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United States General Accounting Office
Washington, DC 20548

Comptroller General
of the United States

Decision

Matter of: United Defense LP

File: B-286925.3; B-286925.4; B-286925.5

Date: April 9, 2001

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DIGEST

Protest against award of single contract for both infantry carrier vehicle (ICV) and mobile gun system (MGS) variants of new family of armored vehicles is denied where (1) awardee's proposal for ICV, accounting for approximately 89 percent of new vehicles in contemplated brigade, was reasonably evaluated as offering significant performance and supportability advantages which outweighed protester's schedule and price/cost advantages, and (2) although awardee's schedule for deploying MGS was very disadvantageous and evaluation did not fully reflect certain disadvantages with respect to ammunition storage in awardee's MGS, its proposal nevertheless offered other performance and supportability advantages, and selection of awardee's MGS would result in commonality between ICV and MGS, such that award for both variants was not unreasonable.

DECISION

United Defense LP (UDLP) protests the U.S. Army Materiel Command's (AMC) award of a contract to GM GDLS Defense Group LLC (GM/GDLS), under request for proposals (RFP) No. DAAE07-00-R-M032, for the Interim Armored Vehicle (IAV). UDLP challenges the evaluation of proposals, asserting that the evaluation and resulting cost-technical tradeoff were inconsistent with the evaluation scheme set forth in the RFP and were otherwise unreasonable.

We deny the protest.

BACKGROUND

RFP

According to the RFP, and the agency's overall statement of its requirements in its "Operational Requirements Document for a Family of Interim Armored Vehicles" (ORD), incorporated into the solicitation, there is an "an immediate and urgent need for an air transportable [Brigade Combat Team (BCT)], capable of deployment anywhere on the globe in a combat ready configuration." RFP, Executive Summary; Operational Requirements Document at 1. In this regard, the agency states in "The Interim Brigade Combat Team: Organizational and Operational Concept" (O&O Concept), also incorporated into the solicitation, that Army light forces can deploy quite rapidly, but lack the lethality, mobility, and staying power necessary to ensure decision, while Army mechanized forces possess substantial lethality and staying power, but require too much time to deploy. O&O Concept at 4.

The contemplated Interim BCT (IBCT), with which the Army intends to address this perceived shortfall in capability, was generally described in the Operational Requirements Document as "a full spectrum, combat force" which has utility in all operational environments, but "is designed and optimized primarily for employment in small scale contingency (SSC) operations in complex and urban terrain, confronting low-end and mid-range threats that may employ both conventional and asymmetric capabilities." Operational Requirements Document at 2. According to the Operational Requirements Document, the IBCT "deploys very rapidly, executes early entry, and conducts effective combat operations immediately on arrival to prevent, contain, stabilize, or resolve a conflict through shaping and decisive operations"; "participates in major theater war (MTW), with augmentation, as a subordinate maneuver component within a division or corps, in a variety of possible roles"; and "participates with appropriate augmentation in stability and support operations (SASO) as an initial entry force and/or as a guarantor to provide security for stability forces by means of its extensive combat capabilities." Id. Further, "[i]ts core operational capabilities rest upon excellent operational and tactical mobility, enhanced situational understanding, combined arms integration down to company level, and high dismount strengths for close combat in urban and complex terrain."

Id. at 3. Furthermore, "[g]ven its likely operational environment, the IBCT achieves decisive action by means of combined arms dismounted assault at the company level, supported by direct fires from organic weapon systems (ICV [infantry carrier vehicle] crew served weapons, MGS [mobile gun system], anti-tank systems, and snipers) integrated with indirect fires from artillery, mortars, and joint fires/effects." Id. As an example of its intended use, the RFP included as an attachment the IAV Operational Mode Summary/Mission Profile (OMS/MP), which generally described a 30-day long-term operation, consisting of a 4-day deployment period, 72-hour small scale contingency, 19-day SASO period, and a 4-day redeployment period, but focused on the 72-hour small scale contingency.

