CBO TESTIMONY

Statement of Donald B. Marron Acting Director

The Air Force's Proposal for Procuring F-22 Fighters

before the Subcommittee on AirLand Committee on Armed Services United States Senate

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CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515

Mr. Chairman, Senator Lieberman, and Members of the Subcommittee, I am pleased to appear before you today to discuss the Air Force's acquisition strategy for the F-22 fighter program. At your request, the Congressional Budget Office (CBO) has examined the proposal for a multiyear procurement contract for 60 aircraft and has found the following:

- The Air Force proposes to pay for the aircraft through incremental funding. Under that approach, the Air Force would seek appropriations for only part of the cost of each annual production lot in the year it was ordered and would request the remaining amount in the following year. Thus, the funding provided each year would not be sufficient to complete the aircraft ordered that year, and the Air Force would have to seek additional appropriations in the future to obtain functional aircraft.
- The Air Force would commit to the purchase of 20 aircraft per year for three years, with the right to cancel the remainder of the order at the end of each year. But it is not requesting appropriations sufficient to cover the potential cancellation liability. Under that proposal for multiyear procurement, the Air Force would have to seek additional appropriations in the future even if a decision was made to cancel the contract.
- By initially requesting only incremental funding to pay for components of the aircraft and by excluding funding for the cancellation liability, the Air Force reduces the amount of 2007 budget authority needed to initiate its proposed procurement. By the same token, the approach would also increase the amount of future budget authority needed either to complete the purchases or to cancel them.
- Current law prohibits the use of incremental funding in multiyear procurement contracts. The Air Force has requested that legislation exempting the service from that prohibition be included in the National Defense Authorization Act for 2007.
- Deferring recognition of the full cost of the assets being purchased would understate the nature of the government's obligations, potentially distorting budgetary choices by making the program appear less expensive than it is, and would constrain budgetary flexibility in subsequent years.

Funding of Capital Acquisitions

In general, the federal budget operates on the principle that appropriations for the full costs of acquiring an asset should be enacted in advance. In that regard, the Office of Management and Budget's Circular A-11, which guides executive branch agencies in the preparation of the budget, states:

Good budgeting requires that appropriations for the full costs of asset acquisition be enacted in advance to help ensure that all costs and benefits are fully taken into account at the time decisions are made to provide resources. Full funding with regular appropriations in the budget year also leads to tradeoffs within the budget year with spending for other capital assets and with spending for purposes other than capital assets. Full funding increases the opportunity to use performance-based fixed price contracts, allows for more efficient work planning and management of the capital project (or investment), and increases the accountability for the achievement of the baseline goals.¹

Up-front funding enables the Congress to control spending at the time a commitment is made and ensures—or at least increases the likelihood—that a complete and usable asset will be delivered without the need to provide additional appropriations in future years.

Very expensive items, however, may be difficult for an agency to budget for if it must have an appropriation for the full cost in the first year. In some instances, the cost of a single item may exceed an agency's annual budget for capital acquisitions. If the cost of an asset represents a large portion of its budget, an agency may have to forgo most other capital acquisitions for that year or otherwise disrupt other ongoing acquisition programs. One solution to that problem would be for the Administration to request an appropriation in excess of the annual amount normally provided to an agency for capital acquisitions. But large, temporary increases in budget authority are sometimes difficult to accommodate in the budget process, at least for nonemergency appropriations.

Budgetary constraints have sometimes led agencies to seek to defer recognition of costs until later years—for example, by using incremental funding for capital assets. The Congress has approved incremental funding requests for some ships for the Navy and the Coast Guard, water resources projects of the Army Corps of Engineers, construction projects of the Department of Defense (DoD), and space exploration projects of the National Aeronautics and Space Administration (NASA). Agencies argue that through incremental funding authority, they have acquired many useful assets that they could not have funded up front.

Incremental funding, however, can have several deleterious effects. It may limit visibility and accountability because it does not display the full cost of decisions at the time they are made. In the competition for appropriations, it may tilt the playing field in favor of expensive programs that benefit from such a funding

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Office of Management and Budget, Preparation and Submission of Budget Estimates, Circular A-11 (July 2005), Appendix J, p. 3.

arrangement; programs may be selected on the basis of their apparent economy—in their initial stages—relative to other programs that do not have the advantage of such a favorable budgetary treatment. Moreover, incrementally funded projects may be started without adequate scrutiny or a full understanding of the total cost. Incremental funding may even provide a particular incentive to underestimate costs at the outset of a project because later cost increases would not have to be acknowledged as such but could be incorporated in subsequent funding increments.

