



ACQUISITION

OFFICE OF THE ASSISTANT SECRETARY OF DEFENSE

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MEMORANDUM FOR UNDER SECRETARY OF DEFENSE FOR ACQUISITION,
TECHNOLOGY, AND LOGISTICS

SUBJECT: PARCA Root Cause Analysis for the Wideband Global Satellite (WGS) Program

This memorandum summarizes PARCA's root cause analysis for the cost growth which triggered the Nunn-McCurdy breach declared by the Wideband Global Satellite (WGS) program in its December 2009 SAR. Specifically, the SAR stated that the addition of two additional satellites (WGS 7 and 8) after a two-year production break resulted in Average Program Unit Cost (APUC) growth of 27.2% over the current Acquisition Program Baseline (APB) which is a Critical Cost Growth threshold breach

Nearly one-third of the growth of current APUC is due to anomalies in its computation when established in FY01. The first three satellites were purchased in fixed price contracts. Subsequently, it was discovered that actual contractor costs were much higher than the contract price. The government paid realistic prices for the next three satellites. Since the government cannot include the higher than contracted value (i.e., the true cost) for the first three satellites, it artificially causes the APUC for future buys to increase as more satellites are purchased even if the unit cost of the subsequent satellites had remained constant.

About two-thirds of the growth in APUC is due the fact that the unit costs of satellites 7 and 8 are about 50% higher than preceding satellites. The root cause for this increase in unit costs is mostly attributable to unanticipated design and business base issues which result from extending the program for two additional satellites. The WGS is based on Boeing's HS702HP bus which was designed as a commercial bus. Up to this point, the fact that commercial buyers shared in significant satellite production costs reduced the cost of the satellites to the DoD. But now, without a commercial demand, the DoD must pay these costs. Specific consequences include higher component costs, obsolescence induced redesign, qualification, testing costs, and storage/restart costs. We note that the computation of APUC in the current baseline was also in error because it excluded anticipated known fees. Although this error was small, without it, this program would not have reached a critical breach for the procurement of satellites 7 and 8.

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