

GAO

Testimony before the Air and Land Forces
Subcommittee, Committee on Armed
Services, House of Representatives

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**AIR FORCE
PROCUREMENT**

**Aerial Refueling Tanker
Protest**

Statement of Daniel I. Gordon, Deputy General Counsel





Highlights of [GAO-08-991T](#), a testimony to the Air and Land Forces Subcommittee, Committee on Armed Services, House of Representatives

GAO's Role Under The Competition in Contracting Act

The Boeing Company protested the award of a contract to Northrop Grumman Systems Corporation by the Department of the Air Force for KC-X aerial refueling tankers. Boeing challenged the Air Force's technical and cost evaluations, conduct of discussions, and source selection decision. Because Boeing competed for the contract, it is an interested party for purposes of filing a protest. Under the Competition in Contracting Act of 1984, GAO is required to consider protests of contract awards filed by interested parties. In deciding protests, GAO makes a determination of whether the agency's actions complied with procurement statutes and regulations.

GAO's Recommendations

In its decision, GAO recommends that the Air Force reopen discussions with the offerors, obtain revised proposals, re-evaluate the revised proposals, and make a new source selection decision, consistent with GAO's decision. GAO further recommends that, if the Air Force believed that the solicitation does not adequately state its needs, the agency should amend the solicitation prior to conducting further discussions with the offerors. GAO recommends that if Boeing's proposal is ultimately selected for award, the Air Force should terminate the contract awarded to Northrop Grumman.

To view the full product, click on [GAO-08-991T](#). For more information, contact Daniel I. Gordon at (202) 512-8219 or gordond@gao.gov or Michael R. Golden at (202) 512-8233, goldenm@gao.gov.

AIR FORCE PROCUREMENT

Aerial Refueling Tanker Protest

GAO's Findings

Review of the extensive record, including a hearing, led GAO to conclude that the Air Force had made a number of significant errors that could have affected the outcome of what was a close competition between Boeing and Northrop Grumman. The errors included not assessing the relative merits of the proposals in accordance with the evaluation rules and criteria identified in the solicitation, not having documentation to support certain aspects of the evaluation, conducting unequal and misleading discussions with Boeing, and having errors or unsupported conclusions in the cost evaluation. Accordingly, GAO sustained Boeing's protest.

The redacted decision is at www.gao.gov/decisions/bidpro/311344.htm.

Mr. Chairman, Mr. Ranking Minority Member, and Members of the Subcommittee:

Thank you for the opportunity to be here today to discuss the June 18, 2008 decision of GAO in response to The Boeing Company's protest of the Air Force's award of the aerial refueling tanker contract.

GAO has been deciding bid protests since the 1920s. The Competition in Contracting Act of 1984 (CICA) now provides specific statutory authority for our bid protest function. The Act codified GAO's role as a quasi-judicial forum to provide an objective, independent, and impartial process for the resolution of disputes concerning the awards of federal contracts. We handle protests following the procedures set out in the Bid Protest Regulations in Part 21 of Title 4 of the Code of Federal Regulations. We conduct outreach and exchange views with the Department of Defense (DoD) and civilian agencies on a regular basis with regard to best practices and lessons learned from our bid protest decisions.

In Fiscal Year 2007, we received nearly 1,300 bid protests challenging procurements across the federal government. GAO received between 700 and 775 protests of DoD procurements over each of the past 5 years. Because there are often multiple protests of a single procurement action, we would estimate that 750 protests would involve approximately 500 defense procurements—out of the many tens of thousands of defense procurement actions that could be protested each year. Bid protest statistics and a detailed breakdown by DoD components are included in our appendices to this statement.

The bid protest process is a legal one, and both the process and the resulting product differ from those associated with the reports that GAO issues in connection with its program audits and reviews. Protests are handled solely by GAO's Office of General Counsel (OGC), not by its audit teams. In developing the record, OGC provides all protest parties—the protester, the awardee, and the contracting agency—an opportunity to present their positions. In some cases, OGC conducts a hearing to further develop the record. Under CICA, as amended, we have 100 calendar days to decide a protest.

