Today the United States has entered an era in which both its strategic options and its challenges have broadened. The number of regions in which U.S. forces are likely to operate has multiplied, and the nature, scope, and range of political objectives are more varied as well. Although the world has always held diverse dangers, the United States today has greater latitude to act upon threats to its interests and values. At the same time, access to real-time, detailed information on global events by publics has created heightened expectations, often resulting in demands that “something be done,” and be done quickly.

The effect of these developments on the U.S. Air Force has been profound. We have observed that there has been an increase in the number and duration of deployments by Air Force personnel to austere forward locations, supported by a downsized and malpositioned overseas basing structure. As a Cold War force, the Air Force was structured to fight a known enemy from well-equipped main operating bases. In the current environment, the Air Force has found it difficult to maintain high levels of readiness in the face of repeated deployments away from its home bases as well as demands for sustained presence at austere forward locations. The new operating environment requires a more agile force that can deploy rapidly and regularly, while maintaining the quality and training of its personnel.

In response to these shifting requirements, the Air Force has been restructuring itself into an EAF. Although the service has made progress in instituting the organizational aspects of moving to an EAF, we believe that there are additional concerns that need to be
addressed if the Air Force is to become truly expeditionary. The Air Force needs a strategy for deploying and employing its forces overseas in the face of significant uncertainty regarding its operating locations. We have proposed such a strategy, which we call flexbasing, as a way to manage the “base access issue.” However, access is not the only reason the Air Force needs a basing strategy. Such a strategy is also needed to provide expeditionary aerospace forces with the operational capability they need to perform their mission. To conclude our discussion of the flexbasing strategy, we will bring together the issues we have discussed in the previous chapters to show how the flexbasing strategy would affect the employment of expeditionary aerospace forces.

FLEXBASING, AGILE LOGISTICS, AND FORCE PROTECTION

In this report, we deemed two flexbasing elements to be especially vital to the success of the strategy: agile logistics and a robust force protection capability. Figure 5.1 conceptually illustrates the close relationship that exists between these two capabilities and the basing

![Diagram](Figure 5.1—Agile Logistics, Force Protection, and Basing)
concepts available to an expeditionary force. The levels of agile logistics support and the capability to operate from bases in the face of threats largely determine the range of bases that can support expeditionary operations. The basing in turn indicates whether long- or short-range weapon systems must be used, a factor in determining the intensity of the combat operations that can be brought to bear. By making available a wide range of basing alternatives, agile logistics and force protection will provide expeditionary aerospace forces the flexibility that they need to take advantage of basing opportunities. This will significantly enhance both access and the array of operational concepts open to joint commanders.

**BOMBS ON TARGET: FLEXBASING AND OPERATIONAL EFFECTIVENESS**

As Figure 5.1 illustrates, agile logistics and force protection are parameters that will enable the operational capability of expeditionary aerospace forces. We used these two elements of flexbasing, along with another salient aspect—FSLs—to gauge the degree to which the strategy might enhance the operational effectiveness of expeditionary aerospace forces. In Chapter Two, we described FSLs as locations where parts and equipment could be located to support operations throughout a region. They could also provide basing for longer-range combat and enabling systems such as bombers, tankers, AWACS, and the Joint Surveillance and Tracking System (JSTARS). In examining the effect of FSLs, we considered how their presence in a theater would affect the number of targets that could be struck over time. To do this, we looked at strike operations conducted with and without access to FSLs, while varying our assumptions about the levels of available logistics support and needed force protection capability.

We varied the force protection challenge according to the low, medium, and high levels that we used in our earlier force protection discussion. An increasing threat level requires substantial increases in the force protection resources that must be prepositioned at the forward location or transported to the location before operations can be safely commenced. We also varied the levels of logistics support capability using the three categories used earlier. Category 1 bases can commence operations within 48 hours of the receipt of a de-
ployment order by CONUS-based forces. Category 2 and 3 bases provide 96-hour and 144-hour responsiveness, respectively.\(^1\) Similar to the force protection levels, and as discussed in Chapter Three, there were significant differences in the resources that must be prepositioned or transported to meet the indicated responsiveness. Increasing levels of responsiveness require more resources, located at more bases throughout the theater of operations. Figure 5.2 shows the three-by-three matrix that results when the levels of force protection and logistics support are matched.

We examined the effects of logistics support, force protection, and the flexbasing strategy on the generation of operational capability at forward locations by looking at the three cases shown in the matrix. These cases span the ranges of threats and responsiveness, and are useful examples of the degree to which flexbasing could affect

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\(^1\)These baseline responsiveness levels assume a low force protection threat. Timelines to Initial Operational Capability (IOC) of a forward base will be extended beyond these baseline values, depending on the nature of the threat and the required responses.
operations under varying assumptions. The first, Case A, is a well-
stocked, highly responsive Category 1 forward location with a high
force protection threat. Case B is a Category 3 bare base, also under
heavy threat. Case C is a location with 96-hour responsiveness and a
low force protection threat level. We assumed that enemy TBMs
with CB warheads represented the high threat level, and that the
Category 1 FOL already had COLPROs prepositioned; the Category 3
FOL required both COLPROs and a Patriot battery to be airlifted to
the site. For each, force protection measures had to be in place or
deployed to the FOL prior to the arrival of the force package. Table
5.1 summarizes the characteristics of each case.

