

Beauchamp, Arthur, CIV, WSO-BRAC

From: Taylor, Bob (Thune) [Bob_Taylor@thune.senate.gov]
Sent: Thursday, July 28, 2005 3:40 PM
To: Beauchamp, Arthur, CIV, WSO-BRAC
CC: Small, Kenneth, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Art,

Per our conversation before our bosses met, thank you again for catching this and having it corrected. We greatly appreciate the extensive work you are putting into this.

We will also probably be sending the commission a letter re the AF response to the RBTI litigation questions you submitted. We found their response rather amazing. I was actually quite surprised with the AF's explicit admission that they simply did not consider the litigation issue in their deliberation because they did not know how to compute it.

To us, that is a huge admission - though not much of an excuse. But if that is not a substantial deviation, I'm not sure what is. So, a rather significant factor relating to the limitations and future availability of this range were basically ignored in the scoring. That's our read.

They also admitted installations were only scored on "relative distances to range entry/exit points". That's the only criteria used? So, under that simplistic methodology, even a MOA without any current FAA approval to operate in, could outscore a different range simply because it was closer to its installation. That's not a very compelling basis upon which to compare two bases.

Also is the AF saying here that the altitude limitations do not really impact on their training. How does that square with the sworn statements by Gen. DeCuir and LTC Barrett? (If so, should we refer this matter to DOJ, or will you?).

But, Art, what really floors me is that the AF dismisses the court imposed limitations as basically being "voluntary" on their part. That's something akin to an inmate in prison suggesting he is there "voluntarily" because he plea bargained a guilty plea and his sentence. The district court did not impose restrictions because the AF volunteered modified flying altitudes. It imposed restrictions because the higher court told it to. It happened to accept the same altitudes. It does not mean the court cannot, or will not impose harsher standards at a later date - especially after the SEIS is complete.

The AF's overall response to the effect of this litigation, court order and possibility of future court proceedings, in my opinion, demonstrates their total lack of understanding and appreciation of where litigation can lead. For example, in 2003, the AF won their district court cases and things may have indeed looked promising for finally getting approval for their ROD and EIS on the RBTI. However, the rancher groups filed an appeal with the 5th Circuit and in 2005 the lower court rulings are reversed, and the ROD and FAA approval are now effectively nullified. The AF is essentially back at first base, with no RBTI approval - exactly where they were in 1997 when they first started the administrative EIS process. They face maybe two more years to run a supplemental EIS through the wickets, and these plaintiffs will be there, challenging the AF assertions every step of the way. The AF can attempt to make small the significance of this problem if they like, even in the face of the FACT that this litigation has already tied up approval of the RBTI for over 5 years. But that fact, and the apparent resolve of these plaintiffs, suggests instead that the Air Force has a pit bull permanently attached to its ass.

Thanks again, for you hard work.
Bob

-----Original Message-----

DCN: 11865

From: Beauchamp, Arthur, CIV, WSO-BRAC
[mailto:Arthur.Beauchamp@wso.whs.mil]
Sent: Thursday, July 28, 2005 11:45 AM
To: Taylor, Bob (Thune); Beauchamp, Arthur, CIV, WSO-BRAC
Cc: Small, Kenneth, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Bob,

Regarding the sq ft...your right. The actual number according to Ellsworth is 804,000 sq ft shortage. That's the shortage we asked the AF to provide feedback on. We went back with a clarification on this (it should be posted). Not sure why the figure is higher, but will look into.

Art

-----Original Message-----

From: Taylor, Bob (Thune) [mailto:Bob_Taylor@thune.senate.gov]
Sent: Tuesday, July 26, 2005 4:58 PM
To: Beauchamp, Arthur, CIV, WSO-BRAC
Cc: Small, Kenneth, CIV, WSO-BRAC
Subject: RE: Air Force ROD

You are welcome. If you seeking any other basic data on any issue (doesn't have to be related to Ellsworth), and you are not getting a rapid response from DoD, let me know. We will be happy to try and get it through the armed services committee. They tend to respond pretty quick to SASC member requests for data.

Also Art, I noticed on the attached clearinghouse request where you asked about the square footage discrepancy noted at Ellsworth. However, I believe the number you used is incorrect - missing a "0." I believe it is an 800,000 square ft discrepancy, not 80,000. We thought it did not look right, so we confirmed it again today with the base engineer.

Additionally, the figure of \$69 million milcon needed to house all B-1s at Ellsworth is a higher figure than the base engineer provided you earlier, of only \$49.5 M. (Though \$69 M is still a big difference from the \$124 M needed at Dyess). I was curious as to how and why this figure changed.

-----Original Message-----

From: Beauchamp, Arthur, CIV, WSO-BRAC
[mailto:Arthur.Beauchamp@wso.whs.mil]
Sent: Monday, July 25, 2005 9:40 AM
To: Taylor, Bob (Thune)
Subject: RE: Air Force ROD

Bob, thanks for the data. Art

-----Original Message-----

From: Small, Kenneth, CIV, WSO-BRAC
Sent: Friday, July 22, 2005 3:02 PM
To: 'Taylor, Bob (Thune)'
Cc: Beauchamp, Arthur, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Bob

I appreciate the data. Art is out of pocket until tomorrow AM. I expect that he will catch up over the weekend. I will leave it to Art to give you a read on the level of information you are sending along.

n

From: Taylor, Bob (Thune) [mailto:Bob_Taylor@thune.senate.gov]

Sent: ~~DCN: 11865~~ Friday, July 22, 2005 11:32 AM
To: Small, Kenneth, CIV, WSO-BRAC
Cc: Beauchamp, Arthur, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Ken,

You are very welcome. Please tell me if I'm sending you stuff you don't need. Here are some recent AF data tables that may also be helpful.

Also, did you receive the data you requested from Ellsworth AFB through the ACC & clearinghouse pertaining to ability to handle all B-1s and associated long-term milcon costs i.e. saying Ellsworth can receive them now and needs only \$49.5 million in long-term milcon to house 67 B-1s, as compared to \$123 million needed at Dyess?

Bob

From: Small, Kenneth, CIV, WSO-BRAC [mailto:Kenneth.Small@wso.whs.mil]
Sent: Friday, July 22, 2005 9:37 AM
To: Taylor, Bob (Thune); Small, Kenneth, CIV, WSO-BRAC
Cc: Beauchamp, Arthur, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Bob

Thanks. We may need this before we are through. Having the AFH in hand saves us the time to perform the search to find the reference.

Again, the data and continued flow of information is appreciated.

Ken Small

Air Force Team Leader

BRAC Commission R&A

From: Taylor, Bob (Thune) [mailto:Bob_Taylor@thune.senate.gov]
Sent: Friday, July 22, 2005 9:31 AM
To: Small, Kenneth, CIV, WSO-BRAC
Cc: Beauchamp, Arthur, CIV, WSO-BRAC
Subject: RE: Air Force ROD

DCN: 11865

You probably already have this, or a more recent version. It might be helpful to you.

Air Force Handbook (AFH) 32-1084, Facility Requirements, provides facility space allowance guidance by category code. These criteria are used in assigning occupancy of existing facilities and in programming new facilities. This handbook applies to all Air Force commanders and managers that plan, program, review, certify, and approve Air Force facilities.

a. Ramp space required per MDS (Mission Design Series or aircraft type)

:
Chapter 2, Section D

b. Logistics/Maintenance space (Supply warehousing, transportation facilities, hangars, maintenance shops, etc) allocations per MDS

Chapters 3, 5 - 7, 9, 10, and 12

--- Petroleum Dispensing and Operating Facilities: Chapter 3

--- Hangars: Chapters 5 and 7; Training: Chapter 6

--- Transportation and Maintenance Facilities: Chapter 7

--- Explosives Facilities: Chapter 9; Supply Warehousing: Chapter 10

--- Administrative Facilities: Chapter 12

From: Small, Kenneth, CIV, WSO-BRAC [mailto:Kenneth.Small@wso.whs.mil]
Sent: Thursday, July 21, 2005 5:56 PM
To: Taylor, Bob (Thune)
Cc: Beauchamp, Arthur, CIV, WSO-BRAC
Subject: RE: Air Force ROD

Got it. Thanks for the research. We shall see where these go.

Ken Small

From: Taylor, Bob (Thune) [mailto:Bob_Taylor@thune.senate.gov]
Sent: Tuesday, July 19, 2005 12:48 PM
To: kenneth.small@wso.whs.mil; Arthur.Beauchamp@wso.whs.mil
Subject: Air Force ROD

Ken/Art;

When we visited you last Tuesday and dropped off the packet pertaining to the RBTI litigation, I failed to include a copy of the Air Force Record of Decision, prepared with their initial EIS. It is an important document because it goes to the issue of what the AF envisioned as the RBTI's ideal range capability and clearly states their concept and intended use of the Lancer MOA and IR-178, once the RBTI and EIS were approved;

* On page 1, it states without equivocation that the MTR (IR-178) would permit flights down to 300 feet above ground level in some segments..

It also states that the MOA (Lancer) would have a floor of 12,000 feet AGL.

Of course, the federal court now imposes a 500 feet AGL floor in the MTR and a 12,000 feet MSL floor in the Lancer MOA. Also of interest, on page 7, note that in response to community concerns raised in the administrative approval process, the Air Force placed self-imposed limitations on the number of sortie-operations thus, reducing the number from 2,600 per year down to 1,560 per year. (The sortie issue will obviously be a fertile ground for additional litigation if the Dyess B-1 inventory and training requirements should double.) On the same page, the Air Force seems to indicate that 200 feet AGL was the proposed minimum altitude in the MTR IR-178, but they raised it to 300 in response to concerns raised by the public.

Art, I saw your questions submitted to the Air Force posted on the BRAC website. I immediately thought of several related issues not asked you may want to ask as a follow-up:

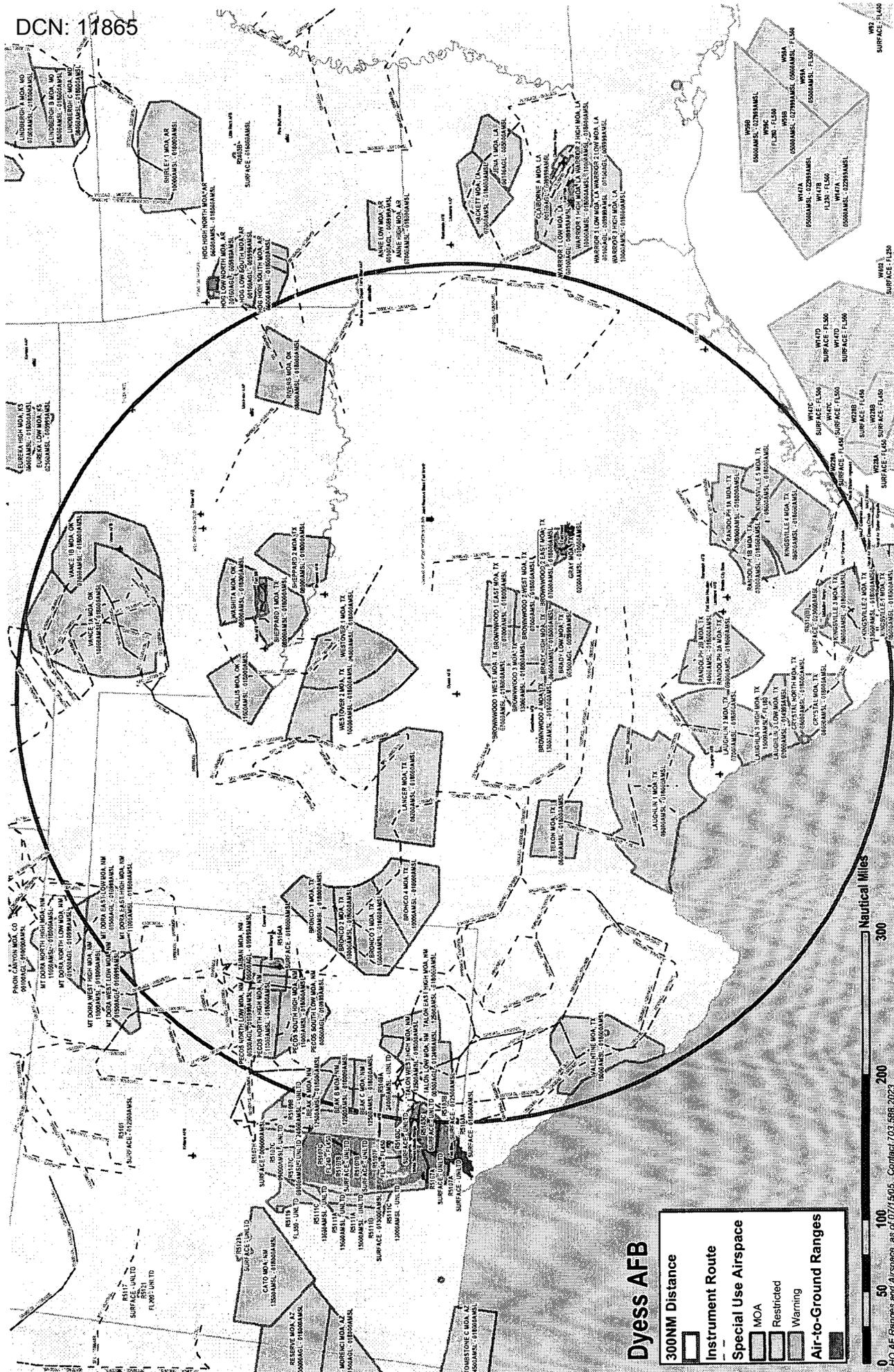
What number of training sorties does the AF estimate as a requirement for RBTI if the entire B-1 fleet is consolidated at Dyess?

Assuming the consolidation of all 67 B-1s at Dyess, and if the court should limit the number of sorties flown per year into the RBTI, e.g. even at its present level, where will the other Dyess B-1s go for alternative training? What additional costs will result from flying to these alternative training sites, per year?

If the AF is permanently restricted to flying at 12,000 feet MSL in the Lancer MOA, how will this impact B-1 training?

In light of both MG DeCuir's sworn affidavit (limitations do not fully meet realistic training requirements) and LTC Garrett's sworn affidavit (no substitute ranges within a reasonable flying distance of our bases in Texas) that were submitted to the court in January 2005 and given under penalty of perjury (and no doubt fully staffed within ACC before being submitted), I look forward with great interest as to how the AF will answer your questions on the impact of the court's restrictions.

Bob



Dyess AFB

	300NM Distance
	Instrument Route
	Special Use Airspace
	MOA
	Restricted
	Warning
	Air-to-Ground Ranges

0 50 100 200 300 Nautical Miles
 MOA Ranges and Airspace, as of 07/15/05. Contact 703-588-2023

