CD                 | 400                                    | 9,000          | 6  | 6     |
| DE                 | 400                 | 9,000          | 6  | 6     | DE                 | 400                                    | 9,000          | 6  | 6     |
| EF                 | 400                 | 9,000          | 6  | 6     | EF                 | 400                                    | 9,000          | 6  | 6     |
| FG                 | 200                 | 9,000          | 5  | 9     | FG                 | 200                                    | 9,000          | 5  | 9     |
| GH                 | 200                 | 9,000          | 5  | 9     | GH                 | 200                                    | 9,000          | 5  | 9     |
| HI                 | 200                 | 8,000          | 5  | 9     | HI                 | 200                                    | 8,000          | 5  | 9     |
| IJ                 | 200                 | 8,000          | 8  | 6     | IJ                 | 200                                    | 8,000          | 8  | 6     |
| JK                 | 200                 | 7,600          | 8  | 6     | JK                 | 200                                    | 7,600          | 8  | 6     |
| KL                 | 200                 | 7,200<br>7,200 | 8  | 6     | KL                 | 200                                    | 7,200          | 8  | 6     |
| LM<br>MN           | 600                 | 6,000          | 8  | 6     | LM<br>MN           | 600                                    | 7,200<br>6,000 | 8  | 6     |
| NO                 | 400                 | 6,000          | 8  | 6     | NO                 | 400                                    | 6,000          | 8  | 8     |
| OP                 | 600                 | 6,000          | 8  | 6     | OP                 | 600                                    | 6,000          | 8  | 6     |
| PQ                 | 600                 | 5,000          | 10   | 4     | PQ                 | 600                                    | 5,000          | 10   | 4     |
| QR                 | 600                 | 5,000          | 10   | 4     | QR                 | 600                                    | 5,000          | 10   | 4     |
| RS                 | 400                 | 5,000          | 10   | 4     | RS                 | 400                                    | 5,000          | 10   | 4     |
| ST                 | 400                 | 7,000          | 4  | 10    | ST                 | 400                                    | 7,000          | 4  | 10    |
| TU                 | 500                 | 7,000          | 4  | 10    | TU                 | 500                                    | 7,000          | 4  | 10    |
| UV                 | 900                 | 7,000          | 4  | 10    | UV                 | 900                                    | 7,000          | 4  | 10    |
| VW                 | 900                 | 7,000          | 4  | 4     | VW                 | 900                                    | 7,000          | 4  | 4     |
| WX                 | 500                 | 9,000          | 4  | 4     | WX                 | 500                                    | 9,000          | 4  | 4     |
| XY                 | 500                 | 11,000         | 4  | 4     | XY                 | 500                                    | 11,000         | 4  | 4     |
| YZ                 | 500                 | 11,000         | 4  | 4     | YZ                 | 500                                    | 11,000         | 4  | 4     |
| ZAA                | 500                 | 7,000          | 4  | 2     | ZAA                | 500                                    | 7,000          | 4  | 2     |
| AAAB               | 1,200               | 7,000          | 4  | 4     | AAAB               | 1,200                                  | 7,000          | 4  | 4     |
| ABAC               | 800                 | 7,000          | 4  | 4     | ABAC               | 800                                    | 7,000          | 4  | 4     |
| ACAD               | 800                 | 7,000          | 4  | 4     | ACAD               | 800                                    | 7,000          | 4  | 4     |
| ADAE               | 800                 | 6,000          | 4  | 4     | ADAE               | 800                                    | 6,000          | 4  | 4     |
| AEAF               | 800                 | 6,000          | 4  | 4     | AEAF               | 800                                    | 6,000          | 4  | 4     |
| AFAG               | 800                 | 6,000          | 4  | 4     | VVA                | 400                                    | 5,000          | 4  | 4     |
| AGAH<br>AHAI       | 2,000               | 10,000         | 4  | 4     | VAVB               | 400                                    | 5,000<br>5,000 | 4  | 4     |
| AHAI               | 2,000               | 10,000         | 4  | 4     | VBR<br>NNA         | 400<br>600                             | 10,000         | 4  | 4     |
| AJAK               | 2,000               | 10,000         | 4  | 4     | ININA              | 000                                    | 10,000         | 4  | 4     |
| VVA                | 400                 | 5,000          | 4  | 4     |                    |  |                |  |       |
| VAVB               | 400                 | 5,000          | 4  | 4     |                    |  |                |  |       |
| VAVB               | 400                 | 5,000          | 4  | 4     |                    |  |                |  |       |
| OOA                | 600                 | 6,000          | 4  | 6     |                    |  |                |  |       |
| OAAE               | 600                 | 6,000          | 4  | 4     |                    |  |                |  |       |

