

United States Government Accountability Office Washington, DC 20548

## DOCUMENT FOR PUBLIC RELEASE

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## **Decision**

**Matter of:** Carson Helicopter Services, Inc.

**File:** B-299720; B-299720.2

**Date:** July 30, 2007

David M. Nadler, Esq., and Joseph Berger, Esq., Dickstein Shapiro LLP, for the protester.

Major ChristinaLynn E. McCoy, and Roy L. Masengale, Esq., Department of the Army, for the agency.

Katherine I. Riback, Esq., and James A. Spangenberg, Esq., Office of the General Counsel, GAO, participated in the preparation of the decision.

## DIGEST

On a solicitation for aerial wildland fire suppression services to be awarded to the offeror submitting the low-priced, technically acceptable proposal under which technical proposals showing compliance with specifications were required, the agency unreasonably determined that the awardee's proposed helicopter met the payload requirements, based upon statements in the proposal indicating compliance, where the proposal also contained information that should reasonably have created doubt to an evaluator familiar with helicopters whether the helicopter in fact satisfied the requirements.

## **DECISION**

Carson Helicopter Services, Inc., protests the award of a contract to Croman Corporation by the Department of the Army pursuant to request for proposals (RFP) No. W911S8-07-R-0007 for aerial wildland fire suppression services. The protester contends that the agency's evaluation of Croman's proposal was unreasonable because its proposed helicopter exceeded the manufacturer's allowable payload limitations.

We sustain the protests.

Issued on January 17, 2007, the RFP provided for the award of a fixed-price contract covering the period of May 15 to September 30, for the exclusive use of a rotary wing aircraft capable of delivering a minimum of 1,000 gallons of water in a single trip to fight wildland fires within the confines of Yakima Training Center, Yakima, Washington, and fires that threaten to enter or pass through the training center. The

rotary wing aircraft was required to be certified under Federal Aviation Regulation part 135 to carry passengers for reconnaissance of wildland fires. RFP amend. 4, attach. 2, at 6.

The RFP stated that the Army intended to award the contract without discussions to the offeror submitting the lowest-priced, technically acceptable proposal and which had satisfactory or neutral past performance. RFP, amend. 4, attach. 3, at 20. The RFP stated that the agency would determine technical acceptability by evaluating the three technical factors--management and staffing plan, type of aircraft and delivery system, and response to wildland fires--as "met" or "not met." Id. at 20-21.

With regard to the type of aircraft and delivery system factor, the RFP required that the offerors:

Describe[] the type of aircraft, lifting capability, <u>Federal Aviation</u> <u>Regulation Certifications held (e.g. part 133, 135, etc.)</u>, and the type of water delivery system (<u>e.g.</u> bucket, tank, etc.) to include the amount of agent that can be delivered for firefighting support, and agent re-fill system (<u>e.g.</u> gravity, suction pump, etc.). Meets all PWS specifications and convinces the Government that the contractor can adequately meet the requirement.

<u>Id.</u> at 21. Under the performance work statement (PWS) included in the RFP, the "intent" of the contract with regard to the required aircraft is stated as follows:

The aircraft shall have a minimum capacity to deliver 1,000 gallons of water by bucket or fixed tank in a single trip. The contractor shall operate the aircraft safely and efficiently carrying 1,000 gallons of water at 15 degrees Celsius, 29.92 altimeter setting at 1,500 feet above sea level, and carry at least 1.5 hours worth of fuel.

RFP, amend. 4, attach. 2 at 6. Where a water bucket was to be used on the helicopter, the PWS provided that the contractor was to determine the helicopter's "allowable payload in accordance with the aircraft manufacturer's operation and maintenance requirements, assuming 8.35 pounds per gallon of water." <u>Id.</u> at 11.