In cases in which an acknowledgment of the full cost up front could render a program too expensive to consider, both agencies and the Congress may end up accepting those higher costs at a later date if the only alternative is to abandon their previous investment in partially completed products. Finally, incremental funding may constrain the funding available for other programs in future years as programs that were partially funded in previous years continue to consume resources.

The Air Force's Plan for Acquiring F-22s

Through the end of fiscal year 2005, the Air Force had ordered 100 F-22 aircraft. In its budget request for fiscal year 2006, the service proposed purchasing 80 more planes—24 in 2006, 29 in 2007, and 27 in 2008. The Congress appropriated \$3.7 billion to procure 24 aircraft in fiscal year 2006. To date, funds have been appropriated in advance for the full cost of all of the aircraft ordered.

The fiscal year 2007 budget request seeks authority to buy more aircraft in total but at a slower rate than envisioned a year ago. The Air Force now seeks authority to purchase 60 aircraft at a rate of 20 aircraft per year over the 2007-2009 period using a multiyear procurement approach aimed at mitigating the increase in costs that would otherwise result from the reduction in the production rate. Under its proposed approach, the Air Force would commit to purchasing all 60 aircraft, with the option to cancel the contract at the end of each fiscal year if funds were not appropriated to continue the contract. According to the Air Force, the 60 airplanes would cost about \$10.5 billion in total.

The Air Force's proposal differs from the practice of full up-front funding in two ways: it seeks incremental funding for acquiring capital assets, and it provides for a multiyear procurement without funding for possible cancellation costs.

Incremental Funding

The Air Force has requested the authority to budget and to pay for each annual production lot incrementally over a two-year period rather than obtaining appropriations for the full cost of those aircraft in the year production begins. The

service's approach would reduce the amount of budget authority needed in the first year, although it would increase the amount needed in subsequent years. The first year's funding would cover the cost of producing certain components of the first 20 aircraft; the second year's appropriation would pay for the cost of assembling them. Specifically, the Air Force has asked for appropriations of about \$2 billion in 2007 to pay for part of the cost of the aircraft whose production would begin in 2007. Under a multiyear contract without incremental funding, the Air Force would initially need approximately \$4 billion to \$5 billion to cover its minimum liability.²

In each of the past four years, the Congress has appropriated around \$4 billion to procure F-22s. A similar appropriation in 2007 would fully fund 12 to 20 aircraft under a multiyear contract, depending on the amount of the cancellation liability—if such liability was fully covered within that amount.

The Air Force's strategy to incrementally fund production of the F-22 would have the effect of deferring appropriations for commitments already made. At the time it orders the aircraft for each annual production lot, the Air Force would have appropriations sufficient to pay only for certain components, such as engines, electronic systems, and airframe subassemblies. Appropriations for the cost to assemble those components into a usable airplane would be requested in the following year.

Such a process would allow the Air Force to order more aircraft in the first year within a given amount of funding by understating the government's ultimate costs. Therefore, when the Congress allocated budget authority to programs in the 2007 DoD appropriations act, the F-22 program would have an advantage over other programs or activities that did not receive that form of funding. In subsequent years, the Congress could be left with little choice but to provide additional appropriations to ensure the delivery of fully assembled, functional aircraft. Although more aircraft could be ordered in the first year under the incremental funding approach, fewer aircraft could be ordered in subsequent years within any given amount of appropriations. And even if costs increased relative to the Air Force's current estimate, the Congress might feel compelled to appropriate funds for aircraft that had already begun production to avoid wasting the funds already invested in the components.

The incremental funding approach could restrain the pace of aircraft production. Because the Air Force would not have sufficient appropriations to pay for the full cost of the aircraft in the first year, it would have to closely monitor the contractor's work to ensure that the pace of production was maintained at a level

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The exact amount would depend on the cost of canceling the contract after 2007. On the basis of
cancellation liabilities for other multiyear programs, that amount could be between 5 percent and
15 percent of contract costs.

that would not obligate funds that had not yet been appropriated. Otherwise, production might have to be slowed or halted in the later months of the year.

The Congress has approved incremental funding for other DoD programs, such as Navy ships and some military construction projects. For instance, the Congress authorized the Navy to incrementally fund the CVN-78 aircraft carrier and the LHD-8 amphibious ship. But incremental funding has rarely been used for aircraft procurement programs. Perhaps because aircraft—even ones as costly as the F-22—are less expensive than Navy ships, dams and levees constructed by the Army Corps of Engineers, and NASA's space station, they are easier to budget for in full. Consequently, budgetary constraints can be accommodated by purchasing fewer aircraft in a given year rather than by funding only a part of the cost of a larger production lot.