The product of a protest before GAO—our legal decision—does not address broad programmatic issues such as whether or not a weapons program is being managed effectively or consistent with best practices. Instead, a bid protest decision addresses specific allegations challenging particular procurement actions as contrary to procurement laws,

regulations and the evaluation scheme set forth in the solicitation. We sustain a protest when we find that the procuring agency has not complied with procurement laws, regulations, and the solicitation's evaluation scheme, and that this prejudiced the protester's chances of winning the contract.

With that background, my testimony today will summarize our recently issued decision in the Boeing protest of the Air Force's award of a contract to Northrop Grumman Systems Corporation. The tanker procurement is a large and complex one, and Boeing advanced numerous protest grounds, which required us to use almost all of the 100 calendar days allowed by CICA to resolve the protest. In this regard, Boeing supplemented its initial protest seven times, raising more than 20 main challenges to the agency's evaluation and source selection.

Our review of the record led us to conclude that the Air Force had made a number of significant errors that could have affected the outcome of what was a close competition between Boeing and Northrop Grumman. We therefore sustained Boeing's protest. We also denied a number of Boeing's challenges to the award to Northrop Grumman, because we found that the record did not provide us with a basis to conclude that the agency had violated the legal requirements with respect to those challenges.

Several other points should be noted. First, our protest decision does not reflect any view on the merits of Boeing's and Northrop Grumman's proposed tankers or the firms' proposals. Judgments about which company will more successfully meet the Air Force's needs are for the Air Force, not GAO, to make. Second, bias, undue influence or other intentional wrongdoing was not alleged by Boeing in its protest, nor did GAO see any evidence of such intentional wrongful conduct by the Air Force in this procurement. Third, this statement is based on the public version of our decision. A limited amount of information that is proprietary to the parties or source selection sensitive has been redacted from the decision, but none of the redacted information is critical to understanding the decision. Finally, we made a number of recommendations to the Air Force in sustaining the protest. By statute, the Air Force has 60 days to inform our Office of the Air Force's actions in response to our recommendations. We recognize that acquiring new aerial refueling tankers is a critical need for the Air Force and the nation. We think that it is important that the Air Force act with all due dispatch to correct the procurement flaws indicated in our decision and to move forward to meet the agency's mission needs.

Background

Aerial refueling is a key element supporting the effectiveness of DoD's air power in military operations and is, as such, an important component of national security. The Air Force's tanker fleet, consisting of the medium-sized KC-135 and larger KC-10, is old; the KC-135 aircraft currently has an average age of 46 years and is the oldest combat weapon system in the agency's inventory. To begin replacing the aging refueling tanker fleet, the Air Force established a three-pronged approach under which it intended to first conduct a procurement to replace the older KC-135 tankers, while maintaining the remaining KC-135 and KC-10 tankers; the first procurement, which is the acquisition that is the subject of our decision, was identified by the Air Force as the KC-X procurement or program.

Although the Air Force intends to ultimately procure up to 179 KC-X aircraft, the agency's solicitation that led to the contract award at issue here provided for an initial contract for system development and demonstration of the KC-X aircraft and procurement of up to 80 aircraft. The solicitation provided that award of the contract would be on a "best value" basis, and stated a detailed evaluation scheme that identified technical and cost factors and their relative weights. With respect to the cost factor, the solicitation provided that the Air Force would calculate a "most probable life cycle cost" estimate for each offeror's proposal, including military construction and fuel costs. In addition, the solicitation provided a detailed system requirements document that identified minimum requirements (called key performance parameter thresholds) that offerors must satisfy to receive award. The solicitation also identified desired features and performance characteristics of the aircraft (which the solicitation identified, in certain cases, as "objectives" that offerors were encouraged, but were not required, to provide).

The Air Force received proposals and conducted numerous rounds of negotiations with Boeing and Northrop Grumman. The agency selected Northrop Grumman's proposal for award on February 29, 2008, and Boeing filed its protest with our Office on March 11. In accordance with our Bid Protest Regulations, we obtained a report from the Air Force and comments on that report from Boeing and Northrop Grumman. The documentary record produced by the Air Force in this protest was voluminous and complex. Our Office also conducted a 5-day hearing to receive testimony from a number of Air Force witnesses to complete and explain the record. Neither Boeing nor Northrop Grumman produced any witnesses at the hearing, although each was invited to do so. Following the hearing, we received further comments from the parties, addressing the hearing testimony as well as all other aspects of the record.