Three proposals were received in response to the RFP. The proposals of Carson and Croman each received "acceptable" technical ratings and "satisfactory" past performance ratings.<sup>1</sup> The source selection officer concluded that Croman, as the

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<sup>&</sup>lt;sup>1</sup> The other offeror's proposal was found unacceptable because it proposed to perform the work with two helicopters each carrying 530 gallons of water. Agency Report (AR), Tab 13, Individual Evaluation Summary at 1.

offeror with the lowest priced, technically acceptable proposal with satisfactory past performance should receive the award. AR, Tab 14, Source Selection Decision.

Carson proposed a Sikorsky S-61N "short body" helicopter with "enhanced performance" equipped with a 1,000 gallon externally mounted belly tank for the water. Carson's proposal provided information documenting its proposed helicopter's allowable payload and that it was capable of handling 1,000 gallons of water. AR, Tab 8, Carson's Proposal, at 33-34, 66-70; Protest at 4.

Croman proposed a modified Sikorsky S-61N "long body" helicopter, AR, Tab 9, Croman's Proposal, at 9; Tab 20, Contracting Officer's Verification of Information, at 1-2. Croman's proposal described its proposed helicopter and compliance with the PWS requirements as follows:

The S-61N is Type Certificated by the Federal Aviation Administration and has "Standard Airworthiness" certificate. The S-61N has a total gross weight of 22,000 pounds. The aircraft proposed for this Yakima Training Facility has an empty weight of 11,121 pounds which results in a total payload of 10,879 pounds. Deducting the weight of the pilots (400 pounds), fuel for 1.5 hours for flight time (1,508 pounds), the bucket (650 pounds)<sup>2</sup> the allowable payload for water is 8,362 pounds (1,001 gallons).

AR, Tab 9, Croman's Proposal at 9. Croman's proposal also included a "Load Calculation Work Sheet" that shows how the actual allowable payload for water was calculated; this work sheet shows, among other things, a 22,000-pound computed maximum gross weight. The proposal also included a "Croman Corporation S-61N Performance Chart" to show how the 22,000-pound maximum gross weight was calculated; this chart is a marked up page from the Sikorsky Aircraft S-61N Flight Manual entitled "S-61N EXTERNAL LOADS MAXIMUM GROSS WEIGHT FOR HOVERING IN GROUND EFFECT--10-FOOT WHEEL HEIGHT." AR, Tab 9, Croman's Proposal, at 9-10.

On April 5, Carson submitted an agency-level protest contesting the proposed award to Croman because its proposed helicopter assertedly lacked the capability to transport 1,000 gallons of water in a single trip in accordance with the RFP PWS requirements for a variety of reasons. AR, Tab 17, Carson's Agency-Level Protest. After investigating this claim, the Army denied the protest, finding "there is sufficient documentation" upon which the agency reasonably determined Croman's proposal

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<sup>&</sup>lt;sup>2</sup> The bucket is to be used to transport the water in Croman's helicopter. The 650-pound figure is a typographical error, and as otherwise indicated in Croman's proposal, and by totaling the figures reported here, should read 610 pounds. AR, Tab 9, Croman's Proposal, at 9-10; AR, Tab 19, Croman Letter (Apr. 9, 2007).

was compliant with the PWS requirements. AR, Tab 26, Agency-Level Protest Decision. Award was made to Croman on April 13. This protest to our Office followed. Because of the protest, the agency suspended contract performance and issued a stop work order to Croman. On May 14, however, the Army determined that continued performance of this contract "is in the best interest of the United States, and urgent and compelling circumstances that significantly affect the interest of the United States will not permit awaiting the GAO decision," and advised Croman to resume work effective May 15.<sup>3</sup> Army Submission (May 14, 2007).

