

With any defense contractor, work is performed by the same personnel on several programs at the same time. Who decides when the work of an engineering team on antenna technology is billed to one of several projects it might be construed as applicable to? Up until now, the companies and the military services have made that decision. The DoJ indictments dispute just that.

Presently, the services grant contractors discretionary R&D funds under "internal research-and-development (IRAD)," and "bids and proposals" (B&P), to carry out advanced work. Every year, the services review a contractor's R&D. If they think they're coming up with some good results, they might raise their R&D funding. If they don't like what they see, they may lower it. Now the Justice Department has stepped in and asserted that this relationship is illegal, and that any work that General Dynamics had done on advanced, next-generation anti-aircraft guns under IRAD was "really" work done on the Sergeant York. If this charge holds, at the awarding of a contract, R&D will grind to a halt, and scientists and engineers who design program hardware might face layoffs, because Harvard lawyers like William Weld, current nominee for head of the Criminal Division, will ban their companies from work on R&D that could possibly be construed as related to the contract.

As the General Dynamics' and defendants' joint motion to dismiss states, "The policy issues involved in this case are of [great] significance. . . . At stake in this case are the B&P or IRAD regulations that will apply to the billions of dollars of contracts that the Department of Defense undertakes for national defense. . . . The decisions made in resolving the cost allocation issues in this case will set precedents with respect to the defense industry's use of bids-and-proposals and internal research-and-development funds in situations where proposals and research efforts are conducted parallel with the performance of an existing contract."

Industry sources report that the Justice Department was determined to get an indictment. The Criminal Division in 1984 sent special agent Gary Black to Los Angeles to handle the grand jury. By February or March of 1985, after one year, Black reported that there was no basis for an indictment and there were no criminal violations by either General Dynamics or the other contractor on the prototype development project, Ford Aerospace.

Black was immediately transferred back to Washington and placed in the Civil Division, and Robert Bellows from the Criminal Division was sent to Los Angeles to revive the case. Bellows never informed the companies of the revival of the grand jury. Reportedly, he orchestrated offers of immunity and threats of prosecution toward lower-level employees at General Dynamics to contrive the case against the company and its executive officers. Indeed, the indictment papers themselves make several references to unnamed "General Dynamics employees" who are cited as having done allegedly criminal acts in cooperation with the defendants, but who are not named in the indictment itself.

The DIVAD contract: study in incompetence

The Army's "Sergeant York" Division Air Defense (DIVAD) gun system was designed to fail. The contract included several features inspired by "cost-effectiveness" which guaranteed a system that would not be a significant advance over existing air defense guns. Because of this, Defense Secretary Caspar Weinberger cancelled production in 1985. The contract's ridiculous features were as follows:

1) In order to save money, it required the use of "off the shelf" components, developed for other weapon systems, so that DIVAD system integration, the development of computer software, would be the primary development task of the contractors. A May 1986 General Accounting Office (GAO) report, *Sergeant York: Concerns About the Army's Accelerated Acquisition Strategy*, states:

The integration of the weapon's major subsystems and their application to a weapon for which they had not been originally designed apparently represented a greater technical undertaking than originally anticipated. . . .

2) The development contract was a fixed price contract. However, since development costs cannot be accurately predicted, this led to a situation where contractors were forced to compromise performance to stay within the contract's fixed price. GAO reports:

The Army established 12 firm requirements that each competing contractor's weapon system had to meet. Beyond these, the army identified 43 system requirements in priority order which each contractor could trade off to help lower the program's cost. For example, Ford Aerospace elected not to equip its weapon with night vision capability, 1 of the 43 tradable items, in an effort to keep unit production costs down.

3) The contract included a first-ever "warranty [that] required Ford Aerospace to correct characteristics of the weapon system which did not meet the specifications at no

increase in price to the Army.” This set up a situation in which the contractor became occupied with finding loopholes, rather than producing a weapon with the required performance. As GAO reports:

The contract to acquire the Sergeant York provided protection against cost increases emanating from defects in the design, component integration, materials, or workmanship which could preclude meeting the specification requirements. This protection went beyond that generally obtained for other weapon systems, where the contractor’s liability does not cover design defects. The warranty provisions made the contractor responsible for correcting the defects without increases to the contract’s target cost, target ceiling, or ceiling price and without extensions of delivery time. . . .