Ellsworth AFB

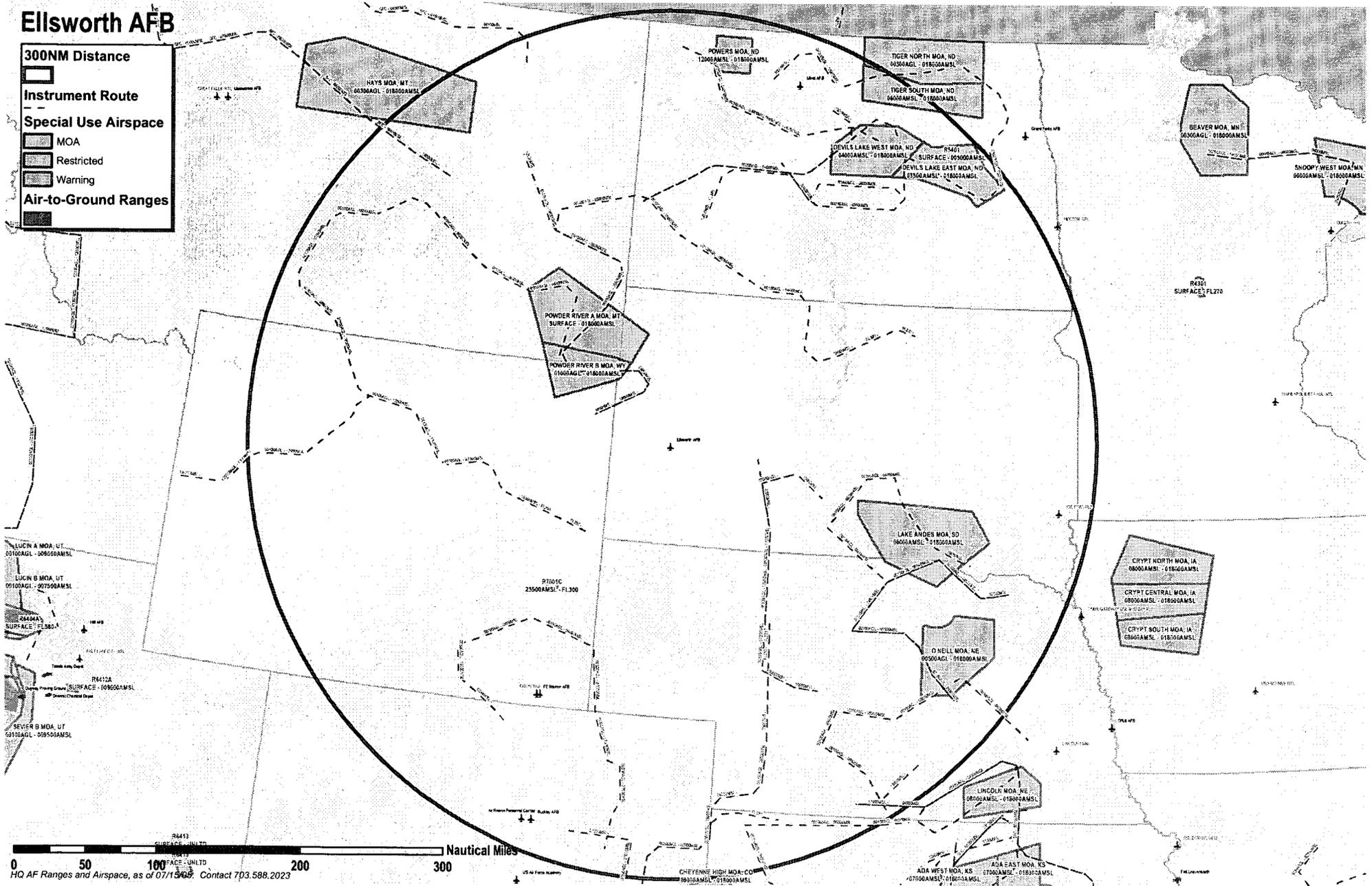
300NM Distance

Instrument Route

Special Use Airspace

- MOA
- Restricted
- Warning

Air-to-Ground Ranges



0 50 100 200 300 Nautical Miles

HQ AF Ranges and Airspace, as of 07/15/09. Contact 703.588.2023

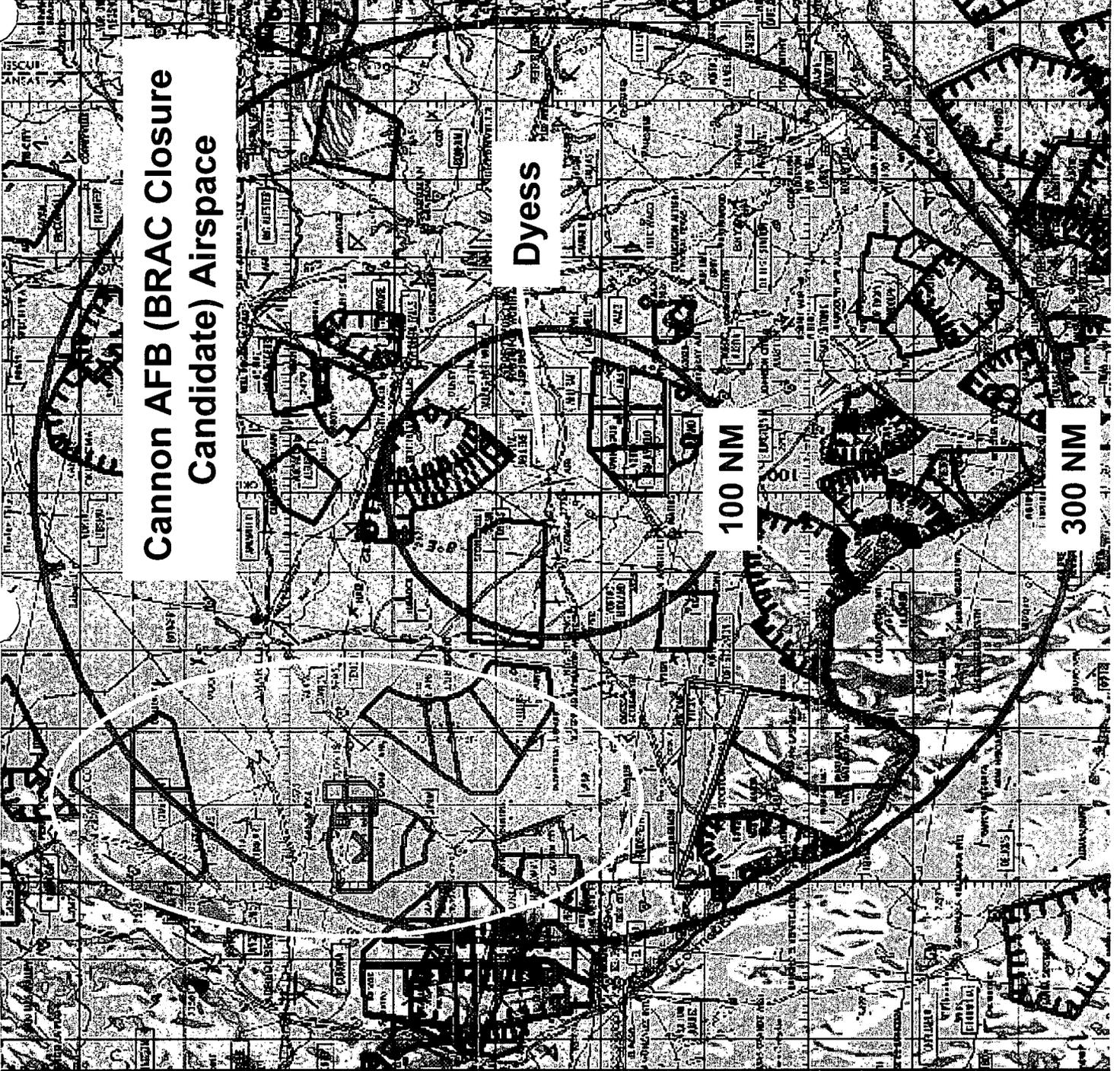


Cannon AFB (BRAC Closure Candidate) Airspace

Dyess

100 NM

300 NM





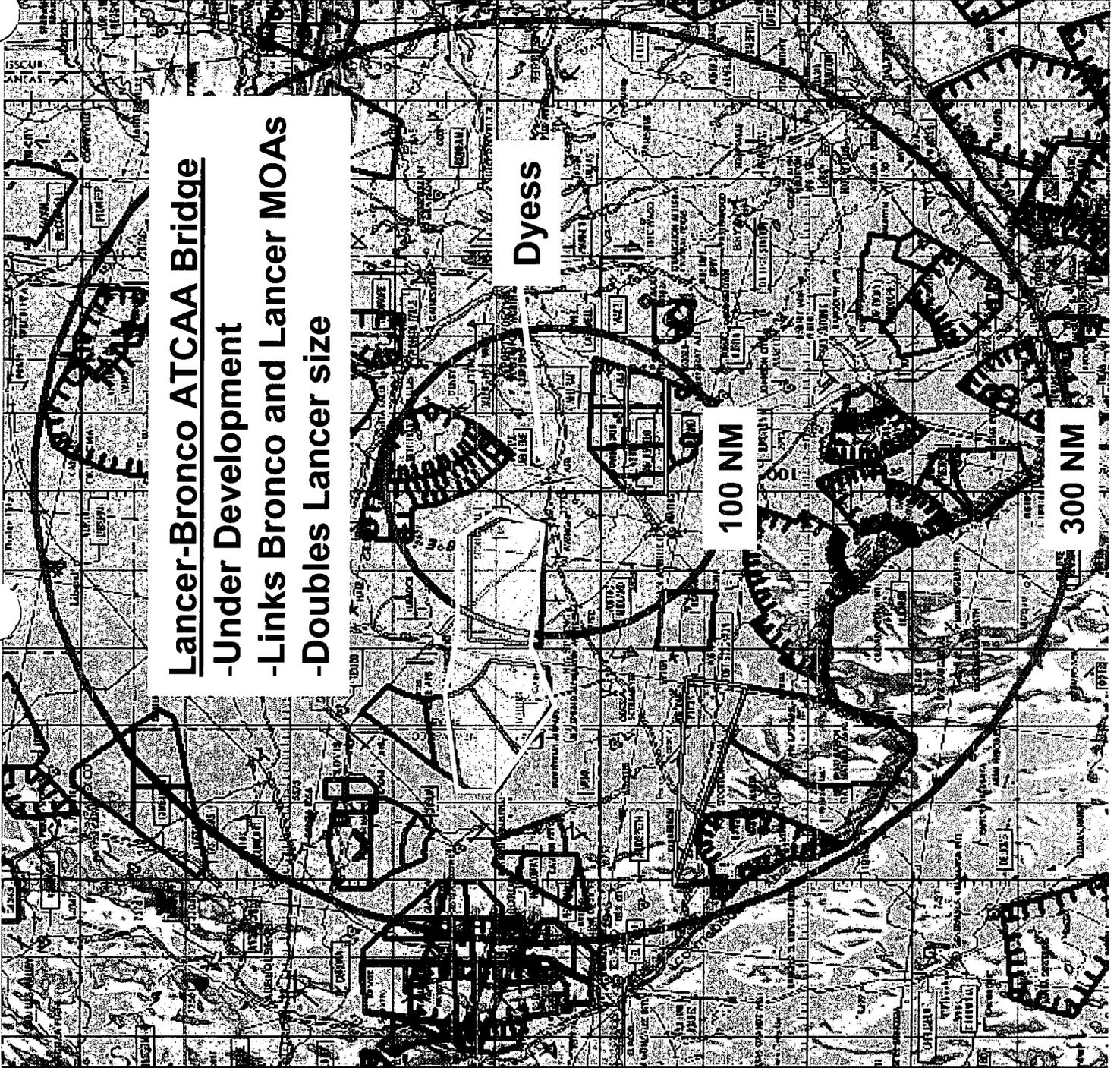
Lancer-Bronco ATCAA Bridge

- Under Development
- Links Bronco and Lancer MOAs
- Doubles Lancer size

Dyess

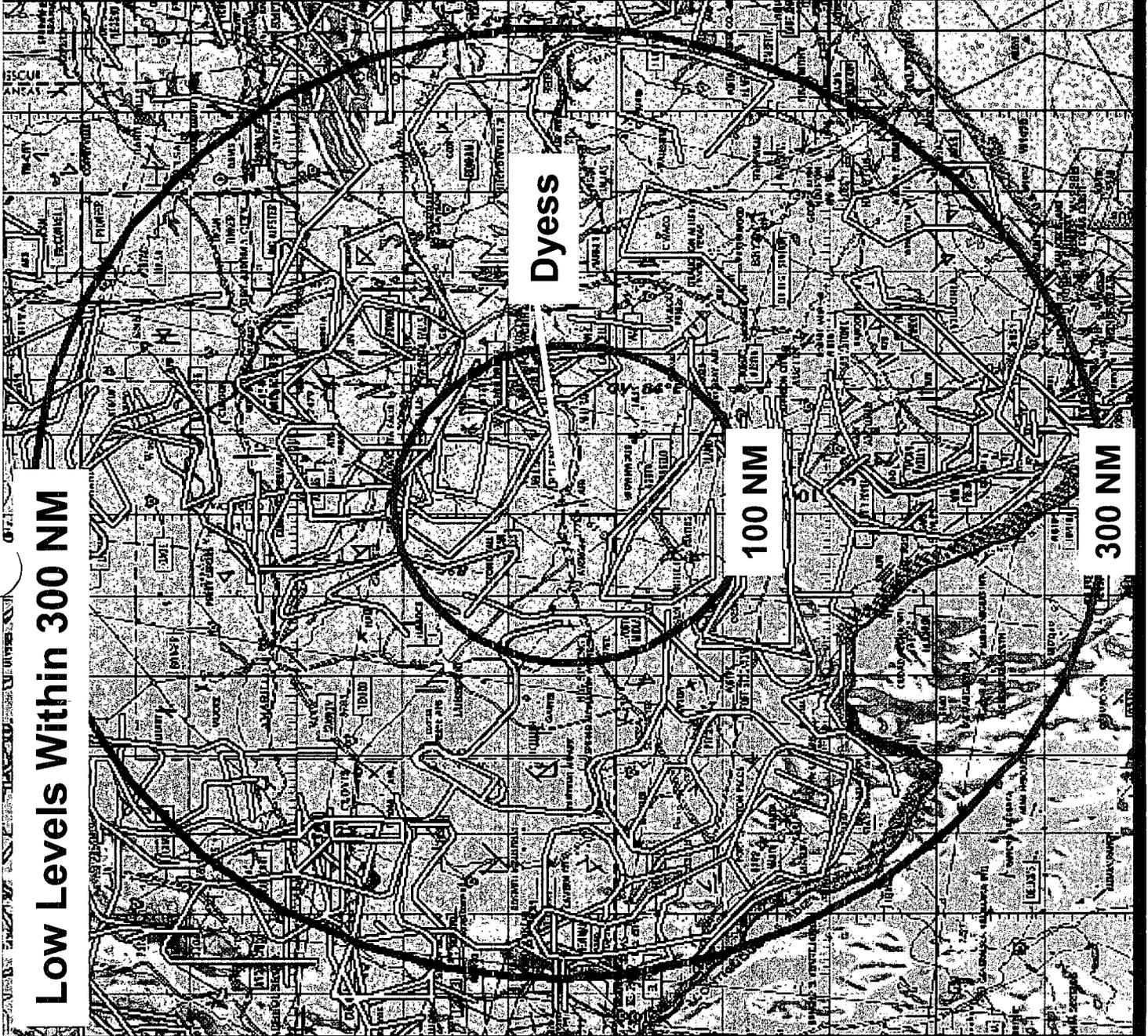
100 NM

300 NM





Low Levels Within 300 NM



Dyess

100 NM

300 NM

Dyess-Owned Low Levels

IR 500/501

300 NM

IR 177

100 NM

Dyess

IR 126/226

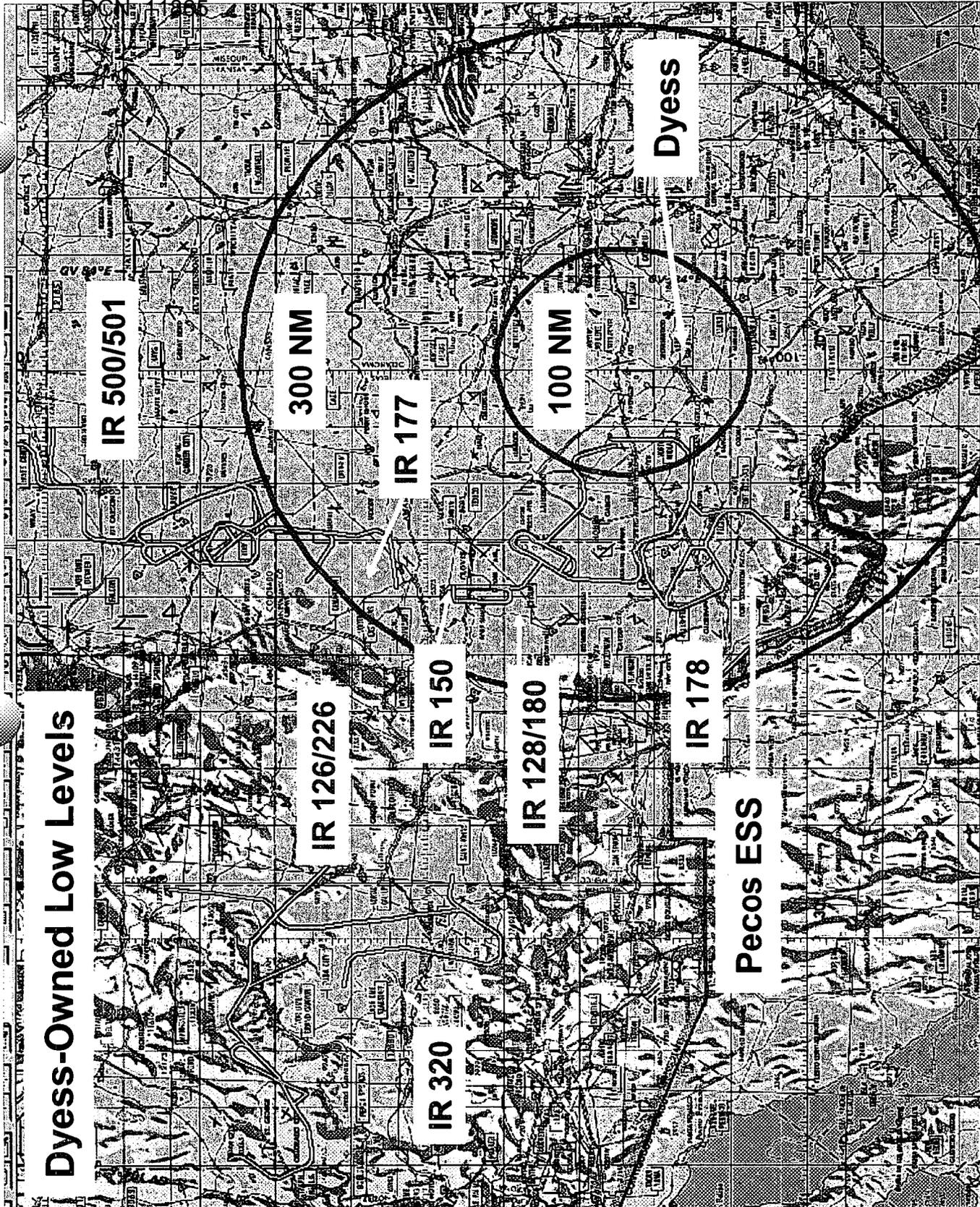
IR 150

IR 128/180

IR 178

Pecos ESS

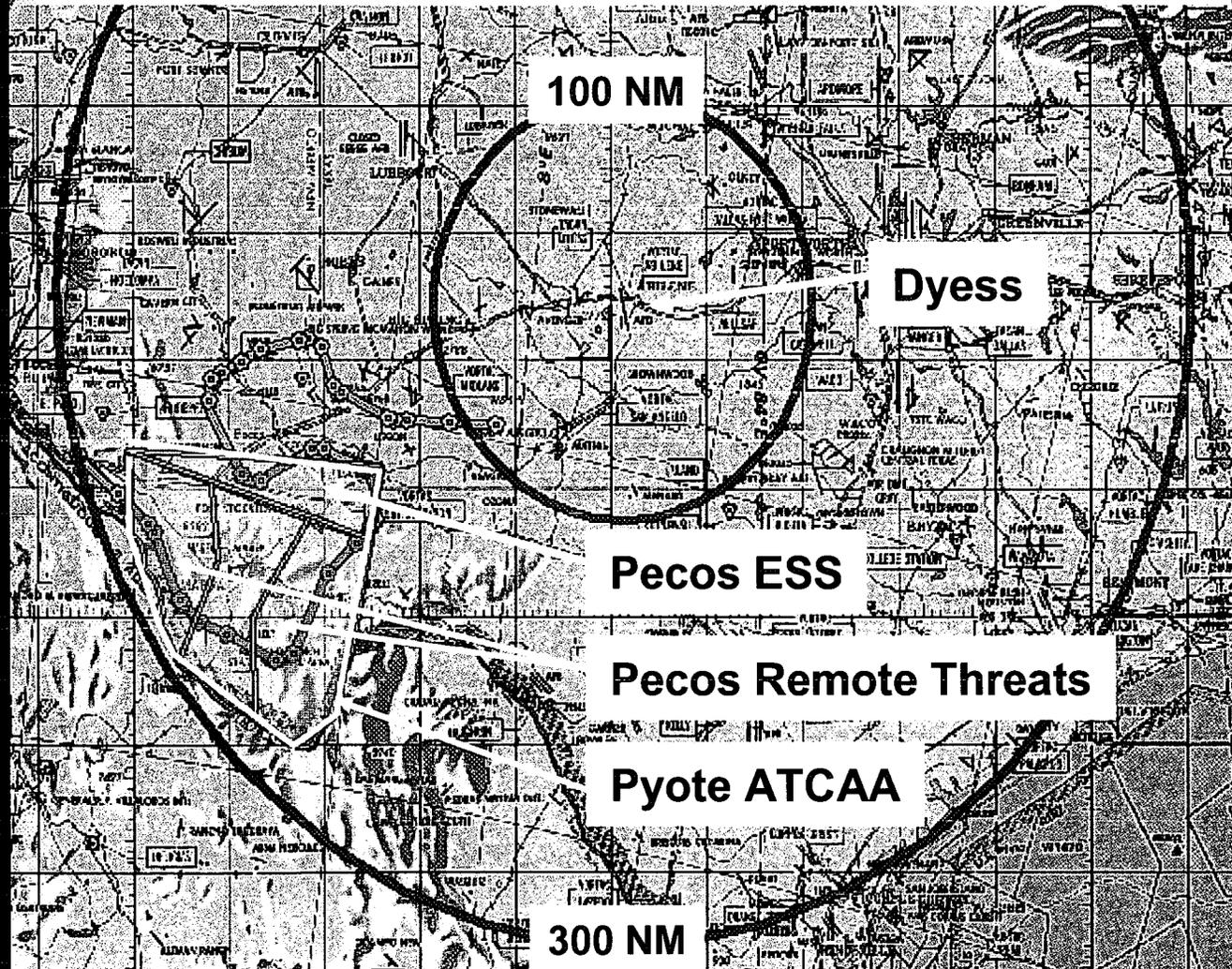
IR 320





L/L and Airspace Enhancements

- IR 193 (IR 178 reversed) allows “pop” into Pyote
- Pecos ESS spread out to simulate defense in depth
- Provides three Lancer-sized areas with ESS coverage