Carson contends that the allowable payload of Croman's proposed helicopter was not calculated in accordance with the manufacturer's requirements as required by the PWS. Specifically, Carson contends that Croman improperly relied upon Sikorsky's "in ground effect" performance chart for the S-61N to calculate the allowable maximum gross weight of the proposed helicopter for purposes of showing that it was capable of hauling 1,000 gallons of water. Carson argues that Sikorsky's "out of ground" performance chart, which reflects a lower maximum gross weight, was the proper source for ascertaining Croman's proposed S-61 helicopter's allowable payload.<sup>4</sup>

The Army also asserts that our Office should dismiss the protests because Carson's post-hearing comments were filed after the July 16, 5:30 p.m. deadline (the comments were received at 6:25 p.m. on that date and no GAO official extended that deadline). 4 C.F.R. § 21.7(g)(2007). While our Office will ordinarily dismiss a protest in such circumstances, the protester had earlier that day filed a detailed response to an agency request for dismissal because of claimed corrective action (discussed below), in which response the protester stated in some detail why it believed its protest was meritorious and that it should receive the award. Protester Submission (July 16, 2007). In light of this filing by the established deadline, we decline to dismiss the protests.

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<sup>&</sup>lt;sup>3</sup> The protester asserts that our Office cannot consider disruption or costs in making our recommendation where we sustain a protest and where the agency has made only a "best interest" override. See 31 U.S.C. § 3554(b)(2) (2000). However, the agency here also determined that the override was necessary because of "urgent and compelling" circumstances, and this basis does not constrain what our Office can recommend.

<sup>&</sup>lt;sup>4</sup> The Army claims that this issue was untimely raised and that the additional arguments raised by Carson on this point represent an unwarranted piecemeal presentation of these issues. However, this issue was squarely raised in Carson's agency-level protest and timely supplemented as further information was provided in the agency report.

The evaluation of proposals is a matter within the discretion of the contracting agency since the agency is responsible for defining its needs and the best method of accommodating them. Maritime Berthing, Inc., B-284123.3, Apr. 27, 2000, 2000 CPD ¶ 89 at 8. In reviewing an agency's evaluation, we will not reevaluate proposals, but instead will examine the agency's evaluation to ensure that it was reasonable and consistent with the solicitation's stated evaluation criteria. Id. However, in determining the technical acceptability of a proposal, an agency may not accept at face value a proposal's promise to meet a material requirement, where there is significant countervailing evidence that was, or should have been, reasonably known to the agency evaluators that should create doubt whether the offeror will or can comply with that requirement. SeaBeam Instruments, Inc., B-253129, Aug. 19, 1993, 93-2 CPD ¶ 106 at 6-7; Mine Safety Appliances Co.; Interspiro, Inc., B-247919.5, B-247919.6, Sept. 3, 1992, 92-2 CPD ¶ 150 at 3-4, recon. denied, National Draeger, Inc.--Recon., B-247919.7, Nov. 6, 1992, 92-2 CPD ¶ 325 at 3.

As stated above, both Croman's and Carson's proposals indicate that their proposed helicopters have the ability to transport a payload of 1,000 gallons of water as required by the RFP. In a hearing held in connection with this protest, the agency evaluator, a fire chief, testified that in evaluating the proposals of Croman and Carson he basically just checked the arithmetic in each proposal to ensure that each helicopter provided for a payload of at least 1,000 gallons for the proposed helicopters, and determined that the proposals were acceptable in this respect. Hearing Transcript (Tr.) at 21-24.

As pointed out by Carson, however, the problem with Croman's proposal is that its calculations, which were included in its proposal, are based on Sikorsky's "in ground effect" performance chart. Croman's proposal interprets this chart as indicating that its proposed helicopter has 22,000 pounds of gross weight at the operating parameters identified in the RFP PWS, for example, operating at 15 degrees Celsius. Carson contends that Sikorsky's "out of ground effect" performance chart should

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<sup>&</sup>lt;sup>5</sup> In fact, the calculations in Croman's proposal reflect that its helicopter's <u>maximum</u> available payload was 1,001 gallons of water. Thus, any adjustment to the calculations could affect its successfully demonstrating its compliance with the payload requirement.

