

address -- Estimating Weapon System Costs -- the difficult task of estimating weapon system costs realistically is a major cause of cost growth. To address that problem, the Pentagon some years ago established a Cost Analysis Improvement Group (CAIG) to prepare independent estimates of the full life-cycle costs of a system. Since the current Secretary has made "budgeting to most likely costs" one of his central acquisition initiatives, the CAIG has been quite busy during the past two years.

In deriving independent estimates, the CAIG relies on many sources of data: the cost and development history of the program to date, provisions of contracts that have already been signed, and the cost history of similar programs. In fact, the CAIG maintains a special data base, derived from cost information on systems actually being procured, that is used to project the costs of new weapons.

Contrary to some recent testimony, no single, simple equation can produce cost estimates for all situations. The construction of an independent cost estimate is a painstaking process that combines a variety of analytic approaches. Some elements are constructed using parametric techniques -- that is, the estimated cost is based on the characteristics of the weapon system or its components relative to those of existing systems. This approach is particularly helpful in the early stages of a program, before actual production begins.

Once development and early production data are available, they are analyzed to help project future production costs. Those projections must include the engineering hours and material