Air to Ground Ranges

UTTR

Nellis

Smokey Hill

300 NM

Melrose

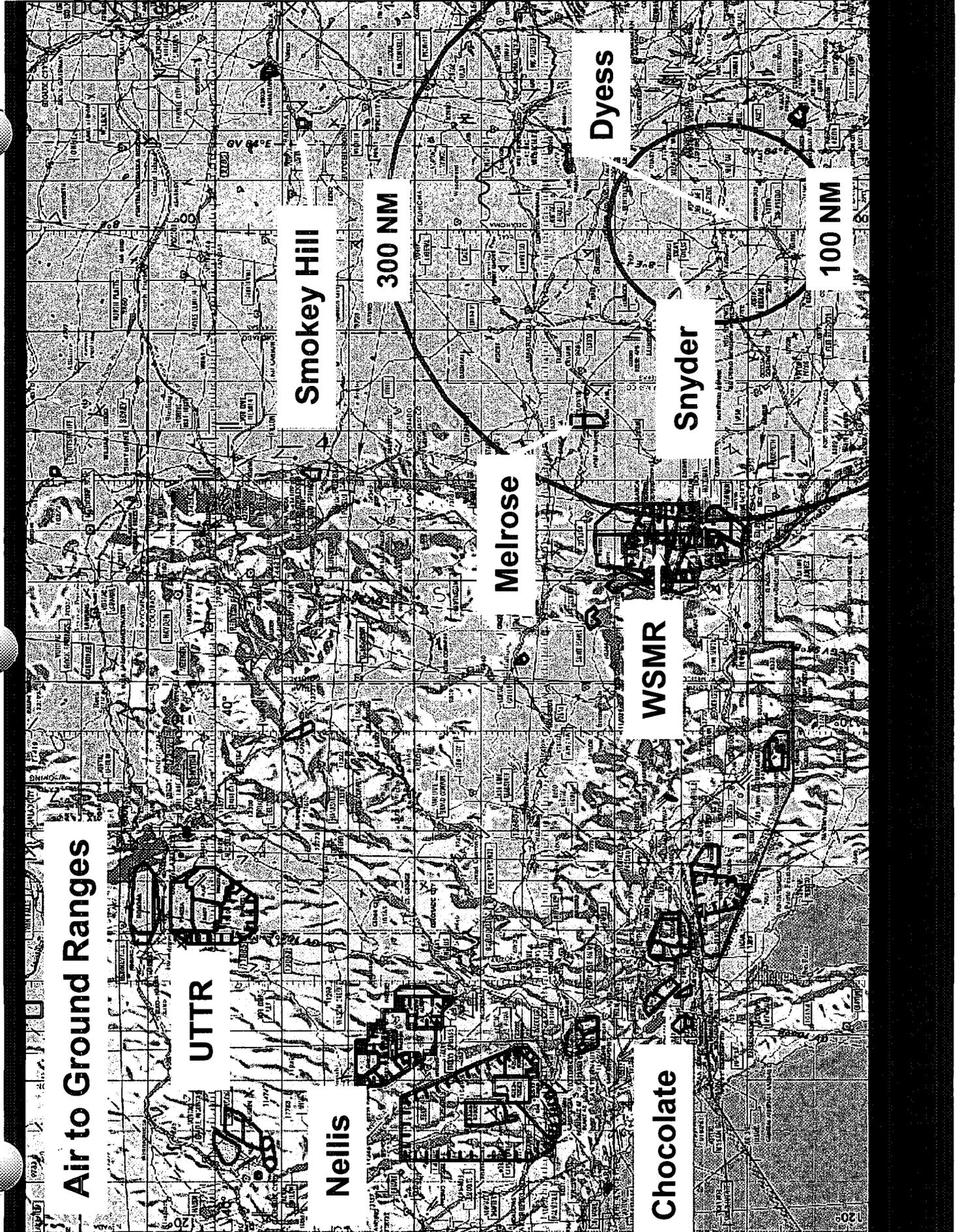
WSMR

Chocolate

Dyess

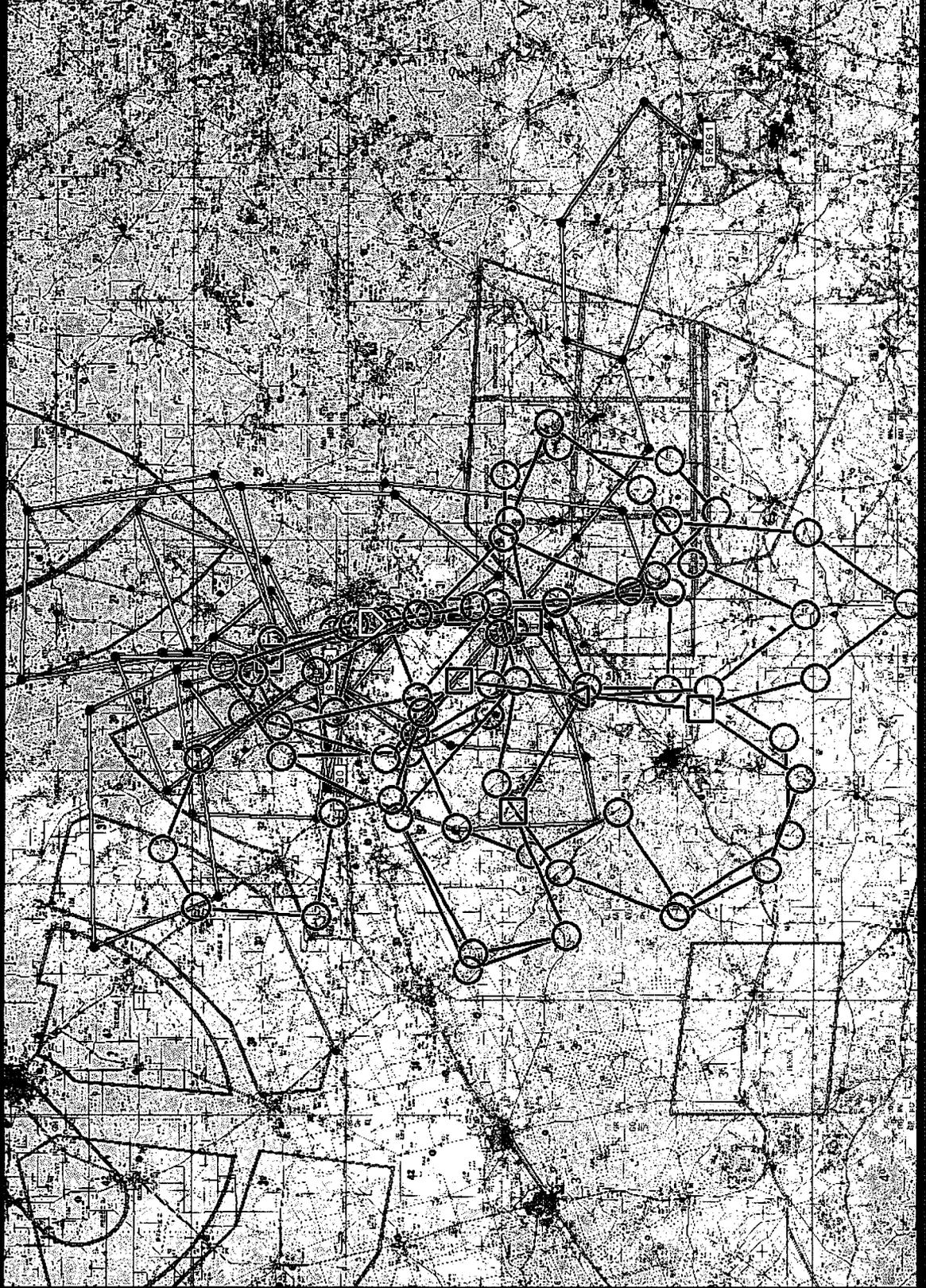
Snyder

100 NM

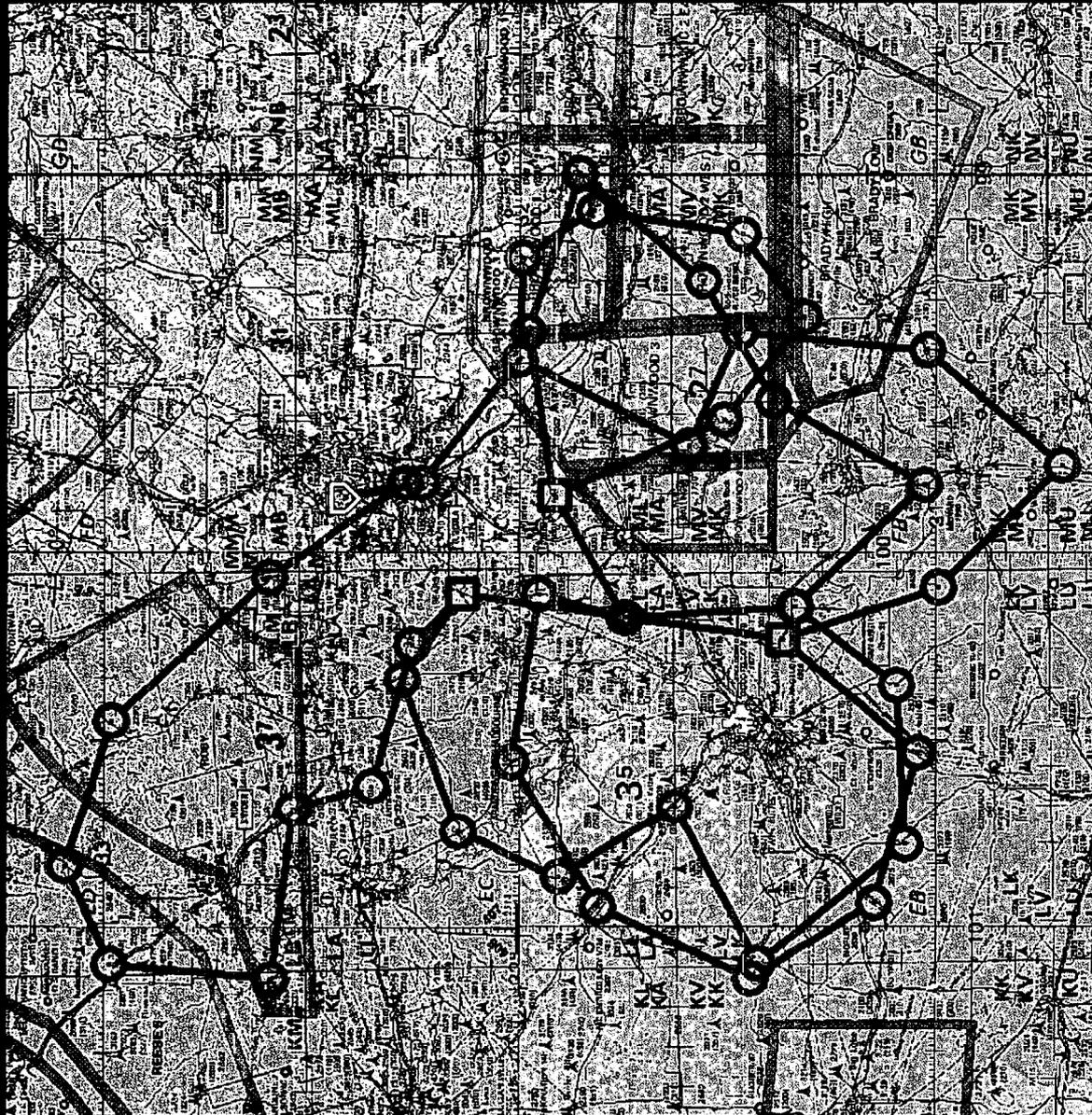




Local C-130 Training Routes

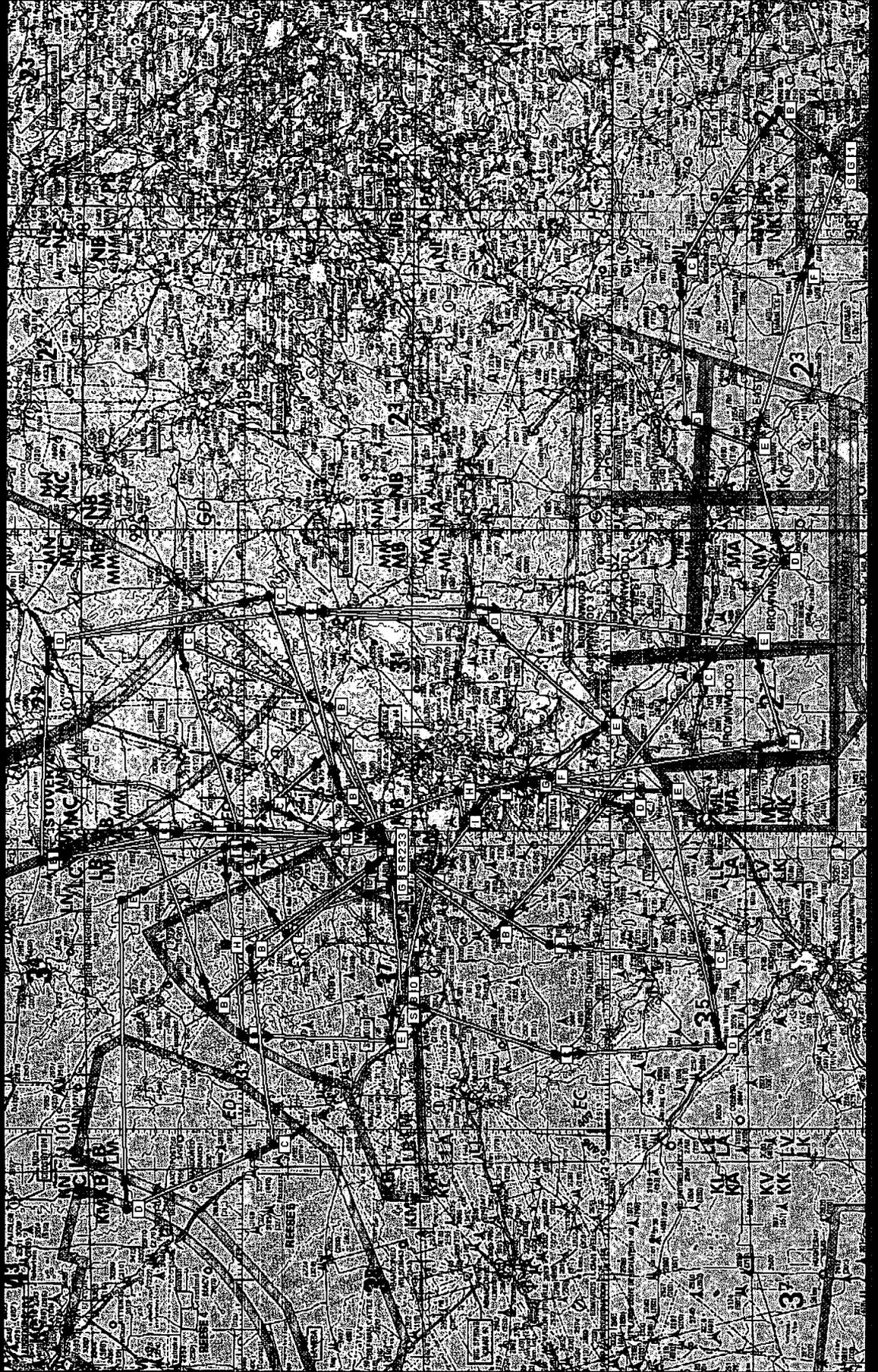


317 AG LR Routes





317 AG SR Routes





317 AG LZ's and DZ's



Military Operations Areas (MOA's, i.e. Lancer)

- a.** MOAs consist of airspace of defined vertical and lateral limits established for the purpose of separating certain military training activities from IFR traffic. Whenever a MOA is being used, nonparticipating IFR traffic may be cleared through a MOA if IFR separation can be provided by ATC. Otherwise, ATC will reroute or restrict nonparticipating IFR traffic.
- b.** Examples of activities conducted in MOAs include, but are not limited to: air combat tactics, air intercepts, aerobatics, formation training, and low-altitude tactics. Military pilots flying in an active MOA are exempted from the provisions of 14 CFR Section 91.303(c) and (d) which prohibits aerobatic flight within Class D and Class E surface areas, and within Federal airways. Additionally, the Department of Defense has been issued an authorization to operate aircraft at indicated airspeeds in excess of 250 knots below 10,000 feet MSL within active MOAs.
- c.** Pilots operating under VFR should exercise extreme caution while flying within a MOA when military activity is being conducted. The activity status (active/inactive) of MOAs may change frequently. Therefore, pilots should contact any FSS within 100 miles of the area to obtain accurate real-time information concerning the MOA hours of operation. Prior to entering an active MOA, pilots should contact the controlling agency for traffic advisories.
- d.** MOAs are depicted on sectional, VFR Terminal Area, and Enroute Low Altitude charts.

Military Training Routes (i.e. IR-178)

- a.** National security depends largely on the deterrent effect of our airborne military forces. To be proficient, the military services must train in a wide range of airborne tactics. One phase of this training involves "low level" combat tactics. The required maneuvers and high speeds are such that they may occasionally make the see-and-avoid aspect of VFR flight more difficult without increased vigilance in areas containing such operations. In an effort to ensure the greatest practical level of safety for all flight operations, the Military Training Route (MTR) program was conceived.
- b.** The MTR program is a joint venture by the FAA and the Department of Defense (DOD). MTRs are mutually developed for use by the military for the purpose of conducting low-altitude, high-speed training. The routes above 1,500 feet AGL are developed to be flown, to the maximum extent possible, under IFR. The routes at 1,500 feet AGL and below are generally developed to be flown under VFR.
- c.** Generally, MTRs are established below 10,000 feet MSL for operations at speeds in excess of 250 knots. However, route segments may be defined at higher altitudes for

purposes of route continuity. For example, route segments may be defined for descent, climbout, and mountainous terrain. There are IFR and VFR routes as follows:

- 1. IFR Military Training Routes-(IR).** Operations on these routes are conducted in accordance with IFR regardless of weather conditions.
- 2. VFR Military Training Routes-(VR).** Operations on these routes are conducted in accordance with VFR except flight visibility shall be 5 miles or more; and flights shall not be conducted below a ceiling of less than 3,000 feet AGL.

d. Military training routes will be identified and charted as follows:

1. Route identification.

(a) MTRs with no segment above 1,500 feet AGL shall be identified by four number characters; e.g., IR1206, VR1207.

(b) MTRs that include one or more segments above 1,500 feet AGL shall be identified by three number characters; e.g., IR206, VR207.

(c) Alternate IR/VR routes or route segments are identified by using the basic/principal route designation followed by a letter suffix, e.g., IR008A, VR1007B, etc.