<sup>&</sup>lt;sup>6</sup> A former Sikorsky helicopter test pilot, who testified on Carson's behalf at the hearing, stated that Croman misinterpreted the Sikorsky in ground effect chart. His analysis of the chart, which we find reasonable, indicates that the proposed helicopter only had the capability of lifting a maximum 21,875 pounds of gross weight under the operating parameters defined in the PWS. Tr. at 88-90. Thus, it appears that, even using the "in ground effect" chart, Croman's helicopter does not satisfy Sikorsky's requirements regarding the helicopter's capability of transporting a payload of 1,000 gallons of water.

have formed the basis for Croman's calculations of its helicopter's maximum gross weight.

The "in ground effect" and "out of ground effect" are important aspects of a helicopter's operations. For example, as relevant to this protest, these effects must be taken into account to measure a helicopter's load capabilities while hovering, depending on which effect is applicable to the particular operation of the helicopter. Essentially, a helicopter needs less power and can operate more efficiently when operating in ground effect because this allows for more vertical lift and less induced drag as a result of operating close to the ground. In contrast, more power is needed when operating "out of ground." Thus, where the "in ground effect" is applicable, a helicopter can generally carry more weight than where this effect is not applicable. See Tr. at 76 (testimony of former Sikorsky test pilot); see also Westec Air, Inc., B-230724, July 18, 1988, 88-2 CPD ¶ 59 at 2 n.1.

By its own terms, Sikorsky's "in ground effect" performance chart included in Croman's proposal is only applicable when the distance from the bottom of the helicopter tires to the ground is 10 feet or less. AR, Tab 9, Croman's Proposal, at 11; Tr. at 77-78. That is, if the bottom of the helicopter's tires is more than 10 feet off the ground, then the "out of ground effect" performance chart applies. Tr. at 80. The agency's technical evaluator testified that the cargo bucket proposed by Croman to carry the water is approximately 8 feet tall, and is attached to the helicopter by a line approximately 150 feet long. Tr. at 54-55. Thus, when the helicopter is hovering with the bucket lifted off the ground, the helicopter would be approximately 160 to 175 feet off the ground. Tr. at 56.

Under such circumstances, the record indicates that Sikorsky's "out of ground effect" performance chart, rather than its "in ground effect" chart, would be applicable to Croman's proposed helicopter.<sup>7</sup> Tr. at 85-86. According to the

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In investigating Carson's agency-level protest, the agency's contracting specialist, among other things, contacted the owner of the helicopter proposed by Croman. (Croman did not own this helicopter.) This individual indicated that the "in ground effect" chart was appropriate for calculating external loads because "it is routine to use a short line which puts the aircraft in ground effect anyway." AR, Tab 20, Contracting Officer/Specialist Verification of Information, at 2; Tab 21, E-mail from Coulson Group to Contract Specialist (Apr. 11, 2007). This advice is inconsistent with the bucket configuration used by Croman, as described above by the agency's technical evaluator, and thus provides no basis for using the "in ground effect" table. The record also shows that the contract specialist contacted a Sikorsky employee (whose responsibilities have not been identified), who indicated that an S-61N helicopter could satisfy the agency's requirements. AR, Tab 20, Contracting Officer/Specialist Verification of Information, at 3. (In fact, the record evidences that Carson's modified "short body" S-61N apparently complies with the payload

protester, this "out of ground effect" chart indicates a maximum gross weight under the operating parameters described in the PWS of 20,000 pounds or less. Protester's Comments at 5; see AR, Tab 21, S-61N EXTERNAL LOADS MAXIMUM GROSS WEIGHT FOR HOVERING OUT OF GROUND EFFECT. Regardless of the accuracy of the protester's calculations here, the record indicates that the calculated maximum gross weight using the "out of ground effect" chart would be significantly less than 22,000 pounds, and Croman's proposed helicopter, which was only claimed by Croman to have the capability of transporting a maximum 1,001 gallons of water using the "in ground effect" performance chart, would thus not have the demonstrated payload capability, consistent with the manufacturer's operation and maintenance requirements, of transporting 1,000 pounds of water.

