## Testimony

Before the Subcommittee on Science, Technology, and
Space, Committee on Commerce, Science, and
Transportation, U.S. Senate

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## SPACE STATION

## Deteriorating Cost and Schedule Performance Under the Prime Contract

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## Mr. Chairman and Members of the Subcommittee:

We are pleased to be here today to provide you with an updated status of the prime contractor's cost and schedule performance on the International Space Station (ISs). Just 3 months ago, we testified before this Subcommittee on the continuing cost control difficulties in the ISS program. ${ }^{1}$ That testimony was based on ongoing work being done for Senator Bumpers and Representative Dingell. Early this week, we issued our final report to those requesters. ${ }^{2}$ At the request of the Subcommittee, our testimony today draws from that report and focuses on the cost and schedule status of the iss prime contract.

In our June testimony, we noted that the cost and schedule performance under the prime contract had been consistently worsening for some time. We pointed out that between January 1995 and April 1997, the costs associated with the schedule slippage; that is, the estimated cost of work to get back on schedule, had increased from a value of $\$ 43$ million to $\$ 129$ million. During that same period, the variance between the actual cost to complete specific work and the budget for that work had gone from a cost underrun of $\$ 27$ million to a cost overrun of $\$ 291$ million. The situation has continued to worsen since April 1997. Figure 1 shows that as of July 1997, the costs associated with the schedule slippage had increased further to $\$ 135$ million and the cost overrun had increased to $\$ 355$ million.
${ }^{1}$ Space Station: Cost Control Problems Continue to Worsen (GAO/T-NSIAD-97-177, June 18, 1997).
${ }^{2}$ Space Station: Cost Control Problems Are Worsening (GAO/NSIAD-97-213, Sept. 16, 1997).

Figure 1: Cost and Schedule Variances on the Space Station Prime Contract (Jan. 1995 to July 1997)


Note: The zero line represents meeting planned cost and schedule. Negative schedule variances are the estimated cost of work to get back on schedule.

Figure 2 shows the cumulative cost and schedule variances from January through July of this year. The figure shows the relatively consistent downward slope of the cost line and highlights the fact that the current situation is considerably more serious for cost than for schedule. The rate of decline for the cost variance is especially worrisome because it has shown no particular inclination to lessen. On the other hand, the schedule deterioration has been much less severe, with minor "upticks" in the variance in April and July. The relative difference is at least partly explained by NASA's statement that much of the cost growth is due to overtime and additional staff being used in an effort to maintain schedule.

Figure 2: Cumulative Monthly Cost and Schedule Variances on the Space Station Prime Contract (Jan. 1997 to July 1997)


Principally because the difference between the actual and budgeted cost of work has been increasing steadily, estimates of the total cost overrun at contract completion have also been increasing. For example, last year's estimates of the contract overrun at completion ranged from $\$ 240$ million to $\$ 372$ million. They currently range from $\$ 514$ million to $\$ 610$ million. The prime contractor's estimate of the cost overrun at completion was recently increased from $\$ 278$ million to $\$ 600$ million.

NASA's concern about the prime contractor's performance is evident in its award fee decision for the 6-month period that ended March 1997. The prime contractor was eligible for nearly $\$ 34$ million in award fee. Citing significant problems in program planning, cost estimating, and hardware manufacturing, nASA concluded that the contractor's performance did not warrant any award fee. ${ }^{3}$ The recent increase in the estimated cost overrun

[^0]at completion has also potentially reduced the prime contractor's incentive award by $\$ 48$ million over the remainder of the contract.

In response, the prime contractor is implementing a corrective action plan that it believes will improve the performance of the entire contractor team. The announced strategy includes changes in personnel, hiring additional software engineers and managers, and committing funds for a software integration test facility. The prime contractor has also presented a cost control strategy to NASA. According to NASA, the strategy includes organizational streamlining and transferring some roles to NASA.

In summary, iss cost and schedule problems have worsened. Currently, NASA and the prime contractor agree that costs are going to continue to increase beyond the current variance. Their challenge is to at least slow the rate of growth so that their current estimates of the total cost overrun will not be exceeded. The extent to which the current efforts will enable them to do so remains to be seen.

Mr. Chairman, this concludes my statement. We will be happy to answer any questions you or the members of the Subcommittee may have.

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[^0]:    ${ }^{3}$ The prime contractor may eventually receive some or all of this award fee because, under the terms of the contract, the prime contractor could receive a previously denied award fee after NASA's final assessment at the end of the contract.