The Legal Standard

Procuring agencies are obligated to conduct proposal evaluations in accordance with the evaluation scheme set forth in the solicitation. Such proposal evaluation judgments are by their nature often subjective; nevertheless, the exercise of these judgments in the evaluation of proposals must be reasonable and must bear a rational relationship to the announced criteria upon which the successful competitor is to be selected. In order for GAO to perform a meaningful review, the protest record must contain adequate documentation showing the bases for the agency's evaluation conclusions and source selection decision.

In negotiated procurements, when procuring agencies conduct discussions with offerors with respect to their proposals, the discussions must be meaningful and fair, and they must not be misleading.

Judgments about which offeror will most successfully meet governmental needs are for the procuring agencies. Our protest decisions are limited to the record we develop, shaped by the allegations raised by the protester and the responses put forward by the agency and awardee, and measured against the criteria established for the procurement by applicable statutes, regulations, and the agency's solicitation.

GAO's Review of the Record

As discussed above, each of the parties—the Air Force, Boeing, and Northrop Grumman—had a full and complete opportunity to submit argument and evidence for the record. The documentary evidence in the record was voluminous. From our review of the record, including the hearing testimony of 11 Air Force witnesses, GAO found a number of significant errors in the Air Force's technical and cost evaluation and that the agency conducted misleading and unequal discussions with Boeing.

First, we found that, although the solicitation identified the relative order of importance of the requirements and features of the aircraft solicited by the Air Force, the record did not show that the Air Force, in its evaluation and source selection decision, applied the identified relative weighting in assessing the merits of the firms' proposals. In comparing Boeing's assessed advantages against Northrop Grumman's assessed advantages, the Air Force did not account for the fact that many of Boeing's assessed advantages were derived from requirements and features of the aircraft which the solicitation identified as being more important than those from which Northrop Grumman's assessed advantages were derived. Moreover, the solicitation requested that offerors propose to satisfy as many of the solicitation's desired aircraft features and performance as possible, but the record did not show that the Air Force in its evaluation or source selection

decision credited Boeing with satisfying far more of these features and functions than did Northrop Grumman.

Second, we found that a key discriminator relied upon by the Air Force in its selection of Northrop Grumman's proposal for award was not consistent with the terms of the solicitation. Specifically, the Air Force credited Northrop Grumman for proposing to exceed a solicitation key performance parameter objective for fuel offload versus unrefueled range (that is, the amount of fuel a tanker could offload to a receiver aircraft at a given distance of flight by the tanker without itself refueling) to a greater extent than Boeing proposed, but the solicitation plainly provided that no consideration would be given for proposing to exceed key performance parameter objectives.

Third, we found that the record did not show that the Air Force reasonably determined that Northrop Grumman's proposed aircraft could refuel all current Air Force fixed-wing, tanker-compatible aircraft using current Air Force procedures, as was required by the solicitation. During the procurement, the Air Force twice informed Northrop Grumman that the proposed maximum operating velocity for that firm's proposed aircraft would not be sufficient under current Air Force procedures to achieve overrun speeds for various Air Force aircraft. (In aerial refueling operations, if a receiver aircraft overruns the tanker during the final phase of rendezvous, the tanker and receiver pilots are directed to adjust to specified overrun speeds, and after overtaking the receiver aircraft, the tanker will decelerate to a refueling airspeed.) In response to the Air Force's concerns, Northrop Grumman promised a solution to allow its aircraft to achieve the required overrun speeds. The record did not show that the Air Force reasonably evaluated the capability of Northrop Grumman's proposed aircraft to achieve the necessary overrun speed in accordance with current Air Force procedures.

In addition, we found that the Air Force did not reasonably evaluate the capability of Northrop Grumman's proposed aircraft to initiate emergency breakaway procedures, consistent with current Air Force procedures, with respect to a current fixed-wing, tanker-compatible Air Force aircraft. A breakaway maneuver is an emergency procedure that is done when any tanker or receiver aircraft crewmember perceives an unsafe condition that requires immediate separation of the aircraft. In such a situation, the tanker pilot is directed to accelerate, and if necessary to also climb, to achieve separation from the receiver aircraft.