The solicitation requested proposals to equip on a requirements basis up to six IBCTs with IAVs and for any necessary engineering and manufacturing development (EMD) (to be performed on a cost-plus-award-fee basis). RFP Amend. No. 0005. The Army contemplates that these IBCTs, which must be "fully mobile and completely air deployable by C-130 tactical lift aircraft," RFP, Executive Summary, will be comprised (after the first BCT) of 330 IAVs (as well as numerous other vehicles), including: (1) the ICV variant, comprised of 114 infantry carriers (108 plus 6 operational readiness float (reserve) vehicles) per brigade after the initial brigade, 51 reconnaissance vehicles, 40 commander's vehicles, 38 120-millimeter mortar carriers, 10 antitank guided missile (ATGM) vehicles, 14 fire support vehicles, 10 engineer squad vehicles, 18 medical evacuation vehicles, 4 nuclear-biological-chemical reconnaissance vehicles; and the MGS (31 vehicles). Offerors were permitted to propose for either the ICV variant (including all configurations), the MGS, or both.

The solicitation included performance specifications for each type of IAV; the requirements were categorized as Key Performance Parameters (KPP), Band 1 Performance Requirements, Band 2 Performance Requirements, non-Band 1/non-Band 2 Performance Requirements, and Desired Capabilities. Offerors were required to meet all KPPs for all IAVs at the time of delivery, commencing with the initial deliveries; offerors were encouraged to meet as many of the Band 1, Band 2 and non-Band 1/non-Band 2 Performance Requirements as possible in the initial delivery, but were required to meet all performance requirements other than the KPPs (i.e., Band 1, Band 2, and non-Band 1/non-Band 2) no later than delivery of the last vehicle in the fifth brigade. Offerors not proposing to meet all performance requirements at the time of initial delivery were required to propose block improvement options for incorporating the remaining requirements into production subsequent to initial delivery and for retrofitting all previously produced IAVs to the block improvement design. RFP § M.1.1.10. Offerors were required to furnish, not only extensive proposal information detailing their approach to meeting the solicitation requirements, but also, in the event that they proposed the ICV variant, two ICV bid samples to be used "to verify the content of the written portion of [the] proposal." RFP § L.3.1.

The RFP provided for four award alternatives: (1) one award for both the ICV variant (including all ICV configurations) and the MGS; (2) one award for the ICV and one award for the MGS; (3) one award for the ICV only; or (4) one award for the MGS only. RFP, Executive Summary, § M.1.6. Award was to be made on a best overall/best-value basis to the offeror whose proposal was rated acceptable for all evaluation areas (other than price/cost) and was most advantageous to the government.

The solicitation provided for proposals to be evaluated under five evaluation areas: (1) schedule, including evaluation elements for production/delivery/support for the first IBCT element and for subsequent production/delivery/support; (2) performance, including elements for performance requirements and commonality; (3) supportability, including elements for deployability, sustainment cost, system maintainability, and predicted reliability; (4) price/cost; and (5) management. Schedule and performance were equal in importance and were "each slightly more important than" supportability and price/cost; supportability and price/cost were of equal importance and were each more important than management. RFP § M.1.1. In addition, offerors were advised that the source selection authority (SSA) and source selection advisory council (SSAC),

> using their best professional and military judgment and consistent with the results of the proposal evaluation and the Basis for Award, [would] make an integrated assessment of the capability of the offerors' proposals to satisfy the objectives set forth in the BCT Organizational and Operational (O&O) Concept, considering a Combined Arms Company Team. In the event this analysis indicates that the BCT O&O Concept objectives cannot be achieved, the Government reserves the right not to make any award(s) based on this solicitation and to pursue other ICV and/or MGS contract actions.

RFP § M.1.7.