The Potential Benefits of Multiyear Contracts in Reducing Acquisition Costs

Multiyear procurement is a special contracting method authorized in 10 U.S.C. 2306b that permits the government to enter into contracts covering acquisitions for more than one year but not more than five years, even though the total funds required every year are not appropriated at the time the contracts are awarded. As part of such a contract, the government commits to purchase all items specified at the time the contract is signed, including those to be produced and paid for in subsequent years. Before an agency can enter into such a contract, it must find that multiyear procurement results in substantial savings in comparison with procurement through a series of annual contracts. The Air Force has not yet completed its analysis of whether multiyear procurement is the most cost-effective strategy for purchasing the F-22s.

Because multiyear procurement allows the contractor to plan for more efficient production, such a contract can reduce the cost of an acquisition compared with the cost of buying the items through a series of annual procurement contracts—unless the government decides to cancel the contract partway through it. The savings can come from several sources, such as investments in equipment and facilities, investments in the contractor's workforce, and orders for component parts in economically efficient quantities. For example, given the commitment of a multiyear procurement contract, the contractor may spend time and money on appropriate training or provide financial incentives to retain experienced personnel on the job for the duration of the contract to improve productivity. The contractor may also acquire special tools, manufacturing equipment, or facilities that reduce the time, labor, and materials—and thus the cost—to produce the items. The savings in recurring costs may not be great enough in a single year to recover the cost of the investments, but if production quantities are sufficiently large, the investment costs can be spread out over several years of production.

Similarly, the contractor may also purchase or produce components in advance of need—using an arrangement called economic order quantity procurement—if doing so offers substantial savings by avoiding repeated setup costs.

Contractors are usually willing to enter into multiyear procurement contracts and to spend money up front to reduce production costs because the government, in the event of contract cancellation or termination, promises to pay for incurred costs that would have been recovered over the full term of the contract.

Budgeting for Cancellation Liability

Under a multiyear contract, the government may, at the end of each fiscal year, cancel its order for all remaining years of the contract if it notifies the contractor that funds are not available to proceed for the next fiscal year. Thus, cancellation of a multiyear contract occurs between fiscal years if the Congress does not provide the additional appropriations needed to continue.

Under a multiyear contract, some nonrecurring costs may be allocated to items expected to be produced in future years. Therefore, if the contract is canceled, the government may owe the contractor more than the amount appropriated for items produced in the years before the cancellation. The maximum liability for contract cancellation at the end of any given year is usually negotiated up front and included in the terms of the contract.³

DoD sometimes chooses not to request budget authority specifically for the cancellation liability because it considers cancellation a contingent liability with only a remote probability of happening.⁴ Although the amount of the government's actual liability depends on how the program proceeds, its minimum liability is the sum of the production costs for the items ordered in the first year and the cancellation costs at the end of that year. Regardless of whether the multiyear procurement contract proceeds for the full term or is canceled early, the government's initial obligation to the contractor will exceed the amount required to pay for items ordered in the first year. For example, after the first year of the

^{3.} Contract cancellation differs from contract termination. The government has the right to end any contract early, when doing so is in the government's interest, but must pay the contractor for any authorized work performed before it was notified to cease work. Contract termination is the act of rescinding orders for items for which funds have already been appropriated and on which work has already begun. The cost of terminating an annual procurement contract early should not exceed the available appropriations because an agency should have sufficient appropriations to cover all recurring and nonrecurring costs before it initiates an annual procurement contract.

^{4.} DoD is authorized by 10 U.S.C. 2306b to pay cancellation costs from funds originally available for performance of the contract concerned, appropriations currently available for procurement of the type of property concerned and not otherwise obligated, or funds appropriated for cancellation payments.

three-year contract proposed for the F-22, the Air Force could either cancel the remaining two years of production and pay the costs for cancellation, or it could continue production for the second program year and pay for the cost of those aircraft. Under the multiyear contract, the Air Force would not have the option of forgoing future production lots without paying the cancellation charge. Thus, in no case would the government pay only the cost of the aircraft produced in the first year. An appropriation that covered only the cost for each annual production lot as it was manufactured would therefore be insufficient to finance the government's minimum obligations under the multiyear contract.