| Table C-3. Alternative D: IR-153/Mt. Dora MOA |       |                          |  |       |  |  |  |  |
|---|-------|--------------------------|--|-------|--|--|--|--|
| Proposed IR-153                               |       | R-153 Altitude<br>t AGL) | Proposed IR-153 Width Either side of Centerline (NM) |       |  |  |  |  |
| Segment                                       | Floor | Ceiling                  | Left   | Right |  |  |  |  |
| AB  | 400   | 12,000                   | 4  | 4     |  |  |  |  |
| BC  | 400   | 12,000                   | 2  | 2     |  |  |  |  |
| CD  | 800   | 15,000                   | 2  | 2     |  |  |  |  |
| DE  | 400   | 15,000                   | 4  | 4     |  |  |  |  |
| EF  | 400   | 15,000                   | 4  | 4     |  |  |  |  |
| FG  | 400   | 15,000                   | 8  | 4     |  |  |  |  |
| GH  | 400   | 12,000                   | 8  | 0     |  |  |  |  |
| HI  | 400   | 12,000                   | 8  | 7     |  |  |  |  |
| IJ  | 400   | 12,000                   | 3  | 7     |  |  |  |  |
| JK  | 400   | 12,000                   | 3  | 7     |  |  |  |  |
| KL  | 200   | 9,000                    | 3  | 7     |  |  |  |  |
| LM  | 200   | 9,000                    | 3  | 7     |  |  |  |  |
| MN  | 200   | 9,000                    | 7  | 7     |  |  |  |  |
| NO  | 200   | 9,000                    | 7  | 7     |  |  |  |  |
| OP  | 200   | 9,000                    | 7  | 7     |  |  |  |  |
| PQ  | 200   | 8,000                    | 3  | 7     |  |  |  |  |
| QR  | 200   | 7,000                    | 7  | 7     |  |  |  |  |
| RS  | 400   | 7,000                    | 2  | 4     |  |  |  |  |
| ST  | 400   | 7,000                    | 2  | 4     |  |  |  |  |
| TU  | 400   | 7,000                    | 2  | 4     |  |  |  |  |
| UV  | 400   | 7,000                    | 11   | 3     |  |  |  |  |
| VW  | 400   | 7,000                    | 11   | 3     |  |  |  |  |
| WX  | 400   | 7,000                    | 8  | 4     |  |  |  |  |
| XY  | 400   | 7,000                    | 8  | 4     |  |  |  |  |
| YZ  | 400   | 7,000                    | 4  | 4     |  |  |  |  |
| ZAA   | 400   | 7,000                    | 4  | 4     |  |  |  |  |
| AAAB  | 400   | 7,000                    | 4  | 4     |  |  |  |  |
| ABAC  | 400   | 10,000                   | 4  | 4     |  |  |  |  |
| ACAD  | 2,000 | 10,000                   | 4  | 4     |  |  |  |  |
| ADAE  | 400   | 10,000                   | 7  | 1     |  |  |  |  |
| AEU   | 400   | 10,000                   | 7  | 1     |  |  |  |  |
| TTA   | 2,000 | 10,000                   | 4  | 2     |  |  |  |  |
| TATB  | 2,000 | 12,000                   | 4  | 2     |  |  |  |  |
| ZZA   | 2,000 | 10,000                   | 4  | 4     |  |  |  |  |
| WWA   | 2,000 | 10,000                   | 4  | 4     |  |  |  |  |
| WAWB  | 2,000 | 12,000                   | 4  | 4     |  |  |  |  |
| JJA   | 2,000 | 12,000                   | 4  | 4     |  |  |  |  |
| JAJB  | 2,000 | 12,000                   | 4  | 4     |  |  |  |  |



## Air Route Traffic Control Center 8000 Louisiana Blvd. NE Albuquerque, NM 87109

DEC 3 1 1998

Alton Chavis
Chief, Environmental Analysis Branch
HQ ACC/CEVP
129 Andrews Street, Suite 102
Langley AFB, VA 23665-2769

Dear Mr. Chavis:

As per the request in your memorandum dated December 17, 1998, Subject: Cooperating Agency Point of Contact (POC) for Realistic Bomber Training Initiative (RBTI) Environmental Impact Statement (EIS), Albuquerque Center will serve as a cooperating agency. We designate David B. Wingert, Support Manager, Airspace and Procedures, ZAB-530, as our POC. Dave can be reached at DSN 245-1530 or (505) 856-4530.

Sincerely,

Joan M. Mallen
Air Traffic Manager

cc: ASW-530