2. Route charting.

(a) **IFR Low Altitude En Route Chart.** This chart will depict all IR routes and all VR routes that accommodate operations above 1,500 feet AGL.

(b) **VFR Sectional Charts.** These charts will depict military training activities such as IR, VR, MOA, Restricted Area, Warning Area, and Alert Area information.

(c) **Area Planning (AP/1B) Chart (DOD Flight Information Publication-FLIP).** This chart is published by the DOD primarily for military users and contains detailed information on both IR and VR routes.

REFERENCE-

*AIM. National Imagery and Mapping Agency (NIMA), Paragraph 9-1-5,
Subparagraph a.*

e. The FLIP contains charts and narrative descriptions of these routes. This publication is available to the general public by single copy or annual subscription from:

NACO Distribution Division, AVN-530
Federal Aviation Administration
6501 Lafayette Avenue
Riverdale, MD 20737-1199

Toll free phone: 1-800-638-8972
Commercial: 301-436-8301

This DOD FLIP is available for pilot briefings at FSS and many airports.

f. Nonparticipating aircraft are not prohibited from flying within an MTR; however, extreme vigilance should be exercised when conducting flight through or near these routes. Pilots should contact FSSs within 100 NM of a particular MTR to obtain current information or route usage in their vicinity. Information available includes times of scheduled activity, altitudes in use on each route segment, and actual route width. Route width varies for each MTR and can extend several miles on either side of the charted MTR centerline. Route width information for IR and VR MTRs is also available in the FLIP AP/1B along with additional MTR (slow routes/air refueling routes) information. When requesting MTR information, pilots should give the FSS their position, route of flight, and destination in order to reduce frequency congestion and permit the FSS specialist to identify the MTR which could be a factor.

Appendix 18.

SPEED AUTHORIZATION GRANTED TO DOD

May 18, 1978

Mr. Paul H. Riley
Alternate DOD Representative to FAA
Deputy Assistant Secretary of Defense
The Pentagon
Washington, D.C. 20330

Dear Mr. Riley:

Section 91.70(a) of the Federal Aviation Regulations (FAR) provides that, unless otherwise authorized by the Administrator of the Federal Aviation Administration (FAA), no person may operate an aircraft below 10,000 feet mean sea level (MSL) at an indicated airspeed of more than 250 knots.

The regulation grants an exception to aircraft having flight characteristics which preclude safe operation at speeds below 250 knots by providing that if the minimum safe airspeed for any particular operation is greater than the maximum speed prescribed, the aircraft may be operated at that minimum safe airspeed.

In recognition of the fact that certain military operational and training requirements cannot be met under the terms of the regulation, the Department of the Navy and the Department of the Air Force have been authorized since November, 1967, to operate aircraft below 10,000 feet MSL at an indicated airspeed of more than 250 knots to the extent such high-speed operations were necessary in the accomplishment of air combat maneuvers and tactics, low-level navigation, low-level reconnaissance and intercept, weapons delivery tactics, flight test and evaluation, undergraduate pilot training, actual or simulated alert missions, and other flight operations of a similar nature.

Our authorization of November 1967, to each service, was rescinded and reissued to the Department of Defense (DOD) on June 8, 1976. The June 1976 authorization was rescinded and reissued on February 25, 1977. The February 1977 authorization was rescinded and reissued on December 19, 1977. Provisions are now needed to accommodate military requirements while airspace actions are pending. Therefore, effective immediately, the December 19, 1977, authorization is rescinded and reissued as follows:

Operations below 10,000 feet MSL at an indicated airspeed in excess of 250 knots, in noncompliance with FAR 91.70(a), are authorized for military aircraft, including Reserve and Air National Guard components, only under the following conditions:

- a. Within restricted areas.
- b. Within military operations areas.
- c. When operating within large scale exercises or on short term special missions. Coordination will be effected to insure awareness on the part of the nonparticipating flying public.
- d. When operating on DOD/FAA mutually developed and published IFR routes. The military necessity for each route and for the extent of use of each route is to be reviewed and approved by the appropriate military headquarters.
- e. When operating on DOD developed and published VFR routes. Such routes shall be established for specific missions and used only by designated units when the provisions of a. through d. above will not accommodate the required national defense mission as determined by appropriate military headquarters. Routes are to be developed and published in accordance with DOD/FAA mutually developed criteria.
- f. In the event provisions of a. through c. cannot be complied with, the appropriate military headquarters may authorize flight operations within defined airspace in noncompliance with FAR 91.70 as it considers necessary to accomplish the national defense mission. This provision is intended to accommodate speed requirements on an interim basis within a defined area for which an area/route proposal has been coordinated and concurred in by appropriate military/FAA regional authority but not yet published.

g. If the airspeed required or recommended in the airplane flight manual to maintain safe maneuverability is greater than the maximum speed described in FAR 91.70, the aircraft may be operated at that speed. Where the required or recommended speed is given as range, the lower part of the speed range should be used consistent with good operating practice. This provision is primarily to accommodate climbs/descents and terminal area operations.

This authorization is effective immediately. Operations along VFR low altitude training routes (TR), which were established in accordance with FAA Handbook 7610.4C, Part 10, and in existence at the time of this authorization may be continued until January 1, 1979.

Sincerely,

(s) Raymond G. Belanger
RAYMOND G. BELANGER
Director, Air Traffic Service

Section 4. IR ROUTE DEFINITION

11-4-1. ROUTE WIDTH

Widths of route segments shall be defined by the military. In all cases, the route width shall be of sufficient size to contain all planned activities. For cartographical purposes, the standard route width shall be 5 NM.

11-4-2. ROUTE ALIGNMENT

Route alignment criteria shall be as follows:

a. All IRs to be flown at/below 1,500 feet AGL should be designed to permit aircraft flying the route to avoid charted, uncontrolled airports by 3 NM or 1,500 feet. Where it is impractical to comply with this criteria, procedures shall be established by the scheduling/originating activity to minimize conflict with airport traffic; i.e., identify volume and type traffic, highlight need for increased vigilance commensurate with situation, maintain liaison with airport owner/operator, include appropriate cautionary note in route description: "Avoid flight within 1,500 feet or 3 NM of airport when practicable," etc.

b. Subsequent charting of airports within 3 NM of an MTR may require route realignment to conform to the criteria established in subparagraph a.

c. Routes should be aligned to avoid Class D and Class B airspace.

Associated with Airport traffic Areas - SEE CHART on M-I WALL

d. During development of routes, consideration should be given to potential conflict with published and unpublished instrument procedures/routes.

e. Routes should be aligned so that disturbance to persons or property on the ground is minimized.

ART - THIS IS YOUR TROUBLE AREA - IT'S SUBJECTIVE i.e. arguable in court

11-4-3. ALTITUDES

a. Altitudes shall be established for each route segment. Routes shall contain the minimum number of altitudes commensurate with mission requirements and may be specified singly, in blocks, or a range from which ATC assignment may be made. Minimum altitudes for each route segment shall be established by the military. Altitude information shall be reflected on FAA Form 7110-4 as follows:

1. IRs should depict the highest altitude in MSL terms. The lowest altitude may be depicted in either MSL or AGL terms.

2. An altitude block shall be depicted as the lowest altitude followed by a "B" followed by the highest altitude.

EXAMPLE-
5 AGL B 20 MSL
40 MSL B 60 MSL

This is an example of how 500' AGL would LOOK - IT MEANS A "BLOCK" ALTITUDE OF 500' AGL TO 2,000 FT. MSL

SFC B 50 MSL

3. A range of altitudes from which ATC may assign a single altitude shall be depicted as the lowest altitude, in MSL terms, followed by a "-" followed by the highest altitude in MSL terms (when acceptable to the mission).

EXAMPLE-
20 MSL-50 MSL

b. Unless the route segment is clearly annotated, "for use in VMC conditions only," each route segment shall contain an altitude that is suitable for flight in IMC and can be used in the event of an aircraft systems failure. This altitude shall be referred to as the IFR altitude and may be contrary to 14 CFR Section 91.177 (Minimum Altitude for IFR Operations) when specifically authorized by appropriate military authority. The IFR altitude shall always be depicted in MSL terms. In no case will flight operations be conducted at altitudes less than those specified in 14 CFR Section 91.119 (Minimum Safe Altitude, General). In the absence of an established IFR altitude, the IFR altitude is the highest altitude designated for the route segment as depicted in the route description.

c. All altitudes shall be established by the military. The military may use other than FAA standards for establishing IFR altitudes for route segments.

d. When practical, the designated exit fix altitude shall be within an area of radio coverage. When it is determined that ATC impact or other constraints preclude the exit fix altitude being established within radio coverage, an altitude below radio coverage may be utilized provided procedures for routinely exiting the route; i.e., pre-coordinated clearances, stereo routes, and actions to be taken by the pilot in the event two-way communications are lost, are covered in a letter of agreement.

11-4-4. RE-ENTRY SEGMENTS

Consistent with ATC capabilities, routes may have re-entry segments. To the extent practicable, reentry segments should avoid ARTCC/CERAP boundaries.

11-4-5. ALTERNATE ENTRY, EXIT, AND END POINTS

a. Any point on the route may be identified as an alternate entry/exit/end point. Entry points must precede exit points on the routes/alternate routes with which they are associated.

b. Whenever a route is modified by designating alternate entry/exit/end points, the route segments associated with the alternate points shall be considered modifications to the basic/principal route and may be described and designated as alternate routes.

c. Any alternate route segments shall meet all of the requirements pertinent to the establishment of new routes.

11-4-6. ROUTE REPORTING POINTS

- a. Unless otherwise specified in the letter of agreement, the NFDD, and the DOD FLIP AP/1B route description, exit points shall be mandatory reporting points.
- b. Other mandatory reporting points may be established for ATC purposes. These shall be kept to those absolutely essential in providing IFR separation between the route user and other IFR traffic. These points shall be specified in the letter of agreement, as appropriate, and the route description.

11-4-7. SPECIAL OPERATING PROCEDURES

Special operating procedures may be imposed, but shall be held to the minimum required. These procedures may be applied on a route segment basis and need not apply to the entire route. Such restrictions shall be a part of the narrative route description as published in the NFDD and DOD FLIP AP/1B (or AP/3). If ATC procedures are involved, they shall be included in the letter of agreement governing the use of the route.

11-4-8. LOW ALTITUDE AIR-TO-AIR TRAINING (LOWAT)

- a. LOWAT shall be accomplished only on IRs specifically designated for this purpose.
- b. The provisions for an equivalent level of safety for LOWAT training shall be contained in a letter of agreement between the ARTCC/CERAP and the military unit.
- c. LOWAT maneuvers are not "classical intercepts," but allow for observation and analysis of an aerial attack, initiation of the appropriate defensive response, and continuation of the primary mission with minimal interruption. LOWAT training maneuvers conducted on IEs shall be limited to:
 - 1. No more than a 90-degree turn will be performed on the IR.
 - 2. LOWAT maneuvers will be terminated as soon as visual and/or radio contact is made by the defending aircraft.
 - 3. Weather minimums on IEs at maneuvering altitudes shall be 1,500 feet from clouds and 3 miles flight visibility.
- d. LOWAT training shall be limited to those aircraft with sophisticated operating airborne radar systems.
- e. IEs designated for LOWAT will be coordinated on an individual basis, approved at FAA Washington Headquarters, published in DOD FLIP, and clearly identified as a designated LOWAT route.

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**RECORD OF DECISION
FOR THE
REALISTIC BOMBER TRAINING INITIATIVE**

An Environmental Impact Statement (EIS) was prepared to aid in determining whether to establish the Realistic Bomber Training Initiative (RBTI). The purpose of RBTI is to:

- (1) Permit aircrews from Barksdale and Dyess Air Force Bases to train for their various missions while maximizing combat training time;
- (2) Provide the type and linked arrangement of airspace and other assets that support realistic training for bomber aircrews, and
- (3) Ensure that flexibility and variability in training supports bomber combat missions.

RBTI will fulfill this purpose by establishing a set of linked training assets comprising an Electronic Scoring Site system that will provide realistic bomber training close enough to Barksdale and Dyess AFBs to effectively use limited flying hours. These assets would be located within approximately 600 nautical miles of Barksdale and Dyess AFBs and would involve:

- (1) A Military Training Route (MTR) that offers variable terrain for use in terrain following and terrain avoidance, overlies lands capable of supporting electronic threat emitters and electronic scoring sites, permits flights down to 300 feet above ground level (AGL) in some segments, and links to a Military Operations Area (MOA).
- (2) A MOA measuring at least 40 by 80 nautical miles with a floor of 3,000 feet AGL and extending to 18,000 feet above mean sea level (MSL) used for avoiding simulated threats and simulated attacks.
- (3) An Air Traffic Control Assigned Area (ATCAA) above the MOA at 18,000 to 40,000 feet MSL to be used for high-altitude training.
- (4) Establishing, through lease or purchase, a set of five locations (15 acres each) under or near the MTR corridor, and an additional five locations (15 acres each) under or near the MOA, for placing electronic threat emitters that would simulate the variety of realistic threats expected in combat.
- (5) Constructing two Electronic Scoring Sites co-located with operations and maintenance centers, one under or near the MTR corridor and the other en route from the bases to the MTR and MOA on leased, purchased, or AF-owned property.
- (6) Decommissioning two existing Electronic Scoring Sites in Harrison, Arkansas and La Junta, Colorado that do not fulfill the B-1 and B-52 training requirements. These sites do not provide the required training assets outlined above in items 1, 2 and 3.

ALTERNATIVES ANALYZED

Four alternatives were analyzed, a no-action alternative (Alternative A), and three action alternatives, Alternatives B, C and D. All three action alternatives fulfill the need defined

under the proposed action. Alternative B: IR-178/Lancer MOA and Alternative C: IR-178/Texon MOA are almost entirely in western Texas. Only a small portion of airspace in these alternatives extends into New Mexico. Alternative D: IR-153/Mt. Dora MOA is located primarily in northeastern New Mexico with portions of the MTR extending into northwestern Texas. All three action alternatives predominantly coincide with existing MTR or MOA airspace; little area not currently exposed to overflights would be affected. Under Alternative A: No-Action, the Air Force would continue using existing assets and airspace would remain unchanged. All three action alternatives meet operational goals defined for RBTI. Based on the analysis presented in the EIS, agency input, and public comments, the Air Force believes Alternative B is preferable to Alternatives A, C and D. Alternative B meets all operational requirements with less potential for adverse environmental impacts than Alternative C and significantly less than Alternative D. Therefore, Alternative B is the Air Force's environmentally and operationally preferred alternative.

PUBLIC INVOLVEMENT

The public involvement process followed by the Air Force for RBTI included:

- (1) Community meetings prior to issuing a Notice of Intent (NOI) to prepare the RBTI Environmental Impact Statement (EIS);
- (2) Scoping comment period and meetings;
- (3) Intergovernmental /Interagency Coordination for Environmental Planning (IICEP) and Agency consultation; and
- (4) Public comment period and hearings.

Efforts for early public involvement began in December 1997. These efforts consisted of six informal community meetings in Texas and New Mexico to gain input on the RBTI alternative identification process. Input from the community meetings helped shape the alternatives.

Official notification of the Air Force RBTI proposal began with publication of the NOI in the Federal Register on December 19, 1997. In late January and early February 1998, 11 scoping meetings were held in affected communities in Texas, New Mexico, Colorado and Arkansas. This started the scoping period during which the Air Force solicited comments from the public, interest groups and agencies to help define the scope of analysis for the EIS and to aid in identification of additional alternatives. All comments and letters were considered and used to help develop the scope for the analysis for the draft EIS. The scoping period lasted through April 3, 1998, including a 45 day extension. Public involvement continued in April 1998 (following the formal scoping period), when Air Force representatives were invited to participate in two community meetings held in Taos and Angel Fire, New Mexico.

As part of Government-to-Government consultation for RBTI, 32 tribes and/or tribal-affiliated organizations that historically resided in the affected area were notified. At their request, ongoing discussions and consultations have continued throughout the National Environmental Policy Act (NEPA) process with the Jicarilla Apache Tribe and the Taos Pueblo in New Mexico.

Through the IICEP process, appropriate federal, state and local agencies were notified of the proposed action. In total, over 100 IICEP letters were sent to agencies and officials. Comments from these agencies and officials were reviewed for incorporation into the environmental analysis. The IICEP process also provided the Air Force an opportunity to seek and obtain data on resources within the jurisdiction of each agency or organization, and to gather relevant information on issues affecting the RBTI proposal. Meetings with several agencies were conducted, including with the U.S. Fish and Wildlife Service (USF&WS) as part of consultation for Section 7 of the Endangered Species Act.

The Federal Aviation Administration (FAA) was a cooperating agency for this EIS.

A 45 day public comment period on the draft EIS began with publication of the Notice of Availability (NOA) on March 19, 1999. As with scoping, a 45-day extension was granted, allowing 90 days total for the public comment period. Fifteen meetings were held in 11 locations in Texas, New Mexico, Colorado and Arkansas. All comments were reviewed and considered in development of the final EIS, and this decision.

The Air Force goal is to continuously balance readiness training with the environment and community concerns. This includes actions during the proposal development process, management actions coincident with project start-up, and most importantly, those long-term actions that continuously address community concerns throughout the life of the project.

DECISION

After considering the operational utility and potential environmental consequences of the three RBTI action alternatives and the No-Action Alternative, the Air Force chooses to implement Alternative B, which involves locating the appropriate training assets under IR-178/Lancer MOA. The Air Force will take action required to request FAA implementation of the airspace modifications necessary to implement Alternative B.

IMPACTS

Historically, the affected airspace under RBTI accommodated aircraft overflights, including military flight training activities and civil aviation. Existing airspace will be used to the maximum extent possible for IR-178 and Lancer MOA. Some airspace will be eliminated and new airspace added. Under Alternative B, airspace management will remain similar to that found today. The potential for conflicts with civil aviation will not be significant, although coordinating with civilian aviators involving weather-modification, crop dusting, ranching and other similar management activities will require increased attention and resources from the Air Force. For Alternative B, average daily sortie operations will range from 1 to 10, depending upon the segment of the MTR. Sortie numbers will vary from an increase of 1 to 6 to a decrease of up to 5 per operational day as compared to historic airspace use on given segments.

Noise levels will range from 45 to 61 dB (Average Day-Night Sound Level [DNL]) for Alternative B. There will be an increase in noise of 2 to 13 dB depending on the route/MOA segment examined. Noise analysis indicated an increase in the percentage of people potentially

highly annoyed under RBTI. For Alternative B, the percentage of highly annoyed people could rise to a maximum of 8 percent for portions of IR-178. Under the Lancer MOA, the analysis showed approximately one percent of the people could be highly annoyed.

Effects of aircraft emissions on air quality and the potential for aircraft mishaps will be inconsequential for Alternative B.

Overall, there would be no likely effects to designated land use, recreation or visual resources. Increases in noise levels from aircraft could be perceived by some as affecting their quality of life. However, the analysis revealed no impacts on recreation, property values, or hunting leases. This is evidenced in other MOAs within the region where recreation, property values and hunting leases remain unaffected by aircraft overflights more numerous than those projected for RBTI. Six communities under Alternative B could experience increases in noise levels of 2 to 8 dB. Aircrews, however, will avoid overflights of communities by the standards set forth in FAA regulations.