Seven offerors submitted proposals; some, including GM/GDLS and UDLP, submitted multiple proposals. (GM/GDLS submitted three proposals, including an ICV proposal, an MGS proposal and a combined proposal; UDLP submitted four proposal sets based upon varying approaches, each including an ICV proposal, an MGS proposal and a combined proposal.) Seventeen proposals from four offerors were included in the competitive range. After conducting extensive oral and written discussions with offerors, AMC requested final proposal revisions (FPR). Based upon the evaluation of FPRs and the sample test results, the source selection authority determined that the GM/GDLS proposals, both individually for the ICV and MGS and combined, represented the best overall value and were most advantageous to the government. Source Selection Decision at 9, 27.

Infantry Carrier Vehicle (ICV) Award Decision

The SSA first reviewed the proposals for the ICV; the SSA explained in the Source Selection Decision that he had "elected to compare the ICV proposals and select the ICV proposal that I deem to be the best value, before I compare the MGS proposals, in recognition of the significantly larger number of ICV vehicles and the fact that proposals for the ICV were submitted by all four offerors, while MGS proposals were submitted by only [GM/GDLS] and UDLP." Source Selection Decision at 5.

The SSA determined that UDLP's Proposal No. 1 submission set (including both the individual ICV and MGS and the combined proposal) was its most advantageous set of proposals, and thus compared its Proposal No. 1 approach for the ICV with GM/GDLS's ICV proposal. The SSA found the GM/GDLS's ICV proposal to be significantly superior to UDLP's proposal in the performance and supportability areas, and found UDLP's proposal superior to GM/GDLS's in the schedule area and significantly superior in the price/cost area.

The SSA acknowledged that the evaluated cost of UDLP's ICV ($[DELETED]) was lower than GM/GDLS's ($3.534 billion), such that UDLP's proposal was significantly superior in this area. As for the schedule area, the SSA rated both proposals merely acceptable because neither met the agency's "objective" deployment schedule, under which the First Unit Equipped would be deployed by the end of March 2001 and Initial Operational Capability for the first BCT would be achieved by the end of December 2001. The SSA did recognize, however, that the most probable First Unit Equipped (August 2001) and Initial Operational Capability (February 2002) for UDLP's ICV was "much sooner" than the most probable First Unit Equipped (January 2002) and Initial Operational Capability (December 2002) for GM/GDLS's ICV. Source Selection Decision at 10. The SSA characterized UDLP's proposal as superior with respect to schedule, and further recognized that "[g]iven the urgency of the operational requirement" for the IBCTs, the RFP placed "considerable weight on the [s]chedule [a]rea." Source Selection Decision at 16.

With respect to the performance area, the SSA recognized that UDLP's proposed ICV--the MTVL, a tracked vehicle derived from the M-113 armored personnel carrier--possessed three performance advantages over the GM/GDLS 8-wheeled LAV: (1) UDLP's ICV had superior off-road terrain mobility, including soft soil mobility, vertical climb and side slope capability, while GM/GDLS's ICV had disadvantageous mobility in soft soil; (2) UDLP's proposal indicated that its ICV had the capacity to transport a 10-man infantry squad (in addition to the crew), one more soldier than required and one more than indicated in GM/GDLS's proposal;[1] and (3) UDLP's ICV, unlike GM/GDLS's, would not need any block upgrades because it would meet all

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[1] As noted by the SSA however, UDLP's proposal was rated as having a medium risk that its ICV actually would not be able to carry a tenth soldier.

minimum performance requirements with the initial deliveries. In addition, the SSA recognized that UDLP's ICV offered greater commonality than GM/GDLS's with currently fielded systems; on the other hand, the SSA noted that, in the context of an award for both the ICV and MGS, GM/GDLS's IAV "offers far superior commonality among the combined IAVs variants" because its ICV and MGS "base designs are identical." Source Selection Decision at 13-14, 24.