The Air Force indicates that it may be able to pay contract cancellation costs with funds appropriated for procuring the F-22, which could lead some observers to conclude that there would be sufficient funds to pay both the cost of canceling future production lots and the cost of procuring the aircraft that had been ordered up to that point. In fact, the Air Force would be committing the same appropriations for both purposes simultaneously. But with no funds set aside specifically for cancellation costs, the Air Force would have to terminate orders for some or all of the aircraft that had already entered production if a decision was made to cancel subsequent orders. Thus, if it canceled the remaining years of the multiyear contract at the end of the first year, the government would not only forgo the aircraft to be produced in later years but also would not receive all of the planes it had ordered in the first year—and the taxpayers' investment in those aircraft would be lost. In particular, at the end of the first year, the Air Force would have ordered 20 aircraft. If the government decided to cancel the contract at that point but had not set aside funds specifically for cancellation costs, it would not only forgo the 40 aircraft that had not entered production, but, to free up funds for cancellation costs, it would have to stop work on some of the 20 aircraft that had already been ordered.

Although DoD has requested sufficient appropriations to cover its minimum obligations for some multiyear contracts, it has not allocated resources for cancellation liabilities for many of them. That failure to request funding for cancellation liabilities may distort the resource allocation process by understating the cost of decisions made for the budget year and may require future Congresses to find the resources to pay for decisions made today.

Combining Multiyear Procurement and Incremental Funding

Even though the Congress has authorized and appropriated funds for capital assets on an incremental basis, CBO is unaware of any instances in which the Congress has authorized incremental funding of a multiyear procurement contract. In fact, the Congress recently disapproved such a proposal by the Air Force. In its fiscal year 2003 budget request, the Air Force proposed to use

advance procurement funding—typically used to buy components with significantly longer production time than other system components—for the multiyear procurement of C-17 cargo aircraft. That incremental funding approach would have effectively resulted in progress payments on the aircraft rather than full funding in the initial year of production.

In the National Defense Authorization Act for Fiscal Year 2003, the Congress prohibited that approach proposed for the C-17 by amending the statute governing multiyear procurement to allow DoD to obligate funds to procure end items only if they were "complete and usable." The Congress also added \$586 million to the department's budget request for fiscal year 2003 to fully fund the acquisition of 15 C-17 aircraft entering production that year. The conference report accompanying the Department of Defense Appropriations Act for Fiscal Year 2003 explicitly disapproved the Air Force's proposed approach: "This financing scheme runs counter to the 'full funding' principles which guide federal government procurement practice, and thereby creates a future liability for the Air Force and Congress. For this reason, the conferees disapprove the Air Force's C-17 financing proposal." For the F-22 program, the Air Force has proposed a statutory waiver of the 2003 authorization law's prohibition against incrementally funding the purchase of end items under a multiyear contract.

Although the Air Force indicates it may be able to pay cancellation costs from funds appropriated for the F-22's procurement, combining multiyear procurement and incremental funding makes that unlikely. The smaller amount appropriated under the incremental funding approach would be obligated and spent more rapidly than the full amount. CBO estimates that even if orders for aircraft in production were terminated, as little as 10 percent of the initial appropriation would be available to pay cancellation costs at the end of the initial year of incremental funding for each of the three lots. Consequently, cancellation might necessitate taking funding from other aircraft procurement programs or might require the Congress to provide additional appropriations to pay those costs.

Employing an incremental funding strategy in conjunction with a multiyear procurement contract introduces the risk that the Air Force might pay for aircraft that would not be completed if the contract was canceled. At the end of each year of the contract except the last one, there would be some aircraft in production that would require appropriations to complete. If the Congress declined to provide further funds to continue the contract in the next fiscal year, the Air Force would have to cancel the contract for all subsequent years and terminate orders for aircraft that had not been fully funded. If the contract was canceled after 2007, the Air Force would not receive any completed aircraft. If the contract was canceled after 2008 and no additional funds were provided for 2009, the Air Force would receive the 20 aircraft ordered in 2007 but would receive only components of the aircraft that had been ordered in 2008.

Incremental funding and multiyear procurement are conceptually inconsistent budgetary practices. On the one hand, multiyear procurement contracts suggest a firm and substantial commitment on the part of the government. The contractor is encouraged to make investments promoting efficiency on the basis of the government's commitment to purchase multiple annual production lots or to compensate the contractor for those investments if it chooses to cancel the contract. On the other hand, the amount of budget authority provided under an incremental funding arrangement suggests a very limited government liability—only for the cost of the components that are produced in that year.