Field surveys at the emitter and Electronic Scoring Sites for Alternative B did not identify any threatened, endangered or sensitive species. Under Alternative B, increased overflights would occur over estimated historic Aplomado Falcon habitat; however, only 11 sightings have occurred in the region since 1992. The Air Force has consulted with the USF&WS on the Endangered Species Act relative to RBTI. The USF&WS concurs with the Air Force determination that this action is not likely to adversely affect threatened and endangered species.

Construction of the Electronic Scoring Sites in Texas will result in a beneficial socioeconomic impact. Decommissioning of the Electronic Scoring Sites in Harrison, Arkansas and La Junta, Colorado will result in minimal negative socioeconomic impacts. The effects of flying activities are not expected to produce measurable impacts on the economic value of the land since this area has been generally overflowed since the 1940's. Other factors, such as drought, market prices, community amenities, and proximity to urban areas are more likely to affect land values than military aircraft overflights. The environmental justice analysis established that implementation of Alternative B will have no adverse impact.

The Air Force surveyed the proposed emitter and Electronic Scoring Sites for cultural resources that could be affected by construction and ground operations. One archaeological site could be affected under Alternative B. However, impacts to this site could be avoided or mitigated to insignificance through completion of the Section 106 process of the National Historic Preservation Act and employment of a combination of avoidance, monitoring, testing, and data recovery (if needed), or selection of an alternative site. Existing research and consultation with appropriate Native American tribes indicated no identified traditional resources within the affected airspace of Alternative B. Although 15 National Register-listed properties could be overflowed, overflights will occur in areas already subject to military aircraft overflights and aircraft would not create a new visual or audible feature in an otherwise historic or traditional landscape. Noise from aircraft overflights would not reach levels likely to damage structures. Therefore, the effects of visual or audible intrusions or damage from noise or vibrations would be negligible. No National Historic Landmarks are located under Alternative B.

Proper management will be followed to reduce effects of any potential short-term wind and water erosion of surface soils to insignificant levels. Landowners will retain control of any mineral or water rights. No long-term impacts to water resources will occur as a result of construction or use of the Electronic Scoring Sites or emitters.

There would be no cumulative impacts from the interaction of RBTI Alternative B with other past, present or reasonably foreseeable actions.

MITIGATION MEASURES

The mitigation measures presented below reflect specific actions the Air Force will take to reduce the potential for particular effects to resources, as identified in the EIS.

- (1) The Air Force will reduce potential impact (as identified by USF&WS) to Aplomado Falcon habitat by:
 - (a) Evaluating the areas under IR 178 that are not currently being surveyed.
 - (b) Expanding the ongoing Aplomado Falcon survey into areas the evaluation determines may be Aplomado Falcon habitat.

- (2) The Air Force will avoid or reduce potential impacts to biological and cultural resources from construction or modification of access roads, power lines, and telephone lines by:
 - (a) Consulting with State Historic Preservation Office (SHPO).
 - (b) Consulting with USF&WS.
 - (c) Surveying rights-of-way for cultural and biological resources.
 - (d) Realigning rights-of-way to avoid resources, where feasible.
 - (e) Developing and implementing site-specific mitigation measures, if required.

- (3) The Air Force will avoid or reduce potential impacts to cultural resources from the decommissioning of the La Junta Electronic Scoring Site, including disposition of lands out of federal ownership, by completion of the National Historic Preservation Act's Section 106 process.

MANAGEMENT ACTIONS

In addition to the mitigation measures described above, two types of management actions are designed to address concerns:

Management Actions incorporated into the proposal: These actions used project design, configuration, and/or component location to reduce or eliminate potential impacts to a resource or suite of resources. Such actions include the use of existing information or data collected as part of the public involvement process to avoid siting alternative components in areas or settings known to contain resources that could be significantly

affected. Such avoidance is not absolute; rather it is balanced with training and operational considerations needed to perform realistic bomber training.

- (1) Citizens expressed concerns about creating new military airspace. The Air Force followed the FAA policy of using existing airspace to the maximum extent possible. This proposal used 85% existing airspace by:
 - (a) Linking segments of existing MTRs to form a complete MTR, IR 178.
 - (b) Linking portions of three existing MOAs to form a complete MOA, the Lancer MOA.
- (2) Concerns were expressed about the structure of the proposed MTR, IR 178. The Air Force reduced noise related to individual overflights and associated effects by raising the floor of several segments of the proposed IR 178.
- (3) Agencies expressed concerns that flexibility was needed in the number and siting of emitter sites and Electronic Scoring Sites to address potential environmental impacts. The Air Force provided flexibility and minimized impact by:
 - (a) Considering more sites than would be required for the Electronic Scoring Sites and emitter sites.
 - (b) Eliminating many candidate sites that contained known historical sites, or were located too close to homes, large structures, and obvious bodies of water.
- (4) The public expressed concerns with potential environmental consequences due to site and infrastructure construction associated with emitter sites and Electronic Scoring Sites. The Air Force minimized impact by:
 - (a) Selecting candidate sites as close as possible to existing roads, as well as power and telephone lines so that less area would be affected by construction.
 - (b) Choosing previously disturbed areas, where feasible.
 - (c) Conducting surveys to locate sensitive cultural or biological resources to avoid or minimize disturbance.
- (5) Citizens expressed concerns about exposing the public to radio frequency energy from emitters. The Air Force minimized risk and ensured public safety by using sites that contain an 800 X 800 foot fenced area that provides 150 feet of extra safe-separation distance.
- (6) Concerns were expressed that construction and maintenance of emitter sites and Electronic Scoring Sites could increase erosion and therefore affect soils and water resources. The Air Force will minimize impacts, preserve wetlands and drainages, and reduce erosion by specifying best management practices and selecting sites that avoid wetlands, drainages, and areas with sloped terrain.

- (7) The public and agencies expressed concerns regarding the altitude of the MOA floor. The Air Force will provide additional separation between military operations and civil aviation by establishing the floor of the MOA above the Instrument Approach Procedures minimum altitudes for all airports under or adjacent to the Lancer MOA.

Management Actions to address community/agency concerns: These actions were developed to address concerns voiced by the public and agencies. These concerns were received through oral and written comments during the public comment period.

- (1) Citizens expressed concerns about the increased number of flights proposed for IR 178. The Air Force will reduce the impact of individual low-altitude-flights, compared to projections in the EIS, by limiting the annual sortie-operations to 1,560 (about 6 per day), instead of the proposed 2,600 (about 10 per day).
- (2) The public expressed concerns that the floor of some segments of the proposed IR 178 were proposed to be lower (200 feet AGL) than the minimum flight altitude of 300 feet AGL. The Air Force will institute IR 178 segment altitudes that correspond with minimum flight altitudes by raising the floor of all segments of IR 178 to a minimum of 300 feet AGL.
- (3) Agencies and the public expressed concerns about the interaction between military use of the Lancer MOA and underlying airport traffic. They also indicated concern about the interaction between military use of IR 178 and the Lancer MOA with general aviation activities in the region. The Air Force will increase communication opportunities with civil aviators by establishing a 1-800 telephone number to Dyess AFB for airspace schedule information. Additionally, the Air Force will allow easier access to local airports, raise awareness and avoid potential conflicts between military and general aviation aircraft flying in local airspace by establishing a Military Radar Unit (MRU) and real-time communications. The MRU will be operational concurrently and co-located with the en route Electronic Scoring Site, and will become a critical part of the long-term actions that continuously address community concerns.
- (4) The public expressed concerns about conflicts between military flights and local aviation in the vicinity of the proposed re-entry route on IR 178. The Air Force will reduce the potential for conflicts by raising the floor of the IR 178 re-entry route to 6,000 feet MSL.
- (5) Concerns were expressed that there could be an increase in noise complaints and some citizens indicated that noise complaints are not handled effectively. The Air Force will provide improved communication opportunities between the public and the Dyess AFB Public Affairs Office by publicizing an existing 1-800 telephone number, and encouraging citizens to contact the base with concerns or complaints.

- (6) The public and agencies expressed concern about the potential adverse effect on known cultural resources associated with locating the en route Electronic Scoring Site near Dyess AFB. The Air Force will continue to develop and examine ways to minimize these potential effects to include the possibility of locating the en route Electronic Scoring Site on an evaluated candidate site under the Lancer MOA, at a local municipal airport, or other suitable location. In the event this management action leads to a substantive change, the Air Force will undertake any additional environmental analysis required by this change. Additionally, aircraft overflights will be limited to 5,000 AGL or higher when within 3 nautical miles of the en route Electronic Scoring Site.
- (7) Although not addressed in the EIS, the Air Force will also implement the following initiatives to further enhance public involvement:
 - (a) Designate Dyess AFB as the single point of contact for all noise complaints within the confines of the Lancer MOA.
 - (b) Create a web site to provide the public RBTI information.
 - (c) Establish a team to routinely gather public issues and information to address citizen concerns.

SUMMARY

The Air Force will continue to work with the FAA and other federal agencies, state agencies, and local communities during and after the establishment of the Realistic Bomber Training Initiative. This interaction will aid in the reduction of noise impacts on the affected area and form the basis for long-term actions that will continuously address community concerns throughout the life of the project. These actions will help achieve the Air Force goal to continuously balance readiness training with the environment and community concerns.

The EIS used public involvement to identify alternatives and impacts, and assess the environmental consequences associated with the Realistic Bomber Training Initiative. Where feasible, the Air Force developed mitigation measures and management actions to minimize the environmental impact and address the concerns and comments of agencies and the public.



MARVIN R. ESMOND, Lt Gen. USAF
Deputy Chief of Staff
Air & Space Operations

DCN: 11865

Beauchamp, Arthur, CIV, WSO-BRAC

From: Cirillo, Frank, CIV, WSO-BRAC
Sent: Wednesday, August 17, 2005 10:58 AM
To: Hill, Christine, CIV, WSO-BRAC
Cc: Beauchamp, Arthur, CIV, WSO-BRAC; Small, Kenneth, CIV, WSO-BRAC; Reborchick, Margaret, CIV, WSO-BRAC; Cook, Robert, CIV, WSO-BRAC
Subject: FW: RCJ: Plaintiffs: More B-1s could add to lawsuit

Christine - Congressional E-mail seems to be peaking to R&A - we will not reply but mail should probably go into e-library.

From: Taylor, Bob (Thune) [mailto:Bob_Taylor@thune.senate.gov]
Sent: Wednesday, August 17, 2005 10:55 AM
To: Beauchamp, Arthur, CIV, WSO-BRAC; Small, Kenneth, CIV, WSO-BRAC; Cirillo, Frank, CIV, WSO-BRAC
Subject: FW: RCJ: Plaintiffs: More B-1s could add to lawsuit

Plaintiffs: More B-1s could add to lawsuit

Celeste Calvitto / Rapid City Journal / 8-17-05

Bombers from Ellsworth Air Force Base would compound issues in a federal lawsuit that challenges flyovers near Dyess Air Force Base in Texas, according to lawyers and plaintiffs in the case.

"The additional cumulative impact of the Ellsworth wing will have to be considered," Frank Bond, a Santa Fe, N.M., lawyer representing one of the organizations in the lawsuit, said this week. "It could be significant."

The Department of Defense has proposed closing Ellsworth and moving its 29 B-1B Lancer bombers to Dyess. Ellsworth advocates have told the Defense Base Closure and Realignment Commission, or BRAC Commission, as it is commonly called, — the panel charged with reviewing the Pentagon's list of recommended base closings — that the Air Force failed to factor the lawsuit into its analysis that led to the proposed consolidation. Sen. John Thune, R-S.D., has also charged that the Air Force misled the BRAC Commission about the effects of the lawsuit.

"You can imagine how surprised we were that a lot more bombers might be coming," Kaare Remme, a rancher who is a plaintiff in the lawsuit that challenges training practices, said. "In the newspapers when the BRAC decisions were announced, we were quite surprised that despite the issues that were to be addressed here from the environmental effects of the RBTI (Realistic Bomber Training Initiative), there would be a doubling of the number of aircraft. ... It was never disclosed to us or the courts."

The BRAC Commission is expected to vote on Friday, Aug. 26, whether to remove Ellsworth from the Pentagon list. The Dyess litigation is one of many issues raised by the members of South Dakota's congressional delegation and the Ellsworth Task Force as they lobby the commission to reverse the recommendation.

In a letter sent last week to BRAC Commission chairman Anthony Principi, Bond said: "The report that Ellsworth B-1s are being moved to Dyess was not good news to my clients. They already believe they

8/17/2005

DCN: 11865

live in a war zone. The Ellsworth B-1 wing exacerbates the real impact on these people."

Two separate lawsuits on behalf of property owners, ranchers and others in west Texas have been consolidated before the U.S. 5th Circuit Court of Appeals. The litigation has led to court oversight of restrictions on Dyess' Realistic Bomber Training Initiative pending a supplemental environmental impact assessment.

Among the restrictions are that aircraft cannot fly below 500 feet. Ellsworth advocates say that the Powder River training airspace in Wyoming, minutes from the base near Rapid City, is unrestricted. Dyess conducts training exercises there, also.

Murray Feldman, a Boise, Idaho, lawyer representing Remme's group, said he has been providing information to the BRAC staff about the effects of training routes. He also has filed a notice of appeal, seeking to raise the 500-foot flyover level that Dyess must follow to 1,000 feet.

Among the issues cited in the litigation is the effect of wake vortex, or turbulence, generated by large aircraft on structures and livestock.

"It can tear down windmills, and you wind up with no water for cattle," Remme said. "This is an example of an aeronautical effect. But there is also an environmental effect if you lose water on your ranges. This is just an example of what we are up against."

Bond said in his letter to Principi that because of the range of wake-vortex issues, an environmental assessment could take time.

In addition, the Ellsworth Task Force has said that if Dyess continues to use Ellsworth's current training range, the expense could dilute some of the cost savings the Air Force has projected in connection with closing Ellsworth.

At a recent briefing for community leaders and the media, the task force said that training missions cost \$20,000 per hour. It is a five-hour trip from Dyess to Powder River Military Operating Area.

Remme said that initially, the plaintiffs in the lawsuit he is involved in "took this on reluctantly."

"This is our Air Force, too," he said. "You are not dealing with a bunch of sue-happy people here."

But he also claims that the Air Force failed under the National Environmental Policy Act to give proper consideration to public opposition to the training routes.

"We are just protecting the process," he said.

###

Press Secretary
Senator John Thune, R-S.D.

<http://thune.senate.gov>

8/17/2005

Training Initiative pending completion of the supplemental environmental impact statement and issuance of agency decisions.

DATED: August 16, 2005

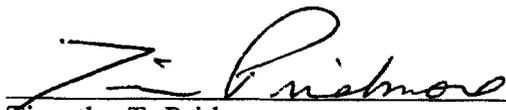
Respectfully submitted,

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ATTORNEY AND LOCAL COUNSEL FOR
PLAINTIFFS BUSTER WELCH, ET AL

CERTIFICATE OF SERVICE

I hereby certify that on this 16th day of August, 2005, I caused to be served a true and correct copy of the foregoing by the method indicated below, and addressed to the following:

Mr. John R. Parker
Chief, Civil Division
Office of the U.S. Attorney
Northern District of Texas
1100 Commerce Street, 3rd Floor, Suite
300
Dallas, TX 75242

- U.S. Mail
- Hand Delivery
- Overnight Delivery
- Telecopy (Fax)

Mr. David Glazer
U.S. Department of Justice
Environmental and Natural Resources
Division
301 Howard Street, Suite 1050
San Francisco, CA 94105

- U.S. Mail
- Hand Delivery
- Overnight Delivery
- Telecopy (Fax)

Lt. Col. John M. Smith
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AFLSA/JACE
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Arlington, VA 22209-2403

- U.S. Mail
- Hand Delivery
- Overnight Delivery
- Telecopy (Fax)



IN THE UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

DAVIS MOUNTAINS TRANS-PECOS
HERITAGE ASSOCIATION,

Plaintiffs-Appellants,

v.

UNITED STATES AIR FORCE,
et. al.

Defendants-Appellees.

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Case No. 03-10506

**DECLARATION OF
MAJOR GENERAL
KENNETH M. DECUIR**

Pursuant to 28 U.S.C. § 1746, I declare as follows:

1. I am Major General Kenneth M. DeCuir. Since March of 2004, I have served as the Director of Air and Space Operations for the Air Combat Command (ACC) at Langley Air Force Base, Virginia. Before that I served in various flying and staff positions within the United States Air Force (USAF) over the past 30 years. I make this declaration based on my own personal knowledge and experience, as well as information made available to me during the course of my commissioned service with the Air Force.

2. Air Combat Command's mission is to provide the primary force of combat air power to America's war fighting commands; to support global implementation of the United States' national security strategy; to operate fighter, bomber, attack,

reconnaissance, battle management and electronic combat aircraft; to operate command, control, communications and intelligence systems; and to conduct global information operations. My duties as Director of Air and Space Operations include direction of operational planning, training and command and control functions to deploy and employ active duty and Reserve component combat air forces, including more than 1,700 aircraft and their associated pilots worldwide, in support of United States security objectives.

3. I am familiar with the types of airspace used for training aviators throughout the Air Combat Command. I am familiar with the airspace and training assets associated with the Realistic Bomber Training Initiative (RBTI), which includes Instrument Route 178 (IR-178) and the Lancer Military Operations Area (MOA). I understand the strategies and tactics employed by B-1 and B-52 aircrews. I am familiar with other training ranges the bombers in question would have to resort to using as a replacement for RBTI. I am familiar with the litigation, *Davis Mountains vs. USAF*. It is my personal and professional opinion that losing the ability to use IR-178 and the Lancer MOA as currently configured will cause grievous and irreparable harm to Air Force training and the ability of the Air Force to meet its national defense objectives.

4. Dyess Air Force Base (AFB), Texas, and Barksdale AFB, Louisiana, units are home to over 70% of Air Combat Command's bomber force. The RBTI consists of consolidated and centralized training assets which maximize training opportunities per flying hour for Dyess and Barksdale AFB, B-1 and B-52 bomber aircrews. It provides

bomber aircrews the opportunity to develop the necessary skills and readiness for combat by linking a realistic sequence and speed of training activities into a single, cohesive mission resembling combat. It improves the efficiency and effectiveness of bomber aircrew training by situating ground-based facilities and airspace close enough to one another and to Dyess and Barksdale Air Force bases to maximize combat training time.

5. RBTI is the primary training airspace with underlying electronic assets for B-1s at Dyess AFB. Dyess AFB has four B-1 squadrons—one operational squadron, two training squadrons and one test squadron. The Dyess FTU uses electronic assets for subjecting bomber aircraft to simulated electronic attack on nearly every sortie.

