Our model for graphically depicting a set of force-mix principles presented in Chapter Two postulated a feasible region within which a range of force mixes would be acceptable and within which cost considerations could prevail. In examining the available evidence, we found that the loci of some of these constraints are currently unknowable and that others are mission- or component-dependent. Where possible, we derived notional results using mission-dependent values pertinent to the fighter force.

The results shown in Figure 7.1 depict the ANG case, where notional personnel flow constraints might allow the RC to occupy up to 42 percent of the total fighter force. A feasible region is thus created to the right of the minority status constraint. The feasible region might be reduced if an availability constraint came into play or if a decisionmaker were to supply some judgmental locus for the social identification, embeddedness, and investment (IE&I) constraint. Within this feasible region, cost-conscious decisionmakers would gravitate toward a 42 percent mix if they were primarily concerned about preparedness for MTW scenarios or toward a 20 percent mix if they were more concerned with meeting current contingency deployment needs. It is possible, of course, to weigh cost more heavily than either the personnel flow or social constraints. In that case, decisionmakers might drive the mix above 42 percent, consciously accepting a degradation in experience levels and readiness. Alternatively, they could drive the mix below the 20 percent RC minority status constraint, possibly compromising RC members’ capacity to influence the values and perceptions of AC members.
If personnel flow or availability were evaluated using different parameters, those constraints could conceivably lie to the left of the RC minority status or social IE&I constraints. There would be no feasible region. In such a case, decisionmakers would have to compromise between conflicting objectives. The most likely outcome would be to deemphasize the minority status and social IE&I constraints because the case for applying the former in the present context is less compelling and the locus for the latter is unknown.

We again stress that the specific force-mix results reported here are notional. Where possible, we used input values that we judged to be approximately correct, recognizing that we did not have the resources in this study to obtain or derive analytically rigorous inputs, especially when the inputs are likely to vary across missions. Also, because of variations across missions or MDSs, force-mix decisions cannot be made in the aggregate. They must be made for each mission or MDS individually.
Although the results reported here are notional, we believe our research provides two concrete contributions to the force-mix decision process. The first contribution is a framework for integrating the range of considerations that decisionmakers face and for gaining perspective on the arguments offered by various interest groups hoping to influence the force mix. The second contribution is a roadmap for more-detailed research into specific mission/MDS force mixes or a general model that incorporates mission/MDS-specific inputs.

Perhaps our most significant finding is that cost considerations can cut in opposite directions depending on whether the force is being optimized for major theater war preparedness or for peacetime contingency operations. In our view, peacetime contingency demands must be given more weight in force-mix decisions, especially in MDSs experiencing high deployment-related stress.