The mission is to conduct punitive or coercive strikes requiring the
delivery of ordnance on ground targets in a remote region as quickly
as possible. For the deploying forces, we used the baseline fighter
aircraft package we described in Chapter Three, with the addition of
six B-1 and six B-2 bombers from CONUS. With these assumptions,
we looked at the number of air-to-ground Joint Direct Attack Munition
(JDAM) strikes that could be accomplished over a two-week period
with and without access to an FSL. Figure 5.3 shows the em-
ployment concepts used with the two basing alternatives.

Table 5.1
Case Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Case A</th>
<th>Case B</th>
<th>Case C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support level</td>
<td>Cat 1 (48 hours)</td>
<td>Cat 3 (144 hours)</td>
<td>Cat 2 (96 hours)</td>
</tr>
<tr>
<td>Threat level</td>
<td>High (TBMs w/CB)</td>
<td>High (TBMs w/CB)</td>
<td>Low (relatively secure)</td>
</tr>
<tr>
<td>Additional force protection</td>
<td>Patriot battery (60 hours)</td>
<td>Patriot battery and COLPROs (108 hours)</td>
<td>No additional requirements</td>
</tr>
<tr>
<td>requirements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time to IOC</td>
<td>108 hours</td>
<td>252 hours</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

2This package consisted of 12 F-15Cs, 12 F-15Es, and 12 F-16CJs, flying 2.3, 2.3, and 2.0
sorties per day, respectively.
Referring to the figure, without an FSL in the theater, operations are initiated with long-range B-2 strikes from CONUS (1). At the same time, the force protection (FP) measures that are needed for Cases A and B are moved into the FOL, along with any additional required base operating support. When the base support infrastructure and force protection are ready, the fighter aircraft package deploys to the FOL (2) and commences operations (3).

With an FSL, operations similarly begin with B-2 strikes from CONUS (1). However, the fighters are deployed forward immediately to the FSL, along with the B-1s (2). While the FOL is being prepared, the B-1s begin operations from the FSL, along with the fighters that are force extended with tankers from the FSL (3). When the FOL is ready to receive the fighter package, the fighters move farther forward (4) and begin intensive operations from that location (5).
The results of our operational analysis are shown in Figure 5.4. As one would expect, with an additional base (such as an FSL) more bombs can be dropped in each case. However, the FSL appears to enable launch of intense strikes in minimum time. In Case A, with a supposedly responsive Category 1 base under high force protection threat, only 168 JDAMs can be delivered within the first five days, as opposed to 585 with an FSL. The effect of the FSL is even more evident in Case B, in which 96 JDAMs can be delivered without a theater FSL versus 561 with an FSL. This represents the difference between a

Figure 5.4—Precision-Guided Munitions Delivered
token series of strikes and the shock and intensity of a true air campaign. Case B involves movement onto a bare base, so it is evident that FSLs are especially important to expeditionary operations in theaters without an infrastructure of bases. Figure 5.5 summarizes the results over the entire 14-day period. We found that the contribution that FSLs could make to the quick response and intensity of expeditionary air campaigns is substantial.

**A STRATEGY FOR GLOBAL AEROSPACE PRESENCE**

We believe that flexbasing could both address base access issues and enhance the operational effectiveness of deployed expeditionary aerospace forces. In Chapter Two, we recommended that the Air Force take the following actions to implement the flexbasing strategy:

- Establish a global support infrastructure of CSLs, FSLs, and FOLs.
- Develop and maintain a robust mix of long- and short-range combat systems.

![Figure 5.5—JDAMs Dropped Over 14-Day Period](image)
Conclusions

- Develop earth orbit as an FSL for selected enabling capabilities.
- Advocate a global presence strategy such as flexbasing as an initiative in the joint arena.
- Design and establish a global logistics/mobility support system for expeditionary operations.
- Provide deployable full-spectrum force protection options for expeditionary forces.

Regarding logistics and mobility, we found that rapid and sustained response by expeditionary aerospace forces cannot be achieved without significant levels of regional prepositioning at FSLs or FOLs. In addition, the expeditionary logistics/mobility system that is an important part of flexbasing must be globally planned and centrally managed both to achieve the needed levels of support at minimum cost and to optimize the transportation network that will tie the system together.

To provide the robust force protection that expeditionary aerospace forces will need, we found that deployed security forces need better sensors and firepower, especially counterbattery and countersniper capabilities. We also determined that the Air Force needs to consider how it intends to address the TBM and CB threats. The responses to these threats will undoubtedly be theaterwide and grounded in the joint arena.

The locations that become available to expeditionary aerospace forces could be distant from the fight or quite close. They could be allied military bases, international airports, or abandoned airfields. To be expeditionary, the Air Force must be prepared to employ effectively from all of these locations and more, many of which will be less than ideal. Aspects such as the level of in-place support will affect the speed with which operations can begin. Locations that are distant from targets will require the employment of long-range weapon systems and greater use of aerial refueling. Locations that are close will present force protection challenges. The initiatives we have described will provide the Air Force a flexible capability to deploy to locations with a wide range of characteristics. This will reduce dependence on access to particular bases and provide potential access to many, perhaps hundreds of, locations throughout a theater.
of operations. Rather than focus on gaining an \textit{a priori} assured access to specific bases, the flexbasing strategy provides a robust and flexible \textit{capability} to move swiftly into, and operate effectively out of, whatever locations become available during crises.