One significant item was that:

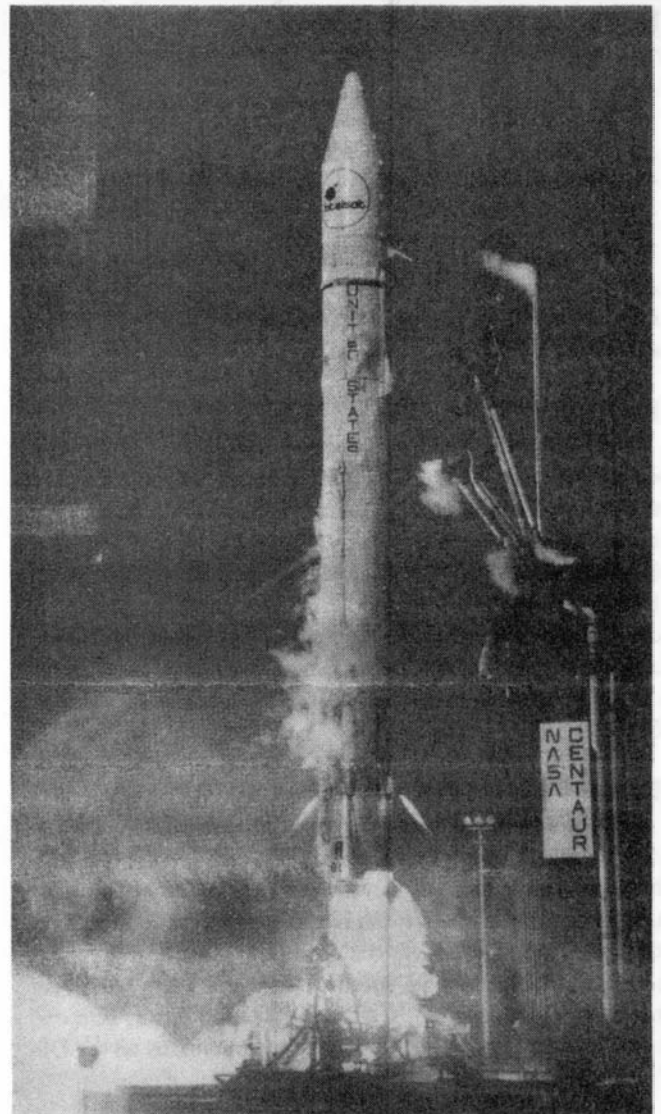
The contractor’s warranty responsibilities did not extend to performance of the Sergeant York in operational testing against operational requirements. . . . The Sergeant York warranty, while it provided protection against the weapon system not meeting the contract’s performance specifications, offered no guarantee that the weapon would perform satisfactorily in an operational environment, where factors such as weather, terrain, and countermeasures aggravate the difficulties of coping with the threat. . . .

The system flunked the operational tests. GAO reported:

The Army Materiel Systems Analysis Activity . . . found that the Sergeant York either met or exceeded 141 of the 163 contract specifications tested. Of the 22 that were not met, 7 were considered by the agency to be particularly significant. These concerned the reliability of the gun’s power and actuation subsystem, its survivability against certain countermeasures, a safety hazard involving the turret’s rotation, a problem with the proximity fuse, and the gun’s performance against certain threats. The power and actuation mission reliability specification called for a mean time between failures of 260 hours. The Sergeant York achieved only 36 hours between failures during the test. The Army agency estimated that the entire gun system mission reliability for the test was 21 hours of operation between failures as compared with the specified 37 hours.

Despite the fact that the contract caused performance failure, GAO concluded that:

The technical difficulties experienced by the weapon system were not a fault of the acquisition strategy. . . . Up to the program’s termination, costs to the government had remained relatively stable, a signif-



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General Dynamics built the first American ICBM, the Atlas. In 1961, the Atlas carried the first American into orbit. The Atlas launch shown here carried the Centaur upper-stage rocket developed by Krafft Ehrlicke.

icant achievement considering the pattern of cost growth exhibited by many weapons during their development and early production. The use of mature components contributed to this favorable cost experience. . . . The Sergeant York’s accelerated acquisition strategy involved risks, particularly in view of the planned concurrency and limited testing. To make these risks acceptable, several safeguards were built into the program. These included using proven components, obtaining more extensive warranty coverage than generally found in other major weapon contracts, and negotiating fixed-price development and production contracts.