Fourth, we found that the Air Force conducted misleading and unequal discussions with Boeing. The agency informed Boeing during the procurement that it had fully satisfied a key performance parameter objective relating to operational utility. Later, the Air Force decided that Boeing had not fully satisfied this particular objective, but did not tell Boeing this, which would have afforded Boeing the opportunity to further address this. GAO concluded that it was improper for the Air Force, after informing Boeing that it had fully met this objective, to change this evaluation conclusion without providing Boeing the opportunity to address this requirement in discussions. In contrast, Northrop Grumman, whose proposal was evaluated as only partially meeting this requirement, received continued discussions addressing this same matter during the procurement.

Fifth, GAO found that the Air Force improperly accepted Northrop Grumman's proposal, even though that firm took exception to a material solicitation requirement. Specifically, the solicitation required offerors to plan and support the agency to achieve initial organic depot-level maintenance within 2 years after delivery of the first full-rate production aircraft. Northrop Grumman was informed several times by the Air Force that the firm had not committed to the required 2-year timeframe, but Northrop Grumman refused to commit to the required schedule. GAO concluded that Northrop Grumman's refusal to do so could not be considered an "administrative oversight" as was found by the Air Force in its evaluation.

Sixth, we found that the Air Force did not reasonably evaluate military construction costs in evaluating the firms' cost proposals. The solicitation provided that the Air Force would calculate a most probable life cycle cost estimate for each offeror. A most probable life cycle cost estimate reflects the agency's independent estimate of all contract, budgetary, and other government costs associated with all phases of the aircraft's life cycle from system development and demonstration through production and deployment and operations and support; military construction costs were specifically identified as a cost that the agency would evaluate in calculating the firms' most probable life cycle costs. Because the agency believed that its anticipated requirements could not be reasonably ascertained, the Air Force established a notional (hypothetical) plan, identifying a number of different types of airbases, to provide for a common basis for evaluating military construction costs. GAO found that, in addition to four errors related to military construction costs that the Air Force conceded during the protest, the record otherwise showed that the agency's military construction cost evaluation was flawed, because the

agency's evaluation did not account for the offerors' specific proposals and because the record did not otherwise support the reasonableness of the agency's notional plan.

Seventh, we found that the Air Force improperly increased Boeing's estimated non-recurring engineering costs in calculating that firm's most probable life cycle cost. Specifically, the Air Force assigned a moderate risk to Boeing's system development and demonstration costs, because, despite several efforts to obtain support from Boeing for its proposed non-recurring engineering costs, Boeing had not sufficiently supported its estimate. Although we found the Air Force's assignment of a moderate cost risk reasonable, GAO also found that the Air Force unreasonably increased Boeing's estimated non-recurring engineering costs in calculating the firm's most probable life cycle cost where the Air Force did not find that Boeing's estimated costs were unrealistic or not probable.

Finally, GAO found unreasonable the Air Force's use of a simulation model to determine the amount by which Boeing's non-recurring engineering costs should be increased in calculating that firm's most probable life cycle cost. Although such simulation models can be useful evaluation tools, here the Air Force used as data inputs in the model the percentage of cost growth associated with weapons systems at an overall program level, and there was no indication that these inputs would be a reliable predictor of anticipated growth in Boeing's non-recurring engineering costs.

There were two other aspects of the Air Force's evaluation that GAO found troubling, but which did not factor into our sustaining the protest. Specifically, GAO received much argument and hearing testimony addressing the Air Force's evaluation of the fuel costs associated with the firms' proposed aircraft, and the record indicated that the agency did not do much more than assess whether the offerors' proposed fuel burn rates (gallons of fuel burned per hour) were reasonable. The record also showed that even a small increase in the amount of fuel that is burned per hour by a particular aircraft would have a dramatic impact on the overall fuel costs. Although we did not sustain Boeing's challenge to the Air Force's evaluation of the firms' respective fuel burn rates, we suggested that this was a matter that the agency may wish to review to ascertain whether a more detailed analysis of the fuel costs was appropriate.

Similarly, the Air Force evaluated a weakness for Northrop Grumman's boom approach but concluded that this evaluated concern posed a low schedule or cost risk. Because the record did not contain any

documentation explaining why the Air Force's evaluated concern with Northrop Grumman's proposed boom design represented low risk, we received hearing testimony addressing the agency's evaluation. Although the record, including the hearing testimony, indicated that some analyses of the impact of the agency's evaluated concerns with Northrop Grumman's boom may have been performed, little detail was provided. Here too, we did not find a sufficient basis in the record to sustain Boeing's challenge, but suggested that this was another matter that the agency may wish to review further.