The SSA also found that the GM/GDLS ICV offered significant performance advantages relative to UDLP's, such that GM/GDLS's proposal overall was significantly superior in this area. Specifically, the SSA emphasized that the GM/GDLS wheeled ICV offered "an exceptionally advantageous maximum sustained speed of 60 mph," noting that the minimum speed in the specification was only 40 mph and that UDLP's tracked ICV was evaluated as at risk of not meeting even that lower speed. Source Selection Decision at 11. The SSA noted that the GM/GDLS "ICV's maximum sustained speed will not only enable it to quickly road march to the designated mission location and engage the threat, but also to rapidly disengage when facing a superior threat, or to rapidly redeploy to a new position when facing an unexpected threat." Id. In addition, the SSA noted that GM/GDLS's wheeled ICV offered lower interior noise and vibration, and therefore an enhanced ride quality, compared to UDLP's tracked ICV. According to the SSA, both increased the alertness and fitness of infantry soldiers riding in GM/GDLS's ICV and--because the soldiers in UDLP's ICV were required to wear double hearing protection devices while those in GM/GDLS's were required to wear only a single device--allowed better communication within GM/GDLS's ICV.

Further, the SSA noted that the overall (external) acoustic signature of GM/GDLS's wheeled ICV was "far less pronounced" than that of UDLP's tracked ICV, which would generally enhance the survivability of both the vehicle and nearby dismounted infantry by reducing the likelihood of detection of the vehicle, and also would provide a superior operational capability to advance closer to a threat without being detected and thereby gain situational dominance. Id. at 13. The SSA found that the survivability of GM/GDLS's ICV also was enhanced by the fact that it included integral all-around horizontal armor protection against 14.5 mm AP (Armor Piercing) rounds (a desired but not a required capability under the RFP), while UDLP's ICV offered that level of integral protection only in the 60-degree arc at the front of the vehicle and otherwise offered only the lesser, required level of integral protection against 7.62 mm AP rounds. The SSA found that GM/GDLS's greater level of armor protection made it "much less vulnerable" and offered "superior survivability" in the complex and urban terrain--a non-linear environment where 360-degree protection was desirable because threats could come from any quarter--where the BCT is envisioned to be used. Source Selection Decision at 12, 26. ([DELETED]).

In addition to the above performance advantages, which the SSA concluded would offer "significantly enhanced soldier survivability," the SSA noted that UDLP's ICV offered "significantly disadvantageous self-recovery and short track degraded operations." Id. at 12. In this regard, UDLP's ICV was evaluated as requiring up to

135 minutes to enter short track mode in the event of a track problem, significantly longer than the time required for GM/GDLS's wheeled ICV either to change a wheel or to proceed based on the "run flat" mode of its tires, and would be able to proceed in a degraded mode (short track) at only approximately 7 mph, while GM/GDLS's ICV could proceed in a degraded mode at speeds in excess of 30 mph. The SSA viewed these UDLP disadvantages as having a significant negative impact on road marches by causing loss of cohesiveness in march formations, and as being "counter to the basic deployment and utilization concept for the BCT, which envisions quick deployment and engagement." Source Selection Decision at 12.

GM/GDLS's ICV also was evaluated as being significantly superior to UDLP's in the lesser-weighted supportability area. In this regard, it was found that a unit of GM/GDLS's ICVs would require fewer C-130 and C-17 airlift aircraft sorties to transport; GM/GDLS's 10-year sustainment cost (for repair parts, maintenance manhours and petroleum, oils and lubricants) was lower than UDLP's; and GM/GDLS's design offered more advantageous maintainability characteristics, which were expected to ease the maintenance burden and provide for superior operational readiness.

In addition, the SSA found the predicted reliability of GM/GDLS's ICV to be significantly superior to that of UDLP's. In this regard, the agency was projecting that most GM/GDLS ICV configurations would achieve a mean miles between critical failure (MMBCF) ranging from [DELETED], while most of UDLP's ICV configurations would achieve an MMBCF ranging from [DELETED]. The SSA, noting that projected reliability targets are rarely realized in practice, concluded [DELETED]. The SSA determined that the fact that GM/GDLS's ICV was expected to experience [DELETED] fewer critical failures than UDLP's represented "exponentially superior combat readiness" and "dramatically heightened ICV readiness" that "directly affects both soldier safety and survivability, as well as the potential for successfully accomplishing the mission." Source Selection Decision at 15.