Operational unit training is more flexible, but the Air Force Ready Aircrew Program (the combat training program designed to focus training on capabilities needed to accomplish a unit's core tasked mission) nevertheless requires each crewmember to get exposure to electronic attack on an absolute minimum of 50% of training sorties and 20 low altitude events per year. RBTI is currently the primary venue for Dyess B-1 crews to meet these requirements.

6. RBTI is also the primary training airspace with underlying electronic assets for B-52s at Barksdale AFB. Barksdale AFB has four B-52 squadrons—three operational squadrons (including one Reserve squadron) and one squadron in the FTU—as well as a weapons school and a test and evaluation unit. The Barksdale FTU uses ESS for electronic attack on nearly every sortie. Again, operational training is more flexible, but

the Ready Aircrew Program requires electronic attack to train Barksdale's Electronic Warfare Officers, who are part of the B-52 aircrew. Barksdale uses Lancer MOA on approximately 60% of its sorties.

7. Lancer MOA is capable of providing training for a variety of missions, including close air support (CAS) for ground troops, time sensitive target (TST), electronic attack (EA), air refueling, defensive tactics (DT), and dissimilar air combat training (DACT). Units from both Dyess and Barksdale use the Lancer MOA for aircrew pre-deployment and post-deployment training.

8. IR-178 is also used by units from both Dyess and Barksdale AFB. Low altitude employment capability and its associated training is a national resource. No other air force in the world maintains the all-weather, day/night, low-level flying capability of the USAF. Low altitude tactics drive the adversary's operational planning and strategic defense program to a surface-to-stratosphere air defense system. Low-altitude flight allows, on the very first day of a conflict, increased options for combatant commanders as they prosecute the air war and support the joint campaign. Retaining a low altitude capability will force potential adversaries to expend resources to counter the possibility of a multi-dimensional attack. Since the Gulf War, "packages" (groups of aircraft) at medium/high altitude are the predictable standard, but there may be times and places where low altitude ingress/egress works best and creates surprise. Aircrews who train only to fight the last war are doomed to failure. If aircrews are stopped from training at

low altitude, commanders will be limited in how they employ bomber aircraft and the enemy can plan better to counter our forces.

9. Certain threats can best be defeated in the low altitude environment, particularly early in a conflict, or where the stakes are high and some risk is acceptable. Low altitude flying is a viable tactic for surprise strike scenarios. Few early warning radars are able to track a low altitude strike aircraft, but almost all early warning radars can detect large force "packages." If an enemy infiltrates a high altitude "package" with air-to-air aircraft, descending rapidly to low altitude may be the only survivable tactic the friendly forces can employ. The Global War on Terrorism with its numerous fleeting targets proves the need to maintain a capability for rapid global strike scenarios utilizing low altitude tactics. A single B-1 could penetrate territory without radar detection at low-level, evade all threats, and then climb quickly to high altitude for weapons delivery. This tactic is especially critical to acquire mobile or time sensitive targets where the location is not known until just prior to strike and access may not be readily available. As with all combat skills, night and day low-level capability is a perishable commodity. Aircrews must train routinely in the low altitude regime to maintain this capability.

10. The B-1 has several low altitude mission scenarios. It has a low altitude mission requirement to follow terrain at night or in poor weather conditions. The B-1 can be tasked to employ mines, which can only be released from low altitude. Aircrews must be able to achieve low altitude ingress on the way to a high altitude target. They also

must be able to counter high altitude threats (e.g., a surprise attack by an enemy fighter) with a dive to low altitude. The 49th Training Squadron at Barksdale AFB uses IR-178 two to three times a month for low-level B-52 mission training as well. Closing IR-178 would force the Barksdale B-52s to try to schedule routes at the Granite Peak site at the Utah Test and Training Range for low-level training. This would increase sortie duration by about four hours and further aggravate the maintenance phase issue, described below. In FY 2004, 1,088 sorties were scheduled on IR-178. The actual numbers flown were less due to poor weather conditions and other limiting factors.

11. The Lancer MOA is critical for the higher altitude missions of the B-1 and B-52. In FY 2004, 1,697 sorties were flown in the Lancer MOA or in the Air Traffic Control Assigned Airspace (ATCAA) above the MOA. Aircrews scheduled 797 sorties for Lancer in FY 2003. It was activated for use and actually used 275 days in FY 2003. The FY 2003 numbers were lower than normal because of deployments in support of Operation Iraqi Freedom. From 28 Mar 02 (the date the MOA was first used) to 30 Sep 02, aircrews flew 266 sorties in Lancer. It was scheduled for use on 127 days but only activated and actually used for 107 days in FY 2002.

12. Training opportunities would be irretrievably lost and other costs incurred if Dyess and Barksdale units were forced to seek training airspace and assets elsewhere. No other site offers sequenced realistic training activities in a single, cohesive mission similar to what aircrews encounter in combat. Another common significant negative

impact on training if RBTI is lost is the amount of unproductive transit time required if aircrews must train elsewhere, which, in turn, negatively effects combat readiness and the Air Force's ability to support national security objectives under current worldwide threats. Aircrews would have to fly much longer sorties to get less effective training. The longer sorties would cause them to fly fewer sorties overall. If required to train elsewhere, training would be more difficult to schedule as B-1 and B-52 aircrews would now have to compete with other primary users of alternate locations. As the number of available training locations decreases, the density of operations in remaining locations would increase. This increase generally results in increased safety risks due to airspace conflicts and higher costs due to extended range operating hours (e.g., civilian or contractor overtime or over hires). Units from other than Dyess and Barksdale AFB would lose training as well if IR-178 and Lancer MOA were not available. Many aircraft from many Air Force bases train on IR-178 and in Lancer MOA, including use of the Pecos or Snyder electronic assets. The following units are a smaller part of Air Combat Command's bomber force, and they only use RBTI as an alternative with enhanced capability relative to training airspace and routes closer to their home station.

Nevertheless, B-1s from Dyess AFB, TX and Ellsworth AFB, SD use both IR-178 and Lancer MOA. B-52s from Barksdale AFB, LA and Minot AFB, ND use both. F-16s from Cannon AFB, NM use both. C-130s from Kirtland AFB, NM and German Air Force Tornados from Holloman AFB, NM use IR-178. E-4 Airborne Weapons and

Control Systems (AWACS) from Tinker AFB, OK; Navy P-3s from Miramar, CA; and T-1 trainers from Laughlin and Vance AFBs, TX all use Lancer MOA.

13. Losing IR-178 and Lancer MOA would severely limit primary and alternate mission capability and would have ever-increasing second order effects on training. As a safety measure, the number of hours in a crew duty day is limited by Air Force instructions to 12 hours per day in most cases. In some cases, the instruction can be waived to 16 hours per day for FTU crews, but this is an exception. Pre-flight maintenance inspections for bombers can take up to eight hours. If maintenance is required, this time eats into the crew duty day. If crews were required to use more of their crew duty hours flying unproductive transit time, there would not be enough time for the aircraft to be "turned" or rotated for another flight crew to train in any given day, particularly if maintenance were necessary. Because of its close proximity (10 minutes in the air from Dyess AFB, for example), RBTI provides critical operational flexibility when maintenance, weather or scheduling conflicts would otherwise cause unrecoverable delays.

14. Unproductive, longer sorties also would have negative effects on aircraft maintenance. The negative effect of losing Lancer MOA and IR-178 on the maintenance "phase" would be common for both bases. Much like an automobile, military aircraft require scheduled maintenance after a certain number of flying hours, as opposed to miles. Using the B-52 as an example, typical maintenance phasing occurs as follows.

There is a pre-flight and post-flight maintenance check after each flight of the aircraft. After every 50 flying hours, a more detailed inspection occurs. After every 300 flying hours (which currently occurs roughly once a year), "phased" maintenance must occur. This involves scheduling a hangar (which is dependent on maintenance personnel manning) and putting the aircraft into a hangar for more detailed maintenance from two to three weeks. Every 300 hours, one phase of a three-part maintenance schedule is accomplished. Finally, every five years, the B-52 goes to a depot for approximately six months for complete overhaul. Increased unproductive transit time will nevertheless increase the number of hours logged on an aircraft and accelerate the maintenance schedule relative to the amount of training accomplished. Using the B-52s as an example again, Barksdale's phase capacity is not quite enough to cover the flying hours it needs to accomplish its required training even with RBTI in place. If average sortie duration increases due to increased unproductive transit times to other electronic asset sites, Barksdale aircrews will be unable to fly all of the training sorties required by the Ready Aircrew Program. A possible, although extremely costly, solution for Barksdale AFB would be to build another maintenance hanger and increase manpower authorizations by approximately 60 maintenance phase personnel. The estimated cost for a single B-52 maintenance bay is \$11 million. This would require congressional Military Construction authorization.

15. Another common impact of losing RBTI for both Dyess and Barksdale AFB

would be the inability to perform "crew swaps;" i.e., training more than one crew in the same aircraft with an intervening landing while keeping the engines running. These crew swaps do not require lengthy pre-flight maintenance checks when the engines continue to run. If forced to train elsewhere, the aircraft would not have enough fuel to take off again to the farther destination. If aerial refueling is required, refueling aircraft would have to be scheduled for the mission, further complicating the process and requiring more limited resources. If a refueling mission were already planned with the sortie, the refueling aircraft would have to accomplish the refueling twice for the same amount of training for each bomber crew. An example of the efficiency achieved by B-1 units is that typically, in only two and one-half hours using Lancer MOA and IR-178, a Dyess B-1 crew can accomplish low-level flight and terrain following on IR-178 as well as close-air support and high-level maneuvering in Lancer MOA. No other airspace/low-level combination provides this flexibility for aircrews stationed at Dyess AFB. The current configuration allows training for at least four and up to six pilots per day on each scheduled aircraft.

16. RBTI-trained aircrews are frequently employed in combat. Since RBTI was implemented in March 2002, Dyess B-1s have been deployed three times for a total of nine months. Since October 2001, the Barksdale B-52 squadrons have been deployed a total of 30 months. These aircrews have deployed in support of Operation Enduring Freedom, Operation Iraqi Freedom and other global missions. The training these aircrews receive in the RBTI airspace with its electronic assets is critical to their success in combat

and their safe return home.

17. We have carefully considered other alternatives for the Dyess and Barksdale units to meet their Ready Aircrew Program training requirements if IR-178 and Lancer MOA were no longer available. There are few sites in the western United States configured for bombers to accomplish their training requirements. The other sites, even collectively, would not be able to absorb the additional training hours required if the Dyess and Barksdale units were displaced from RBTI. Two sites with the required electronic assets for simulated training are within the RBTI complex. One is the Pecos electronic scoring site, which is located under IR-178. The other RBTI electronic scoring site is Snyder, located under the Lancer MOA airspace.

18. The next closest airspace and electronic assets are located at Melrose Range near Cannon AFB, NM. Melrose Range is approximately 226 nautical miles from Dyess AFB and 532 miles from Barksdale AFB. The training range is used extensively by the fighter aircraft units at Cannon AFB, and it would be difficult for the Dyess and Barksdale aircrews to compete for training time there. Traveling to Melrose Range would add approximately one-and-a-half to two hours to every mission for every sortie for both Dyess and Barksdale aircrews. In addition, electronic bomb scoring was recently removed from Melrose in favor of increasing electronic scoring hours at Lancer MOA (Snyder). The electronic scoring is particularly important for feedback on FTU missions.

19. Smoky Hill Air National Guard Range in central Kansas is another option.

Smoky Hill is approximately 382 nautical miles from Dyess and 416 nautical miles from Barksdale. Traveling to Smoky Hill Range would also add approximately one-and-a-half to two hours to every mission for every sortie for both Dyess and Barksdale aircrews. Both Melrose and Smoky Hill, however, are already stressed to near-capacity with other training requirements and would be difficult to schedule for training.

20. Another possible site is located in Belle Fourche, Wyoming. It is approximately 774 nautical miles from Dyess AFB, TX, and 890 nautical miles from Barksdale AFB, LA. Traveling to Belle Fourche Range would add up to four hours to every sortie for Dyess aircrews and four to five hours to every sortie for Barksdale aircrews. The EIS established 600 nautical miles, however, as the maximum distance the aircrews could travel to train efficiently.

21. Another site is the Granite Peak Site at the Utah Test and Training Range, which is approximately 800 nautical miles from Dyess and 1,056 nautical miles from Barksdale. Traveling to Granite Peak Range would add up to four hours to every sortie for Dyess aircrews and four to five hours to every sortie for Barksdale aircrews. In addition, Granite Peak is very difficult to schedule.

22. Electronic assets are also in place at Mountain Home AFB's Saylor Creek Range near Boise, ID. Saylor Creek, however, is approximately 959 nautical miles from Dyess AFB and 1,207 nautical miles from Barksdale AFB.

23. All of the possible alternate ranges offer less realistic training than that

provided by RBTI, the reason RBTI was developed in the first place. The electronic assets at Belle Fourche and Granite Peak that provide some degree of linked and sequenced combat training are distant from Dyess and Barksdale, requiring long and unproductive transit times. Such long transit times contribute little to combat training and do not efficiently use valuable and finite flight hours. The locations and arrangement of these alternative locations would force aircrews to use available flight time to fly to and among different realistic assets, causing disjointed training that does not replicate actual combat.

24. Dyess and Barksdale aircrews previously trained at La Junta ESS Range in southwestern Colorado and Harrison ESS Range in north central Arkansas. These sites lacked terrain variability and a linked system of airspace and ground-based assets necessary to provide realistic combat training. Both of these sites were completely deactivated when RBTI was implemented. Consequently, they are no longer available for training.

25. The possible alternate ranges have been environmentally analyzed for a maximum number of sorties. Scheduling issues aside, some of the ranges might be able to allow additional training sorties and remain within the limits analyzed in their Environmental Impact Statements (EIS). Other ranges, however, could require new or supplemental EIS to accommodate additional bomber sorties, with significant cost (approximately \$1.5 million for an EIS) and time (18 months minimum for an EIS)

commitments. There would be no guarantee, of course, that any EIS would result in a Record of Decision (ROD) that would allow the additional training at these alternate ranges.

26. Not allowing training in RBTI will have direct costs to the Air Force. For FY 2004, the B-1 cost approximately \$22,000 per hour to operate. For FY 2004, the B-52 cost approximately \$15,000 per hour to operate. IR-178 scheduled sorties numbered 1,088 for FY 2004, and Lancer MOA scheduled sorties numbered 1,697. Using the lower \$15,000 cost per hour figure, the following chart conservatively indicates direct annualized costs to train elsewhere, presuming the training sorties were available and could be scheduled:

Estimated Costs of Training at Alternate Ranges

Airspace	Number of transit hours	Cost per hour ¹	FY 2004 sorties	Total Annual Cost (\$ millions)
IR-178 (using Melrose or Smoky Hill as alternate)	1.5	\$15,000	1,088	\$24.48M
MOA (using Melrose or Smoky Hill as alternate)	1.5	\$15,000	1,697	\$38.18M
IR-178 (using Belle Fourche or Granite Peak)	4	\$15,000	1,088	\$65.28M
MOA (using Belle Fourche or Granite Peak)	4	\$15,000	1,697	\$101.82M

TOTAL Annual Costs (using most conservative figures)				\$62.66M ²
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Notes:

1. Based on the lower cost of the B-52.
2. \$24.48M + 38.18M

27. The Air Force employs a contractor to operate and maintain all of its primary training ranges throughout the United States, including the RBTI training assets. The portion of the FY 05 contract costs applicable to the RBTI Pecos site is \$87,606 per month or \$1,051,272 annually. The portion of the FY05 contract costs applicable to the RBTI Snyder site is \$90,034 per month or \$1,080,408 annually. These costs cannot be recovered. Total annual FY 04 contract and operating budget costs for the Pecos and Snyder sites were \$2,792,417.

28. Continued use of the RBTI during completion of the Supplemental EIS is critical.

I declare under penalty of perjury that the foregoing is true and correct. Executed on 5 JANUARY, 2005.


 KENNETH M. DECUIR, Major General
 Air Combat Command
 Director of Air and Space Operations
 Langley Air Force Base, VA 23665-2789



FILED

October 12, 2004

Charles R. Fulbruge III
Clerk

IN THE UNITED STATES COURT OF APPEALS

FOR THE FIFTH CIRCUIT

No. 02-60288

DAVIS MOUNTAINS TRANS-PECOS HERITAGE
ASSOCIATION, a Texas non-profit corporation,

Petitioner,

versus

FEDERAL AVIATION ADMINISTRATION;
MARION C. BLAKEY, Administrator, FEDERAL
AVIATION ADMINISTRATION; NORMAN Y.
MINETA, SECRETARY, DEPARTMENT OF
TRANSPORTATION,

Respondents.

No. 03-10506

DAVIS MOUNTAINS TRANS-PECOS HERITAGE
ASSOCIATION; DALE TOONE; SUSAN TOONE;
TIM LEARY; REXANN LEARY; EARL BAKER;
SYLVIA BAKER; MARK DAUGHERTY; ANN
DAUGHERTY; DICK R. HOLLAND; J. P. BRYAN;
JACKSON BEN LOVE, JR.; KAARE J. REEME,

Plaintiffs-Appellants,

versus

UNITED STATES AIR FORCE; JAMES G. ROCHE;
Secretary United States Air Force; UNITED STATES
DEPARTMENT OF DEFENSE; DONALD H. RUMSFIELD,
Secretary of Defense,

Defendants-Appellees.

No. 03-10528

BUSTER WELCH; JOHN F. OUDT; LESA OUDT;
JOHN DIRK OUDT; CINDY ANN SPIRES; ET AL,

Plaintiffs-Appellants,

versus

UNITED STATES AIR FORCE; F. WHITTEN
PETERS, Secretary of the United States Air Force;
WENDELL L. GRIFFIN, Colonel, Commander,
7th Bomb Wing, Dyess Holloman Air Force Base;
CURTIS M. BEDKE, Brigadier General, Commander,
2nd Bomb Wing, Barksdale Air Force Base; UNITED
STATES DEPARTMENT OF DEFENSE; DONALD H.
RUMSFIELD, SECRETARY DEPARTMENT OF
DEFENSE,

Defendants-Appellees.

Petitions for Review of an Order of the
Federal Aviation Administration

Before REAVLEY, JONES and DENNIS, Circuit Judges.

REAVLEY, Circuit Judge:*

In these consolidated appeals, petitioners challenge various actions by the United States Air Force (Air Force) and the Federal Aviation Administration (FAA) in connection with the Realistic Bomber Training Initiative (RBTI).¹ Petitioners allege that the Air Force and FAA failed to follow procedures mandated by the National Environmental Policy Act, 42 U.S.C. §§ 4321-4370f (NEPA) and its implementing regulations, 40 C.F.R. §§ 1500.1-1508.28 (2003) (CEQ regulations), 32 C.F.R. §§ 989.1-989.38 (2004) (Air Force regulations), and ask this court to set aside those agency actions and remand to the agencies for NEPA-sufficient procedure.² We agree that the Environmental Impact Statement (EIS)

*Pursuant to 5TH CIR. R. 47.5, the Court has determined that this opinion should not be published and is not precedent except under the limited circumstances set forth in 5TH CIR. R. 47.5.4.

