2 August 2005

Inquiry Response

Re: BI-0180 (CT-0752) DYESS AFB and RBTI Litigation - Follow-up Questions

Requester: BRAC Commission (Arthur Beauchamp)

Reference: BI-0135 (CT-0551) Dyess AFB and RBTI Litigation, 19 July 2005

Commission Provided Background: To help us better understand the scoring method for instrument routes and airspace training ranges please provide clarification to the Air Force's statement below:

"Installations were not scored on the altitude restrictions of instrument routes. The scoring methodology only considered the relative distance of entry and exit points to the subject installations. The greater the number of routes an installation had available within the prescribed distance of 300 nautical miles for the Bomber MCI, the better the installation's MCI score."

Questions:

Question 1: Based on our reading of the above statement there was no consideration given to the quality of instrument routes (IR) [and special use airspace and training ranges]. The score was based on the proximity and number of instrument routes [and special use airspace and training ranges] to an installation. Was the quality of an IR [and special use airspace and training ranges]considered? If no, why not?

NOTE: The AF BRAC office called the BRAC Commission Staff, for clarification. The question asks for IR quality but intended to ask about the quality of airspace in general as mentioned in the background above. This is an airspace question, not just an IR question. On 3 Aug 05, members of the AF BRAC Staff went for a face to face meeting on this subject and discussed it for approximately one hour. The answer paraphrases that discussion.

Response 1: Yes. Quality was definitely considered in AF airspace analysis. USAF Ranges and Airspace uses proximity, time (to the airspace), volume and attributes as the qualities applied to airspace. *Proximity*, in and of itself, is very important quality, particularly to slow moving aircraft that take more time in transit or small aircraft with limited range. *Time* is the availability of the airspace. Saturated airspace or airspace restricted by environmental or seasonal restrictions is of less military value. *Volume* does not neatly apply to low level routes because they are long, linear tracks and vary in all aspects from beginning to end, but volume is very important when considering military operating areas, whiskey areas and restricted areas (ranges) that host all training types from small single ship to large force exercises. In general, bigger volume is better because it allows crews to fly at all altitudes and attack targets from multiple directions. Air to air combat is less constrained and more realistic in a larger area. Another very important aspect of airspace is *Attributes*. *Attributes* include threats, over water, lights out, weapons delivery, chaff, flare, supersonic, electronic combat, scoring, terrain, LASER ops, etc. Attributes were collected in WIDGET questions and applied in the MCI formula #1245, *Proximity to Airspace Supporting Mission*, by weighting airspace volume (15%), operating hours (15%), scoreable range (10%), air to ground weapons delivery (11.25%), live ordnance (3.75%),

2 August 2005

Inquiry Response

Re: BI-0180 (CT-0752) DYESS AFB and RBTI Litigation - Follow-up Questions

IMC weapons release (5%), electronic combat (10%), laser use authorized (10%), lights our capable (10%), flares authorized (5%) and chaff authorized (5%). While this formula does not address IR routes it certainly illustrates the vital importance placed on airspace attributes for other types of special use airspace (restricted areas, whiskey areas, military operating areas, ATCAAs, etc.).

The quality of *Quantity* was scored by determining the number of IR entry and exit points. *Quantity* statistically covers the "diversity of terrain" mandated by BRAC Law without creating specific requirements for terrain types. It also allows for greater diversity in training—flying the in the same airspace countless times is less tactically stimulating and challenging. The IR question, and the companion mathematical equation that yielded an MCI score, looked at the number of IR entry and exit points within the prescribed distance from the installation. The distance standard was dependent on the MCI being considered. For the bomber MCI, that distance was 300 NM. The greater the number of instrument routes and the closer the entry and exit points the better the score.

A mathematical model able to account for detailed elements such as altitude blocks, minimum altitudes allowed, terrain types, restrictions to operations, climactic variations and other attributes—all of which can change within an IR route and some which can change day to day within an IR route—was too complex. It is difficult to compare a mountainous route to a route over flat terrain; to compare one that is forested, to one over desert; to compare a single route that went for hundreds of miles, to one that did not; or an instrument route with a narrow corridor to one that offered a wide corridor. One is not necessarily better but variety is definitely better. The BCEG, therefore, agreed that the installation's IR airspace quality is best reflected by the number of opportunities to conduct low-level training within the prescribed distance for the MCI. More instrument route low-level opportunities yielded a better score and is a strong measure of a supportive training environment.

BRAC Law directs the SECDEF to consider [emphasis added]:

> " The selection criteria prepared by the Secretary shall ensure that military value is the primary consideration in the making of recommendations for the closure or realignment of military installations under this part in 2005" and that Military value must at a minimum preserve **training areas suitable for maneuver by ground, naval, or air** forces...**throughout a diversity of climate and terrain areas in the United States**...."

The MCIs, by not discriminating against or for one type of terrain, meet the legal requirement for diverse terrain. All types of terrain are important because our enemies reside in all types of places. Tactics and techniques for flat or rolling terrain differ from mountainous terrain. Aircrews need a variety of training for full proficiency in all types of tactical environments.

~~Military judgment, and A large number of~~ comprehensive and varied airspace and ranges throughout the country ensure that we met this requirement.

2 August 2005

Inquiry Response

Re: BI-0180 (CT-0752) DYESS AFB and RBTI Litigation - Follow-up Questions

Question 2: Same question but applied to airspace training ranges. In scoring a range did the Air Force factor in the quality or capability of a training range (i.e. operating hours, laser use capability, lights out capable, flares and chaffs capable, etc.,). If no, why not?

Response 2: Yes. Please reference the answer above. In short, the Air Force did factor operating hours, laser use capability, lights out, flares and chaff, etc. into its range scores. The Air Force Volume V, Part II, describes the formula process in detail. The website follows:

Department of the Air Force: Analysis and Recommendations BRAC 2005;
Volume V, Part 2 of 2.
http://www.defenselink.mil/brac/pdf/VAirForce-o.pdf

Question 3: Were instrument routes and training ranges not yet FAA approval to operate (still in works), considered in installation's score?

Response 3: The date established for acceptance of information regarding instrument routes and ranges was the same as for all other data reported in WIDGET: 30 Sep 2003. This date was established by the BCEG and provided a consistent, measurable, non-moving standard against which all installations could be fairly and equitably compared.

Approved

DAVID L. JOHANSEN, Lt Col, USAF
Chief, Base Realignment and Closure Division