The SSA concluded that the advantages of GM/GDLS's ICV in the performance and supportability areas were so significant as to outweigh UDLP's advantages in the schedule and price/cost areas.

MGS Award Decision

The SSA likewise concluded that GM/GDLS's proposed MGS was more advantageous than UDLP's, finding it significantly superior in the performance and supportability areas, which offset UDLP's advantage in the schedule and cost/price areas.

As with the ICVs, both proposals were rated as merely acceptable in the schedule area because neither met the agency's objective deployment schedule. However, the SSA recognized that the most probable First Unit Equipped (September 2001) and Initial Operational Capability (February 2002) for UDLP's MGS were "much closer"

to the objective schedule than were the most probable First Unit Equipped (August 2003) and Initial Operational Capability (November 2003) for GM/GDLS's. Source Selection Decision at 21; Addendum to Source Selection Memorandum. According to the SSA, GM/GDLS's MGS schedule "represents a significant disadvantage and is substantially inferior" to UDLP's; the SSA was "particularly concerned about the length of the [GM/GDLS] development effort." Source Selection Decision at 21, 27. The SSA also noted that UDLP's evaluated price/cost ($[DELETED]) was more advantageous than GM/GDLS's ($1.04 billion).

In the performance area, the SSA recognized that UDLP's MGS possessed advantages with respect to both the rate of fire and fire control for the main gun, although he did not view these capabilities as particularly significant in view of the MGS's primary assigned role of penetrating bunkers and destroying sniper positions. Further, the SSA recognized that, as with UDLP's ICV, its tracked MGS possessed superior off-road terrain mobility, including soft soil mobility, vertical climb and side slope capability, while GM/GDLS's wheeled MGS had disadvantageous mobility in soft soil.

However, the SSA found that GM/GDLS's MGS offered significant performance advantages relative to UDLP's such that its proposal overall was significantly superior in this area. Specifically, the SSA emphasized that the GM/GDLS wheeled MGS offered "a significantly advantageous sustained speed of 60 MPH," noting that UDLP's tracked MGS was capable of only 45 mph. Source Selection Decision at 22. As with the ICVs, the SSA found that the superior maximum sustained speed of GM/GDLS's MGS would enable it both to quickly road march to the designated mission location, and to rapidly disengage when facing a superior threat, or to rapidly redeploy to meet an unexpected threat. In addition, the SSA noted: "Operationally, selection of the [GM/GDLS] MGS would result in the entire BCT, including all IAVs, having comparable sustained speed mobility on hard surface roads." Id. at 22. Further, the SSA also viewed as advantages the fact that the GM/GDLS's wheeled MGS offered (1) superior ride quality with lower internal noise and vibration; (2) greater all around integral 14.5 mm AP armor protection (other than the wheel wells) than UDLP's (14.5 mm AP protection in the front and otherwise 7.62 mm AP); (3) a reduced, "far less pronounced" acoustic signature; and (4) more advantageous self-recovery and degraded mode operation. Id. at 24.

The SSA also found that GM/GDLS's MGS offered advantages in supportability such that it was overall superior to UDLP's in this area. The SSA recognized that UDLP's MGS was "slightly superior overall" with respect to deployability; although GM/GDLS's MGS was evaluated as requiring fewer C-130 and C-17 flights to deploy, UDLP's was evaluated as requiring substantially less time for preparation, loading, unloading, and restowing equipment, especially for unloading and restowing to bring the MGS to its combat ready configuration after C-130 flights. Source Selection Decision at 25. However, the SSA noted that the 10-year sustainment cost for GM/GDLS's MGS was lower than UDLP's, and that GM/GDLS's MGS had significantly superior predicted reliability, since it was expected to achieve an MMBCF of [DELETED], compared to UDLP's initial MMBCF of [DELETED]. Although the SSA

recognized that the source selection evaluation board (SSEB) had projected that UDLP would ultimately meet the RFP requirement for an MMBCF of 1,000, and that it was proposing [DELETED], he noted that [DELETED].