¹ A list of acronyms used in this opinion is appended.

² This case comes to us as two appeals from two district court decisions (*Davis Mountains Trans-Pecos Heritage Association v. U.S. Air Force*, 249 F. Supp. 2d 763 (N.D. Tex. 2003) and *Welch v. U.S. Air Force*, 249 F. Supp. 2d 797 (N.D. Tex. 2003)), consolidated for briefing, and a direct appeal from two orders of the FAA brought by Davis Mountains Trans-Pecos Heritage Association in which the Welch parties have intervened.

prepared by the Air Force and adopted by the FAA does not satisfy NEPA and therefore remand to the agencies to prepare a supplemental EIS in accordance with this opinion.

I. Background

The basis of petitioners' complaints is the RBTI, a plan to provide airspace and ground-based assets for realistic and integrated B-52 and B-1 Bomber flight training within 600 miles of Barksdale and Dyess Air Force Bases. The RBTI includes a Military Operations Area (MOA), linked to a Military Training Route (MTR) by an Electronic Scoring Site system. The MOA provides space, identified to civil and commercial aircraft, where military aircraft can practice air-to-ground and air-to-air training. The MTR is a flight corridor where pilots can practice low-altitude navigation and maneuvers.

Concluding that implementation of the RBTI would constitute a "major action" under NEPA, the Air Force prepared an EIS.³ The FAA participated in the NEPA process as a cooperating agency.⁴ The EIS analyzed three alternative locations for the RBTI and a no action alternative. Two months after issuing the final EIS, the Air Force issued a Rule of Decision (ROD) adopting its preferred

³ 42 U.S.C. § 4332(C).

⁴ 40 C.F.R. § 1501.6.

alternative (Alternative B). Alternative B, located mostly in western Texas, would modify and enlarge existing MTR Instrument Route 178 (IR-178) and create Lancer MOA by consolidating and expanding three existing MOAs. The FAA adopted the final EIS and approved Lancer MOA and the IR-178 modifications.

Petitioners are Davis Mountains Trans-Pecos Heritage Association (DMTPHA), a nonprofit corporation whose members are farmers, ranchers, and business people living and working in the areas underlying the RBTI airspace, and similarly situated named individuals. Concerned with potential impacts of the RBTI on underlying land, petitioners challenged the NEPA compliance of the Air Force and several named federal defendants in the district court. *Davis Mountains Trans-Pecos Heritage Association v. U.S. Air Force*, 249 F. Supp. 2d 763 (N.D. Tex. 2003); *Welch v. U.S. Air Force*, 249 F. Supp. 2d 797 (N.D. Tex. 2003) (hereinafter “Air Force cases”). Petitioners seek review of that court’s summary judgments in favor of defendants as well as the FAA’s approval of Lancer MOA and modified IR-178.

II. Jurisdiction

This court has jurisdiction to review the district court’s grants of summary judgment in the Air Force cases under 28 U.S.C. § 1291. We have jurisdiction to review the FAA’s approvals under 49 U.S.C. § 46110(a), providing for review of

FAA orders in the Courts of Appeals. We lack jurisdiction, however, to hear any claims of the Welch intervenors in the FAA appeal not raised by petitioners in that case. *United Gas Pipe Line Co. v. FERC*, 824 F.2d 417, 434-38 (5th Cir. 1987). In *United Gas*, we held that intervenors in a suit challenging FERC action under the Natural Gas Act could not raise issues in addition to those raised by petitioners, in order to prevent intervenors from effectively appealing outside the sixty day statutory period for appeal. *Id.* The same reasoning applies in the present case, where intervenors did not appeal the FAA decisions and filed their motion to intervene well outside the sixty day period for appeal provided for in § 46110(a). Therefore, we will not address intervenors' argument that the FAA failed to adequately consider the effects of the RBTI on Lubbock, Texas.

III. Standard of Review

We review the district court's grants of summary judgment in the Air Force cases *de novo*.⁵ Our review of the FAA orders is also *de novo*, and we may "affirm, amend, modify, or set aside any part" of the orders approving Lancer MOA and modified IR-178.⁶ As petitioners in both the Air Force cases and FAA appeal challenge those agencies' NEPA compliance, we must determine whether the

⁵ *Miss. River Basin Alliance v. Westphal*, 230 F.3d 170, 174 (5th Cir. 2000).

⁶ 49 U.S.C. § 46110(c).

actions complained of were arbitrary or capricious under the Administrative Procedure Act.⁷ Generally, agency action is arbitrary and capricious

if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.⁸

Preparation of an EIS under NEPA furthers two broad goals. First, it ensures that the agency will consider relevant factors when making its decision. Second, its disclosure requirements foster meaningful public participation in the decisionmaking process.⁹ NEPA does not, however, mandate a particular result.¹⁰

In determining the adequacy of an EIS, this court considers three factors:

- (1) whether the agency in good faith objectively has taken a hard look at the environmental consequences of a proposed action and alternatives;
- (2) whether the EIS provides detail sufficient to allow those who did not participate in its preparation to understand and consider the pertinent environmental influences involved; and
- (3) whether the EIS explanation of alternatives is sufficient to permit a reasoned choice among different courses of action.¹¹

⁷ 5 U.S.C. § 706(2)(A); *Sierra Club v. Sigler*, 695 F.2d 957, 964 (5th Cir. 1983).

⁸ *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

⁹ *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989).

¹⁰ *Westphal*, 230 F.3d at 175.

¹¹ *Id.* at 174.

The EIS must provide information satisfying these criteria, and its conclusions must be supported by evidence in the administrative record.¹²

IV. Environmental Effects of the RBTI

A. *Livestock*

Petitioners raise several challenges to the EIS's analysis of the RBTI's environmental effects. First, petitioners claim that the Air Force, and the FAA in adopting the EIS, did not adequately consider the effects of the proposal on the livestock on ranches underlying the RBTI route. Presumably relying on the principle that agencies must follow their own rules¹³, petitioners argue that the Air Force failed to take the requisite "hard look"¹⁴ at livestock impacts because it did not follow its 1993 handbook, "The Impact of Low Altitude Flights on Livestock and Poultry" (Handbook).¹⁵ Petitioners argue that, because the Air

¹² *Id.* at 174-75.

¹³ *Lyng v. Payne*, 476 U.S. 926, 934 (1986).

¹⁴ *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 374 (1989).

¹⁵ In its "Findings" section, the Handbook states:

Any establishment of new low altitude airspace will seek to minimize potential impacts on livestock and poultry. An initial consideration is the regional distribution of sensitive livestock and poultry operations in the geographical region being considered for low altitude flight. This regional distribution will be determined by identifying those counties that are among the leading counties for livestock and poultry commodities in their respective

Force did not undertake the county- and individual-level inquiry outlined in the Handbook, but instead relied on several studies of the effects of low-level overflights on livestock and a general overview of the underlying region, its analysis was inadequate under NEPA.

Petitioners rely on *Idaho Sporting Congress, Inc. v. Rittenhouse*, in which the Ninth Circuit invalidated a Forest Service EIS, because it analyzed impact on certain species on a “home range” scale, contrary to a Forest Service report stating, “the habitat needs of these species must be addressed at a landscape scale.”¹⁶ Contrary to *Rittenhouse*, however, cases have generally required that an agency pronouncement have the force and effect of law in order to bind the agency.¹⁷ To have the force and effect of law, an agency pronouncement

state. ...

In addition to consideration of counties, individual livestock and poultry operations within an area proposed for an MTR will also be considered.

¹⁶ 305 F.3d 957, 973-74 (9th Cir. 2002); see also *Utahns for Better Transp. v. U.S. Dep’t of Transp.*, 305 F.3d 1152, 1165 (10th Cir. 2002) (stating that “[a]gencies are under an obligation to follow their own regulations, procedures, and precedents, or provide a rational explanation for their departure” and invalidating EIS because agency did not follow its own regulation).

¹⁷ See, e.g., *Lyng*, 476 U.S. at 937 (stating that “not all agency publications are of binding force”); *Schweiker v. Hansen*, 450 U.S. 785, 789-90 (1981) (holding that Social Security Administration Claims Manual was not binding agency rule); *Fano v. O’Neill*, 806 F.2d 1262, 1264 (5th Cir. 1987) (holding that INS Operations Instructions did not bind agency “because they are not an exercise of delegated legislative power and do not

normally “must have been promulgated pursuant to a specific statutory grant of authority and in conformance with the procedural requirements imposed by Congress.”¹⁸ Petitioners do not argue, nor does the record show, that the Air Force’s Handbook was promulgated according to the APA’s procedural requirements. *See* 5 U.S.C. § 553. Thus the Air Force retained discretion to analyze impacts on livestock by methods other than those contained in the Handbook, and we must address the adequacy of the Air Force’s chosen method according to the arbitrary and capricious standard and the relevant criteria announced in *Westphal*.

Because determining whether the RBTI overflights will have a significant adverse effect on livestock requires resolution of issues of fact, we defer

purport to be anything other than internal house-keeping measures.”); *Western Radio Servs. Co. v. Espy*, 79 F.3d 896, 900-01 (9th Cir. 1996) (“[W]e will review an agency’s alleged noncompliance with an agency pronouncement only if that pronouncement actually has the force and effect of law.”); *Gatter v. Nimmo*, 672 F.2d 343, 347 (3d Cir. 1982) (holding that Veteran’s Administration publications did not bind agency, because they were not promulgated using APA procedural requirements for rulemaking); *Fed. Land Bank in Receivership v. Fed. Intermediate Credit Bank*, 727 F. Supp. 1055, 1058 (D. Miss. 1989) (holding that agency directive not promulgated according to APA procedure did not have force and effect of law).

¹⁸ *U.S. v. Fifty-Three Eclectus Parrots*, 685 F.2d 1131, 1136 (9th Cir. 1982); *see also Gatter*, 672 F.2d at 347; *McGrail & Rowley v. Babbit*, 986 F. Supp. 1386, 1393-94 (S.D. Fla. 1997); *Fed. Land Bank*, 727 F. Supp. at 1058.

substantially to the Air Force's expert analysis of the relevant data.¹⁹ The EIS and administrative record reveal that the Air Force considered several studies and comments regarding potential impacts on livestock, including those indicating adverse effects. "[I]n making the factual inquiry whether an agency decision was 'arbitrary or capricious,' the reviewing court 'must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.'"²⁰ After reviewing the administrative record, we conclude that the Air Force's determination that no conclusive evidence showed adverse effects, based on its consideration of relevant studies, was not a clear error of judgment. In addition, the Air Force included a discussion of these studies in the main body of the EIS and its appendices, providing "detail sufficient to allow those who did not participate in its preparation to understand and consider the pertinent environmental influences involved."²¹ We therefore find the EIS's analysis of livestock impacts adequate.

¹⁹ *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 377 (1989) (quoting *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976)).

²⁰ *Marsh*, 490 U.S. at 378 (quoting *Citizens to Preserve Overton Park v. Volpe*, 401 U.S. 402, 416 (1971)).

²¹ *Westphal*, 230 F.3d at 174.

Because the Air Force's analysis complied with NEPA, the FAA's adoption of this portion of the EIS did not violate its obligations under that statute.²²

B. *Economic Effects*

Petitioners' second challenge to the EIS's adequacy concerns its analysis of the RBTI's economic impacts. Specifically, petitioners fault the Air Force and FAA for failing to analyze in depth the effect that the RBTI will have on the values of underlying land for ranching, eco-tourism, and hunting lease income.²³ As studies regarding the effects of low level overflights on rural land values were unavailable, 40 C.F.R. § 1502.22 governed the Air Force's duty to obtain this information. That section provides: "[w]hen an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking." *Id.* It also mandates certain procedures, but only where adverse effects are "reasonably foreseeable." *Id.*

²² 40 C.F.R. § 1506.3(a) (stating that cooperating agency may adopt lead agency's EIS if it concludes that its NEPA requirements have been satisfied).

²³ *See* 42 U.S.C. § 4332(C)(ii) (stating that EIS must discuss environmental effects of proposed action); 40 C.F.R. § 1508.8 (defining "effects" to include economic impacts).

In response to facts similar to the present case, two courts have held that impacts of overflights on land values are not reasonably foreseeable and thus do not require detailed analysis.²⁴ We find the reasoning of these courts persuasive. As in *Lee v. U.S. Air Force*, the flights in the present case will take place along a corridor miles wide, and primarily over areas that have been overflown for years, and potential noise increases experienced by owners of land underlying the RBTI are not significant.²⁵ In addition, the Air Force examined available studies indicating that aircraft overflights near air bases and airports did not cause significant economic impacts. We find the Air Force's consideration of economic impacts adequate. Accordingly, neither the Air Force's nor the FAA's determination that economic impacts were unlikely was arbitrary or capricious.

C. *Wake Vortex Effects*

Petitioners also allege that the Air Force and FAA failed to take a "hard look" at the effects of wake vortices (trails of disturbed air) that would be

²⁴ *Lee v. U.S. Air Force*, 354 F.3d 1229, 1241-42 (10th Cir. 2004) (holding Air Force's conclusion that decreased land values were not reasonably foreseeable and would be minimal based on prior airspace use and dispersion of flight paths reasonable); *Citizens Concerned About Jet Noise, Inc. v. Dalton*, 48 F. Supp. 2d 582, 598 (E.D. Va. 1999), *aff'd without opinion*, 217 F.3d 838 (4th Cir. 2000); *see also Norfolk v. U.S. EPA*, 761 F. Supp. 867, 887-88 (D. Mass. 1991) (upholding EIS that did not quantify property value decline due to proposed action where EIS stated that such decline was unquantifiable), *aff'd without opinion*, 960 F.2d 143 (1st Cir. 1992).

²⁵ *See* 354 F.3d at 1241-42.

generated by aircraft training in the RBTI. Petitioners argue that wake vortices damage ground structures like the windmills used by ranchers to provide water to livestock and wildlife. The Air Force responds that the EIS's discussion of wake vortex effects is adequate, because it "provides a narrative description of what causes vortices and points out that actual, not modeled, B-52 aircraft flying as low as 300 feet [above ground level] ... would generate a surface wind speed of less than 4 mph." Although CEQ regulations require agencies to "make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement,"²⁶ the EIS does not reveal the source of this data. Petitioners point out that the information came from an e-mail from the Boeing Company, stating that tests conducted between 1970 and 1986 "at flight level 300" resulted in "[n]o effect on the ground from the B-52 vortexes."

The Air Force presumably contends that "flight level 300" refers to 300 feet above ground level. In fact, it refers to 30,000 feet above ground level.²⁷ It is not clear whether the Boeing e-mail was a miscommunication, because the Air

²⁶ 40 C.F.R. § 1502.24.

²⁷ Petitioners note that "flight level" is defined at 14 C.F.R. § 1.1 as "three digits that represents hundreds of feet. For example, flight level 250 represents a barometric altimeter indication of 25,000 feet ..." This court also found the term's definition through a simple internet search. See <http://encyclopedia.thefreedictionary.com/Flight%20level>.

Force did not include the actual Boeing study in the administrative record.

Therefore, the e-mail alone cannot provide an adequate basis for the Air Force's conclusion that flights at 300 feet above ground level would generate low surface winds. To uphold that conclusion, we must find a more satisfactory basis than the Boeing e-mail.

The Air Force also relied on a graph providing a "rough estimate" of B1-B wake vortex effects at low altitudes. The administrative record shows that the equation used to generate the chart came from a 1949 aerodynamics text by James Dwinnell, but the Air Force did not include the equation or its inputs in the EIS or administrative record.²⁸ Petitioners urge this court to consider two extra-record documents - excerpts from the Dwinnell text and its expert's declaration - to determine whether the Air Force's chart was reliable and thus constituted a hard look at wake vortex effects.

Generally, the "record rule" limits judicial review of agency action to the administrative record before the agency at the time of its decision.²⁹ This court

²⁸ 40 C.F.R. § 1502.24 states: "Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used ... for conclusions in the statement."

²⁹ *Fla. Power & Light v. Lorion*, 470 U.S. 729, 743-44 (1985).

has recognized an exception to the general rule, however, where examination of extra-record materials is necessary to determine whether an agency has adequately considered environmental impacts under NEPA.³⁰ In the present case we find it necessary to look at the Dwinnell text to determine whether the Air Force's use of the equation therein was sound. Because we lack technical expertise in aerodynamics, we also consider extra-record materials to aid our understanding of the science involved.³¹

Our review of the Dwinnell text and the declarations of petitioners' and the Air Force's experts reveal that the Air Force failed to take a hard look at the possible effects of wake turbulence on ground structures. Although an illustration in the EIS shows that the wake turbulence of an airplane at 300 feet above ground would generate wind speed around two mph at thirty-five feet (the height of a windmill as depicted on the illustration), the Air Force's own expert, Dr. Ojars Skujins, admits that a B1-B at this altitude could generate wind speeds

³⁰ *Sierra Club v. Peterson*, 185 F.3d 349, 369-70 (5th Cir. 1999), *vacated on other grounds on reh'g*, 228 F.3d 559 (5th Cir. 2000); *Sabine River Auth. v. Dep't of Interior*, 951 F.2d 669, 678 (5th Cir. 1992); *accord Nat'l Audubon Soc'y v. Hoffman*, 132 F.3d 7, 14-15 (2d Cir. 1997).

³¹ *Friends of Payette v. Horseshoe Bend Hydroelectric Co.*, 988 F.2d 989, 997 (9th Cir. 1993) (stating that courts may consider extra-record evidence when "necessary to explain technical terms or complex subject matter.").

as high as forty-seven mph just twenty-two feet above ground. Dr. Skujins also declares that the chart generated by the Air Force based on the Dwinnell equation is “oversimplified” and “does tend to underestimate the maximum vortex strength.” Dr. Skujins concludes, however, that the Air Force was correct in finding that vortices would not create a significant impact, because average wind speeds in the RBTI area are similar to wind speeds generated by wake vortices.

The Air Force is entitled to rely on its own qualified experts’ reasonable opinions in determining the significance of impacts.³² The Air Force did not rely on Dr. Skujins’s opinion, however, in addressing the wake vortex issue in the EIS process, but rather relied on the Boeing e-mail and the chart generated from the Dwinnell equation. As discussed above, neither document presents a reliable picture of the impact of wake vortices on surface structures, misinforming both public participation and the Air Force’s conclusion.³³ The Air Force’s reliance

³² *Sabine River Auth.*, 951 F.2d at 678.

