This study found that moving JSF FACO from Lockheed Martin’s plant in Fort Worth to one of the other three sites in the analysis or splitting JSF FACO among two or more of these locations would increase costs to DoD. The study assessed other potential policy arguments for moving or splitting production and found no compelling policy arguments to change Lockheed Martin’s baseline FACO strategy of doing all the work in Fort Worth.

COST

The previous chapter showed no cost advantages to DoD in moving or splitting JSF FACO activities. All the alternatives that divide the work across one or more additional sites increase cost because of loss of learning and duplicate facilities and tooling. Furthermore, moving FACO activity from Fort Worth changes the overall DoD costs because of the effect on indirect costs for other DoD work. The costs of the rest of the JSF work under way at that plant, as well as of the other programs there, will increase because these programs must bear a greater fraction of the overhead costs. This indirect cost increase is not generally offset by a corresponding decrease for other programs at the alternative FACO sites.

In sum, any alternative that changes the FACO base strategy of doing all the FACO work at Lockheed Martin’s Fort Worth plant increases costs to DoD—and to the taxpayer. The least-costly alternative to the base case is shifting part of the FACO work to Lockheed Martin’s Marietta plant, enabling the company to use some of the facilities developed for the F-22 fighter to be reused for the JSF, thus reducing
total investment. However, a downside to this approach is that the JSF FACO work would be undertaken essentially in isolation from the rest of the JSF program, therefore eliminating the advantages of having collocated production and engineering functions. No other JSF subsystems or parts are being considered for manufacture at Marietta. Because placing JSF FACO at Marietta is not part of Lockheed Martin’s planned approach, the effect of these issues is uncertain.

OTHER POLICY ARGUMENTS

Our analysis indicates that some other policy concerns, sometimes raised as a rationale for splitting military production, are not compelling in the case of JSF FACO work. The most-often-cited rationale—spurring better contractor performance through competition—does not apply in the case where a single prime contractor has already been awarded the contract. Some internally generated competition might be possible but could have detrimental effects on configuration control. Neither do other rationales—industrial base, capacity, risk avoidance, etc.—provide compelling arguments for dispersed production. Even the potential advantage from spreading economic benefits across sites does not hold up under close scrutiny. One could also hypothesize that carrying out FACO operations at multiple sites would spread the benefits of the FACO work to several communities. However, three observations lead us to conclude that this argument is not compelling. First, the JSF project is relatively widely dispersed as it is. Figure 2.3 and Table 8.2 provide some indication of the number of communities the program already benefits. Second, the communities that would benefit—Palmdale, Calif., and Marietta, Ga.—are not economically worse off than the country as a whole. In addition, starting FACO operations at another site would not provide an especially large number of new jobs: Direct and indirect labor required for FACO operations is about 1,200 workers. Third, the rationale for the JSF contract—a single contractor building all variants with considerable commonality among them—was to enable DoD to get a needed defense capability at the lowest possible cost. Because moving or splitting FACO operations would increase cost, opting for more than one location appears to undercut the program concept of affordability.
SUMMARY

No compelling policy or cost arguments support a decision to move or divide the FACO operations. Splitting the work would no doubt benefit the communities where the additional sites are located. Whether such a split should occur for this reason, despite the additional taxpayer cost, is not addressed in this study.