The agency argues that these Sikorsky charts are not controlling or necessarily an accurate reflection of the helicopter's true maximum gross weight because, as admitted by Carson's witness (the helicopter test pilot), they are only a "performance prediction" and the charts "are based on zero wind." See Agency's Post-Hearing Comments at 5-6; Tr. at 76, 78, 97. Moreover, the technical evaluator testified that during contract performance Croman's helicopter has successfully carried 1,000 gallons of water with sufficient fuel to operate for 1½ hours. Tr. at 26-28; Agency Hearing exhs. 23 and 24. However, as indicated above, the RFP required technical proposals to demonstrate the proposed helicopter's lifting capability and compliance with the PWS requirements, and where, as here, a water bucket was to be used on the helicopter, the PWS required that the contractor was to determine the helicopter's "allowable payload in accordance with the aircraft manufacturer's operation and maintenance requirements." RFP, amend. 4, attach. 2, at 11; attach. 3, at 21. Thus, even assuming the flights referenced by the technical evaluator satisfied all of the parameters stated in the PWS (which has not been shown in this record) and that Sikorsky's charts may be conservative and are not necessarily reflective of the maximum operational capabilities of a particular helicopter because they may relate to the safe operation of the helicopter, the fact remains that the agency required in the solicitation that proposals show that the helicopters comply with the aircraft manufacturer's operation and maintenance requirements in calculating allowable payload, and in this case, Croman's proposal did not.<sup>8</sup>

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<sup>(...</sup>continued)

requirements based upon application of an "out of ground effect" table.) However, the agency apparently did not ask Sikorsky about the application of the "in ground effect" chart to the helicopter proposed by Croman. <u>Id.</u>; <u>see</u> Tr. at 158.

<sup>&</sup>lt;sup>8</sup> The protester has provided evidence that where, as here, bucket operations are conducted with helicopters, the helicopters "out of ground effect" capability is what needs to be measured. Protester's Supplemental Comments (June 22, 2007) at 13-14. For example, the National Interagency Fire Center's Interagency Helicopter Operations Guide (March 2006) provides:

In sum, the record here reflects that the agency unreasonably determined that Croman's helicopter had the required lifting capability and complied with the PWS requirements. While Croman's proposal indicated compliance with the payload requirements, the calculations included in the proposal to demonstrate compliance were inappropriately based on the manufacturer's "in ground effect" performance chart as could have been ascertained by a reasonable review of the proposal by an evaluator or other individual familiar with helicopters, and the record shows that if the "out of ground effect" chart applicable here were used, Croman's helicopter would not satisfy the RFP's payload requirements. Thus, there was significant countervailing evidence that was, or should have been, reasonably known to the agency evaluators that should reasonably have created doubt whether the offeror could comply with that requirement. Mine Safety Appliances Co.; Interspiro, Inc., supra. While we acknowledge that the agency evaluators did not recognize this issue during the evaluation because of their apparent lack of helicopter expertise,<sup>9</sup> and still did not realize the significance of this issue when they investigated Carson's pre-award protest of this issue, it appears that a reasonable evaluation of the technical proposals by an evaluator familiar with helicopters reasonably would have created doubt whether Croman's helicopter in fact satisfied the RFP payload

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The following procedures shall be used for all bucket operations:

Determine allowable payload using the Interagency Load Calculation Method, appropriate HOGE [hover out of ground effect] helicopter charts and current local temperature and pressure altitude.