In sum, GAO concluded from its review of the record that the Air Force had made a number of significant errors that could have affected the outcome of what was a close competition between Boeing and Northrop Grumman. Accordingly, GAO sustained Boeing's protest. GAO also denied a number of Boeing's challenges to the award to Northrop Grumman, because the record did not provide a basis to conclude that the agency had violated the legal requirements with respect to those challenges.

Our Recommendations

GAO recommends that the Air Force reopen discussions with the offerors, obtain revised proposals, re-evaluate the revised proposals, and make a new source selection decision, consistent with this decision. If the Air Force believes that the solicitation does not adequately state its needs, the agency should amend the solicitation prior to conducting further discussions with the offerors. If Boeing's proposal is selected for award, the Air Force should terminate the contract awarded to Northrop Grumman. GAO also recommended that Boeing be reimbursed the reasonable costs of filing and pursuing the protest, including reasonable attorneys' fees.

Mr. Chairman this concludes our prepared statement. I would be happy to respond to any questions regarding our bid protest decision that you or other Members of the subcommittee may have.

Appendix I: Statistics for All GAO Bid Protests

2004-2008 Statistics for All GAO Bid Protests				
Fiscal Year	Total Cases ^a	Dismissals ^a	Merit Results ^a	
			(Sustain + Deny)	Protests Sustained ^a
2004	1354	989	365	75
2005	1262	956	306	71
2006	1223	974	249	72
2007	1277	942	335	91
2008 ^b	1071	845	226	49

^aThese figures represent the number of protests. Often there are multiple protests filed for a single procurement action.

^bThese figures cover the period between October 1, 2007 to June 27, 2008.

Appendix II: 2004-08 Statistics for GAO Bid Protests Involving DOD Components

2004 DOD Component Statistics				
Component	Total Cases ^a	Dismissals ^a	Merit Results ^a (Sustain + Deny)	Protests Sustained ^a
Air Force	132	84	48	3
Army	324	245	79	18
Defense Logistics Agency	115	103	12	1
Marine Corps	14	10	4	3
Navy	112	64	48	11
DOD (Misc.)	34	12	22	0
Defense -Total	731	518	213	36

2005 DOD Component Statistics				
Component	Total Cases ^a	Dismissals ^a	Merit Results ^a (Sustain + Deny)	Protests Sustained ^a
Air Force	127	93	34	13
Army	282	223	59	7
Defense Logistics Agency	121	108	13	0
Marine Corps	12	4	8	1
Navy	135	105	30	5
DOD (Misc.)	29	19	10	2
Defense -Total	706	552	154	28

2006 DOD Component Statistics				
Component	Total Cases ^a	Dismissals ^a	Merit Results ^a (Sustain + Deny)	Protests Sustained ^a
Air Force	148	105	43	13
Army	334	277	57	12
Defense Logistics Agency	70	62	8	3
Marine Corps	32	29	3	1
Navy	101	73	28	4
DOD (Misc.)	54	42	12	5
Defense Total	739	588	151	38

^aThese figures represent the number of protests. Often there are multiple protests filed for a single procurement action.

2007 DOD Component Statistics				
Component	Total Cases ^a	Dismissals ^a	Merit Results ^a	Protests
			(Sustain + Deny)	Sustained ^a
Air Force	136	103	33	16
Army	323	242	81	22
Defense Logistics Agency	97	80	17	0
Marine Corps	20	18	2	0
Navy	129	96	33	8
DOD (Misc.)	70	36	34	16
Defense Total	775	575	200	62

^aThese figures represent the number of protests. Often there are multiple protests filed for a single procurement action.

2008 DOD Component Statistics ^b				
Component	Total Cases ^a	Dismissals ^a	Merit Results ^a	Protests
			(Sustain + Deny)	Sustained ^a
Air Force	122	101	21	9
Army	309	247	62	9
Defense Logistics Agency	57	50	7	1
Marine Corps	11	10	1	0
Navy	93	61	32	8
DOD (Misc.)	38	36	2	0
Defense Total	630	505	125	27

^aThese figures represent the number of protests. Often there are multiple protests filed for a single procurement action.

^bThese figures cover the period between October 1, 2007 to June 27, 2008.

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