³³ *See Methow Valley*, 490 U.S. at 349. Although the Air Force now argues that wake vortex effects would be speculative and thus need not be discussed in the EIS, during the NEPA process they took the position that wake vortex effects would not be significant based on the two pieces of evidence discussed. Courts may only uphold agency action on the bases articulated by the agency at the time of the action, and may not consider appellate counsel’s “post hoc rationalizations.” *Motor Vehicle Mfrs. Ass’n*, 463 U.S. at 49-50.

on this data cannot satisfy the hard look requirement of NEPA and thus this portion of the EIS is inadequate.³⁴ This determination applies equally to the FAA, which, as an adopting agency, was required to satisfy itself that the wake vortex discussion in the EIS complied with NEPA.³⁵

D. Effects on Civil and Commercial Aviation

Petitioners' final challenge to the EIS's analysis of environmental effects concerns potential conflicts between training flights in IR-178 and Lancer MOA and civil and commercial aviation in western Texas. Petitioners contend that the Air Force's conclusion in the EIS that the RBTI would have little effect on airspace management is contradicted by an FAA study in the administrative record. In addition, petitioners claim that the Air Force violated its own regulations by failing to adequately address mitigation measures proposed by the FAA study in the EIS.

The Air Force argues that effects on aviation are "aeronautical" rather than "environmental," and thus do not require discussion in an EIS. Counsel for the Air Force acknowledged in oral argument, however, the difficulty involved in

³⁴ See *Westphal*, 230 F.3d at 174-75 (stating that "the conclusions upon which an [EIS] is based must be supported by evidence in the administrative record.")

³⁵ 40 C.F.R. § 1506.3(a); Forty Most Asked Questions Concerning CEQ's National Environmental Policy Act Regulations, question 30, 46 Fed. Reg. 18026 (Mar. 23, 1981).

drawing a bright line between effects that are purely “aeronautical” and those that are “environmental.” Because “[e]nvironment’ means something more than rocks, trees, and streams, or the amount of air pollution [- i]t encompasses all the factors that affect the quality of life,”³⁶ we are reluctant to draw such a line.

Civil and commercial aviation are part of the modern human environment broadly defined, and because the RBTI would impact aviation, NEPA required the Air Force to address that impact in the EIS.³⁷

“It is a familiar rule of administrative law that an agency must abide by its own regulations.”³⁸ The Air Force regulations implementing NEPA provide that an EIS must include “responses to comments on the Draft EIS by modifying the text and referring in the appendix to where the comment is addressed or providing a written explanation in the comments section, or both.”³⁹ In the present case the Air Force responded to the FAA solely by modifying the text. It did not refer in the appendix to where the FAA’s comments were addressed or provide any written explanation, neglecting much of its responsibilities under the

³⁶ *Jones v. U.S. Dep’t of Hous. and Urban Dev.*, 390 F. Supp. 579, 591 (E.D. La. 1974).

³⁷ 42 U.S.C. § 4332(C)(i).

³⁸ *Fort Stewart Sch. v. Fed. Labor Relations Auth.*, 495 U.S. 641, 654 (1990).

³⁹ 32 C.F.R. § 989.19(d).

regulation. We therefore conclude that this portion of the EIS is also inadequate.

V. Mitigation

A. *Omission of Mitigation Discussion in Draft EIS*

In addition to their complaints regarding the EIS's environmental inadequacies, petitioners take issue with several aspects of the EIS's discussion of mitigation measures. First, they argue that the Air Force and FAA violated NEPA by failing to discuss mitigation measures in the draft EIS. CEQ regulations require agencies to prepare a draft EIS prior to issuance of a final EIS.⁴⁰ The draft "must fulfill and satisfy to the fullest extent possible the requirements established for final statements."⁴¹ A final EIS must contain a discussion of possible mitigation measures.⁴² Whether the draft EIS must also contain a discussion of mitigation measures is a question of first impression in this circuit.⁴³

⁴⁰ 40 C.F.R. § 1502.9(a).

⁴¹ *Id.*

⁴² *Methow Valley*, 490 U.S. at 351-52.

⁴³ As yet, the issue appears to have been directly addressed by only the Eastern District of California, in *Westlands Water District v. U.S. Dep't of the Interior*, 275 F. Supp 2d 1157, 1187-89 (E.D. Cal. 2002). In that case, the Department of the Interior

The Supreme Court has stated that, absent a discussion of possible mitigation measures, “neither the agency nor other interested individuals can properly evaluate the severity of the adverse effects.”⁴⁴ Although the Court there referred to inclusion of a mitigation discussion in a final EIS, the same reasoning can apply to the draft. Under the structure created by the CEQ regulations, the lead agency must request comments from other agencies and the public on the draft EIS before preparing the final EIS.⁴⁵ Following that structure in the present case, the Air Force provided a public comment period on the draft which closed before the Air Force issued the final EIS. Thus, by excluding mitigation measures from the draft, the Air Force prevented the public from commenting on those measures during the comment period.

On the other hand, even if the agency omits the mitigation discussion from the draft, nothing prevents the public from commenting on the mitigation measures once the agency issues the final EIS, and petitioners do not argue that

prepared a draft EIS without a discussion of mitigation measures that were later included in the final EIS. The court found the EIS inadequate under NEPA. The Ninth Circuit later reversed the district court, finding that the Department’s draft EIS did contain a discussion of mitigation measures. 376 F.3d 853, 872-75 (9th Cir. 2004). Thus, the court of appeals did not address the question of whether the final EIS would have been adequate had the draft not contained such a discussion.

⁴⁴ *Methow Valley*, 490 U.S. at 352.

⁴⁵ 40 C.F.R. § 1503.1.

they were prevented from commenting during the two months between the issuance of the final EIS and the Air Force's ROD.⁴⁶ Given these considerations, we find it unnecessary in the present case to adopt a rigid rule that a draft EIS *must* contain a mitigation discussion, although we note that inclusion of such a discussion is ideal.

B. Adequacy of Mitigation Discussion in Final EIS

Petitioners also attack the discussion of mitigation measures in the final EIS and those adopted by the Air Force in its ROD.⁴⁷ First, petitioners argue that the final EIS does not adequately discuss measures to mitigate potential adverse effects on underlying livestock operations. Contrary to petitioners' assertions, however, the final EIS does recognize that overflights may injure livestock and provides mitigation in the form of a claims process for ranchers whose livestock suffer injury. In light of the Air Force's non-arbitrary

⁴⁶ See 40 C.F.R. § 1503.1(b) ("An agency may request comments on a final environmental impact statement before the decision is finally made. In any case other agencies or persons may make comments before the final decision"). The public can access the final EIS under the Freedom of Information Act. 42 U.S.C. § 4332(C). The agency may not issue its decision until thirty days after publication of notice of the final EIS in the Federal Register. 40 C.F.R. § 1506.10(b)(2). Thus, the public can obtain and comment on the final EIS during that period.

⁴⁷ CEQ regulations require a discussion of possible mitigation measures in an EIS. 40 C.F.R. §§ 1502.14(f), 1502.16(h).

conclusion that adverse effects on livestock were unlikely, we find the Air Force's limited discussion of measures to mitigate those effects reasonable.⁴⁸

Petitioners also argue that reducing the annual number of sorties from the proposed 2,600 to 1,560 and utilizing existing military airspace to the maximum extent possible in creating Lancer MOA did not provide any mitigation because the RBTI would still impose more overflights on certain areas than they had experienced before implementation of the RBTI. This argument is premised on a misunderstanding of the term "mitigation." The CEQ regulations define "mitigation" as "[a]voiding the impact altogether by not taking a certain action or parts of an action" or "[m]inimizing impacts by limiting the degree or magnitude of the action and its implementation."⁴⁹ By reducing the number of sorties proposed for Alternative B by over 1,000 and avoiding creation of new airspace, the Air Force limited the magnitude of the RBTI. Thus, petitioners' argument that these measures did not truly "mitigate" is without merit, and the EIS is not invalid for failure to adequately address mitigation measures.

⁴⁸ See *Izaak Walton League of Am. v. Marsh*, 655 F.2d 346, 377 (D.C. Cir. 1981) ("NEPA does not require federal agencies to examine every possible environmental consequence. Detailed analysis is required only where impacts are likely.")

⁴⁹ 40 C.F.R. § 1508.20.

VI. Extra-Record Materials

In addition to the evidence pertaining to wake vortex effects, petitioners sought in the Air Force cases to introduce extra-record evidence regarding livestock, socioeconomic, and noise effects. The district court excluded all extra-record submissions. Petitioners argue that, by not considering the extra-record evidence, the district court could not adequately review the Air Force's NEPA compliance.

Because district courts have discretion to consider extra-record evidence, we review the district court's decision not to consider such evidence for abuse of discretion.⁵⁰ "A district court abuses its discretion if it: (1) relies on clearly erroneous factual findings; (2) relies on erroneous conclusions of law; or (3) misapplies the law to the facts."⁵¹ In the present case, the district court correctly stated the law regarding extra-record evidence in NEPA cases.⁵² Without

⁵⁰ *Northcoast Envtl. Ctr. v. Glickman*, 136 F.3d 660, 665 (9th Cir. 1998); *Hoffman*, 132 F.3d at 16; *see Davidson Country Oil Supply Co. Inc. v. Klockner, Inc.*, 908 F.2d 1238, 1245 (5th Cir. 1990) (stating that "[t]he trial court's discretion to admit or exclude evidence is generally broad").

⁵¹ *McClure v. Ashcroft*, 335 F.3d 404, 408 (5th Cir. 2003).

⁵² *Davis Mountains*, 249 F. Supp. 2d at 775-76; *Welch*, 249 F. Supp. 2d at 809-10; *see supra* section IV.C.

discussing its rationale, however, it excluded all of petitioners' proffered extra-record evidence.

As discussed in section IV.C., consideration of the Dwinnell text and expert declarations is necessary to determine whether the Air Force took a hard look at wake vortex effects. Thus, by excluding that evidence, the district court "misapplie[d] the law to the facts." Because this court has reviewed the extra-record submissions in its *de novo* review, however, we need not remand to the district court, but instead dispose of this issue by remanding to the Air Force to prepare an adequate supplemental EIS.

The remaining items of evidence consist of declarations of DMTPHA members and experts on livestock, economic, and noise effects of the RBTI. We conclude that the district court did not abuse its discretion in excluding this evidence. The DMTPHA members' declarations are largely cumulative of evidence already in the administrative record. In addition, the Air Force was entitled to rely on the reasonable opinions of its own experts regarding livestock, economic, and noise effects.⁵³ None of petitioners' proffered evidence on these issues shows that those experts' opinions were unreasonable, but instead

⁵³ *Sabine River Auth.*, 951 F.2d at 678.

presents opposing expert opinions. Because the Air Force's reliance on its own experts does not render its decisions arbitrary and capricious, admission of petitioners' opposing expert opinions would not show that the Air Force failed to take a hard look at these effects. Thus, admission of petitioners' extra-record evidence on all issues other than wake vortex was unnecessary to determine whether the Air Force adequately considered environmental impacts of the RBTI⁵⁴, and the district court's exclusion of that evidence was not an abuse of discretion.

VII. NEPA Documentation for Existing IR-178

Petitioners also claim that the Air Force failed to prepare necessary supplemental EIS's for IR-178 due to changes in the route and underlying land since the route's creation in 1985. CEQ regulations require agencies to supplement an EIS if the agency makes substantial changes to the proposed action or significant new circumstances or information arise bearing on the proposed action or its impacts.⁵⁵ A claim asserting that NEPA documentation must be supplemented has three elements: (1) ongoing or remaining federal

⁵⁴ See *Sierra Club v. Peterson*, 185 F.3d 349, 369-70 (5th Cir. 1999), *vacated on other grounds on reh'g*, 228 F.3d 559 (5th Cir. 2000); *Sabine River*, 951 F.2d at 678; *accord Nat'l Audubon Soc'y v. Hoffman*, 132 F.3d 7, 14-15 (2d Cir. 1997).

⁵⁵ 40 C.F.R. § 1502.9(c)(1).

action and (2) new circumstances or information relevant to the environmental impact of the proposed action that are (3) significant enough to warrant supplementation of existing NEPA documents.⁵⁶

The district court held this claim time-barred, finding that the Air Force's alleged NEPA failures occurred more than six years before petitioners filed suit.⁵⁷ Although NEPA and the APA do not contain limitations periods, this court has held that claims under the APA are subject to the general six-year statute of limitations for claims against the government.⁵⁸ The limitations period begins to run when the right of action first accrues.⁵⁹ Because petitioners allege

⁵⁶ *Marsh*, 490 U.S. at 374.

⁵⁷ *Davis Mountains*, 249 F. Supp. 2d at 794-96. A short history of IR-178 is necessary to understand petitioners' complaint. The Air Force completed an Environmental Assessment (EA) and established the route in 1985 as IR-165. When the Air Force combined IR-165 with IR-128/180 in 1991, it changed the route name to IR-178. In 1994 an alternate exit was added to the route, taken from IR-144. The Air Force has no NEPA documentation for IR-144. Petitioners contend that these changes, in addition to changes in underlying land use, necessitated preparation of some kind of NEPA documentation - either a supplemental EA or EIS.

⁵⁸ 28 U.S.C. § 2401(a) (“[E]very civil action commenced against the United States shall be barred unless the complaint is filed within six years after the right of action first accrues.”); *Geyen v. Marsh*, 775 F.2d 1303, 1306-07 (5th Cir. 1985); *see also Jersey Heights Neighborhood Ass’n v. Glendening*, 174 F.3d 180, 186 (4th Cir. 1999).

⁵⁹ 28 U.S.C. § 2401(a); 5 U.S.C. § 704; *Glendening*, 174 F.3d at 186.

agency inaction or delay under 5 U.S.C. § 706(1), we must determine whether this cause of action accrued more than six years before petitioners brought suit.

Petitioners argue that the limitations period does not apply to its IR-178 claim, because the Air Force's actions regarding IR-178 are ongoing. At least one court has concluded that the six-year limitations period does not apply to claims of unlawful delay under § 706(1), reasoning that unlawful delay of a statutory duty is a continuing violation of the statute.⁶⁰ Applying this line of reasoning in the present case would effectively remove the limitations period from claims that an agency has unlawfully delayed supplementation of NEPA documents, because a necessary element of such a claim is ongoing agency action.

We find the better view to be that a claim for agency delay in supplementing NEPA documents accrues when circumstances requiring supplementation first arise. Such a view prevents plaintiffs from circumventing the limitations period by phrasing their complaints against agencies as continuous delay (from the moment they failed to do something required by NEPA) rather

⁶⁰ *Am. Canoe Ass'n v. U.S. EPA*, 30 F. Supp. 2d 908, 925-26 (E.D. Va. 1998) (stating that applying limitations period to claim of unlawful delay would be "grossly inappropriate, in that it would mean that [the agency] could immunize its allegedly unreasonable delay from judicial review simply by extending that delay for six years.")

than a failure to act at a discrete point in time. Petitioners argue that certain modifications to IR-178 required supplemental NEPA documentation and that the Air Force did not prepare it. That cause of action accrued when the modifications were implemented without the required documentation. Because all modifications that may have warranted supplementation occurred more than six years before petitioners filed suit, petitioners' supplementation claim is barred.⁶¹

VIII. FAA's Procedure on Limited Remand

As published in the National Flight Data Digest, modified IR-178 included eleven segments with floor altitudes lower than those evaluated in the EIS. The FAA claimed this was an inadvertent error and this court granted a limited remand to correct it. Petitioners now argue that the FAA failed to follow its own regulations in making the correction.⁶²

⁶¹ Petitioners also assert that the original EA for IR-165 was insufficient under NEPA. This claim concerns past, rather than continuing, agency action (the Air Force's adoption of the EA). Because this past action occurred in 1985, the claim is barred by 28 U.S.C. § 2401(a).

⁶² Regardless of whether the FAA followed its own procedures on the limited remand, petitioners do not contest that the RBTI altitudes now conform to those evaluated in the EIS. Thus, their original argument that implementation of unevaluated adverse effects (lower altitudes) invalidates the EIS is now moot.

The FAA's Order on Special Military Operations, FAA Order 7610.4J, provides certain procedures for establishing or modifying a MTR. Order 7610.4J requires, *inter alia*, a certain form, coordination with the Regional Air Traffic Control Center and others, and consideration of minimization of disturbance to persons and property on the ground. The FAA did not follow these procedures on remand, and argues that Order 7610.4J does not apply to corrections like those at issue, which originate within the FAA. We find the FAA's argument persuasive. Order 7610.4J speaks of route revisions sought by "military unit[s]," not ministerial revisions to correct internal error. Moreover, the FAA sought the remand to correct the altitudes to conform to those in the EIS, which had already considered minimization of ground disturbance. Because the result would be the same—modification of the altitudes to conform to the EIS—whether the FAA followed the procedure of Order 7610.4J or not, petitioners have not been prejudiced by the FAA's chosen procedure on remand, and we see no reason to invalidate the correction.⁶³

⁶³ *Pacific Molasses Co. v. FTC*, 356 F.2d 386, 390 (5th Cir. 1966). Petitioners also argue that the FAA exceeded the scope of the limited remand by issuing an Addendum to the Lancer MOA NRDD. Petitioners contend that the FAA issued this document to shore up its assertion that the NRDD served as the ROD for both the Lancer MOA and modified IR-178 (see discussion below). As discussed in the next section, we find the NRDD as it existed before the FAA added the Addendum adequate as a ROD for the entire RBTI. Thus the FAA did not exceed the scope of the limited remand by issuing

IX. ROD for IR-178 Modifications

Lastly, petitioners argue that the FAA failed to issue a ROD for the IR-178 modifications.⁶⁴ The FAA responds that, because IR-178 and Lancer MOA are “environmentally and aeronautically linked,” its Non-Rulemaking Decision Document (NRDD) of December 11, 2001 for Lancer MOA serves as the ROD for both Lancer MOA and modified IR-178. Because we find the EIS inadequate and therefore must set aside both the Air Force’s and FAA’s RODs approving the RBTI, we need not address this issue.

X. Conclusion

For the foregoing reasons we vacate the decisions of the district court, the Air Force ROD and the FAA orders approving the RBTI. We remand to the Air Force and FAA to prepare a supplemental EIS which adequately addresses wake

the Addendum, which states: “[b]eyond describing these inadvertent altitude discrepancies and documenting their correction, this addendum does not otherwise reopen the [] NRDD.”

⁶⁴ Petitioners’ additional argument that the FAA failed to evaluate environmental factors within the NEPA process is without merit. Petitioners argue that the FAA violated NEPA by conducting studies after the Air Force published the final EIS. NEPA, however, allows a cooperating agency to adopt a lead agency’s EIS after its own review. 40 C.F.R. § 1506.3. Thus, in order for a cooperating agency to adopt the lead agency’s EIS, the NEPA process actually requires the cooperating agency to do some independent study *after* the final EIS has been prepared. Petitioners do not offer any support for the notion that the “NEPA process” concludes once the lead agency issues the final EIS.

vortex impacts and FAA comments as required by CEQ and Air Force regulations.

Appendix

1. APA - Administrative Procedure Act
2. CEQ - Council on Environmental Quality
3. DMTPHA - Davis Mountains Trans-Pecos Heritage Association
4. EIS - Environmental Impact Statement
5. FAA - Federal Aviation Administration
6. IR - Instrument Route
7. MOA - Military Operations Area
8. MTR - Military Training Route
9. NEPA - National Environmental Policy Act
10. NRDD - Non-Rulemaking Decision Document
11. RBTI - Realistic Bomber Training Initiative
11. ROD - Record of Decision