National Interagency Fire Center's Interagency Helicopter Operations Guide (March 2006), ch. 7, ¶ 14. This paragraph also makes it clear that this procedure is to address safety concerns in using buckets on helicopters that may exceed the allowable payload for the helicopter. <u>Id.</u>

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<sup>&</sup>lt;sup>9</sup> Even though the RFP requested technical proposals showing the helicopter's compliance with the technical requirements, including the requirement at issue here, the evaluator that the agency chose to use to evaluate proposals for this procurement had no aviation background. Tr. at 35-36. For example, the evaluator testified that when he was evaluating the proposals he never noticed that Croman's proposal used an "in ground effect" chart, and that Carson's proposal used an "out of ground effect" chart. Tr. at 39. Indeed, when the evaluator was evaluating proposals he testified that he did not know the difference between "in ground effect" and "out of ground effect." Tr. at 38-39.

requirements, notwithstanding its proposal's indication that it did. We therefore sustain the protest on this basis. $^{10}$ 

We recommend that the agency terminate Croman's contract, if feasible, in which case the agency should make award of the remainder of the contract to Carson.<sup>11</sup>

In its dismissal request proposing corrective action, the agency stated that it would take the corrective action of reimbursing the protester its proposal preparation costs and its costs of pursuing the protests, but would not disturb the award for the reasons stated above. <u>Id.</u> In response, Carson reiterated that it was entitled to the (continued...)

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<sup>&</sup>lt;sup>10</sup> Carson has alleged a number of other errors in Croman's calculation of its helicopter's payload capacity (for example, the amount of fuel needed for a 1½-hour mission), which issues we need not address in view of our determination above that Croman's helicopter was not shown to have met this requirement. Carson also maintains that Croman's proposal contains material misrepresentations, including that its proposed helicopter would be available and fully operational by the contract start date of May 15, 2007, and that its helicopter had the appropriate Federal Aviation Regulation part 135 certification. While Croman was not able to satisfy its contractual obligation to provide a helicopter by May 15 and had to obtain a further part 135 certification before it commenced contract performance, we find that it is not clear from the record before us that Croman's proposal contained intentional misrepresentations on these points. That is, the record does not show that Croman knew or should have known when it submitted its proposal that it would not comply with the start date requirements and the record reflects that Croman's proposal accurately reported the Federal Aviation Regulation part 135 certification that its aircraft held. See CourtSmart Digital Sys., Inc., B-292995.2, B-292995.3, Feb. 13, 2004, 2004 CPD ¶ 79 at 6-7.

<sup>&</sup>lt;sup>11</sup> Besides the fact that Croman's helicopter does not comply with the RFP PWS requirements, Croman did not provide the helicopter at the start of the contract, primarily because it was in pieces in Australia when award was made; and even when the helicopter was delivered to the site it had to undergo the required Federal Aviation Regulation part 135 certification. See Supplemental AR, Tabs 15 and 20, E-mails between Evaluator and Contract Administrator. Thus, the contractor instead provided several other noncompliant helicopters to perform this contract until Croman's helicopter was delivered and made operational. In fact, despite being requested, the agency has provided no evidence that Croman has yet been compliant with the contract requirements. See Tr. at 138-39. Additionally, Carson has represented that it can have the same model helicopter that it proposed, which meets all of the PWS requirements, in Yakima in 1 day. Declaration of the Vice President of Carson (July 16, 2007). On the other hand, the agency maintains that terminating Croman's contract is not feasible because the requirement is urgent, the contract term ends September 30, and a transition period would be required. Agency Dismissal Request (July 13, 2007).

In the event that termination is not feasible, we recommend that Carson be reimbursed its proposal preparation costs. We also recommend that Carson be reimbursed its costs of filing and pursuing the protest, including reasonable attorney's fee. 4 C.F.R. § 21.8(d)(1). In accordance with 4 C.F.R. § 21.8(f)(1), the protester's certified claim for such costs, detailing the time expended and costs incurred, must be submitted directly to the agency within 60 days after receipt of this decision.

The protests are sustained.

Gary L. Kepplinger General Counsel

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<sup>(...</sup>continued)

award and could promptly provide a compliant helicopter. Protester Submission (July 16, 2007). Under the circumstances, we did not agree with the agency that the protest would be rendered academic by the agency's proposed corrective action.