The SSA concluded that GM/GDLS's "advantages in the Performance and Supportability Areas are so significant as to outweigh the recognized and significant advantages of the UDLP MGS in the Areas of Schedule and Price/Cost." Source Selection Decision at 26. Again, according to the SSA, UDLP's "significant [schedule] advantage . . . coupled with the lower price/cost of the UDLP proposal, does not offset the tremendous long term advantages accruing to [GM/GDLS] in the Performance and Supportability Areas, and the delay in MGS capability can be filled by surrogate MGS systems available to the Army." Source Selection Decision at 27; Addendum to Source Selection Memorandum. Upon learning of the resulting award to GM/GDLS for both the ICV and MGS, and after being debriefed by the agency, UDLP filed this protest with our Office. We have reviewed the record and find no basis to question the award. We discuss several of the protester's more significant arguments below.

ANALYSIS

Infantry Carrier Vehicle (ICV)

Mobility

The protester asserts that the agency's evaluation of the mobility of offerors' ICVs was unreasonable and inconsistent with the evaluation scheme set forth in the RFP. Essentially, the protester argues that the source selection over-emphasized the high-speed road march capability of GM/GDLS's wheeled ICV and under-emphasized the superior off-road, cross-country mobility of its own tracked ICV.

In discussing his determination that the higher maximum sustained speed of GM/GDLS's ICV--"an exceptionally advantageous maximum sustained speed of 60 MPH"--represented a "highly significant" advantage relative to the 40 mph sustained speed of UDLP's ICV, the SSA noted that

> roadmarches were reflected both in the O&O, and in the integrated operational assessment I performed, along with the SSAC, of the capability of the offerors to satisfy the objectives set forth in the BCT O&O concept, for a combined arms company. Based on my integrated O&O assessment of representative operational scenarios, an extended roadmarch could be accomplished [in] half the time with the [GM/GDLS] ICV, compared to the UDLP ICV.

Source Selection Decision at 11-12. The assessment to which the SSA was referring here was that provided for in RFP § M.1.7: "The SSA and SSAC will, using their best professional and military judgment and consistent with the results of the proposal

evaluation and the Basis for Award, make an integrated assessment of the capability of the offerors' proposals to satisfy the objectives set forth in the BCT Organizational and Operational (O&O) Concept, considering a Combined Arms Company Team." This Integrated O&O Assessment included as its only specific operational scenario the "Road March to Pristina: Port to AO [Area of Operations]," a presentation of three possible, alternative road marches to Pristina in Kosovo, including a 200-mile march from Thessaloniki in Greece, a 185-mile march from Tirana in Albania, and a 135-mile march from an airfield in Macedonia. AR, Tab 84, Integrated Operational Assessment, Oct. 12, 2000; AR, Tab 85, SSAC Integrated O&O Assessment for GM-GDLS; AR, Tab 86, SSAC Integrated O&O Assessment for UDLP.

The protester asserts that the sole operational scenario against which the capabilities of the competing vehicles were judged was the "Road March to Pristina," which it describes as a long-distance movement down a hard surface road between the port of entry and the area of operations; as a result, argues the protester, the SSA gave decisive weight to the operational mobility advantages of the GM/GDLS's wheeled ICVs for speed and ride quality on primary roads, while largely ignoring the advantages of UDLP's tracked vehicles in other terrain and in tactical operations. According to the protester, nothing in the RFP or the O&O Concept informed the offerors of the overwhelming emphasis he would place on the long-distance road march, or the lack of emphasis he would place on tactical mobility and offensive operations. On the contrary, claims the protester, the O&O Concept made clear that tactical mobility and dismounted close combat were key operational capabilities of the IBCT, and the RFP focused on a small scale contingency scenario in the area of operations and advised the offerors to assume that only 20 percent of operations would occur on paved roads.

In reviewing an agency's evaluation of proposals and source selection decision, our review is confined to a determination of whether the agency acted reasonably and consistent with the stated evaluation factors and applicable procurement statutes and regulations. Main Bldg. Maintenance, Inc., B-260945.4, Sept. 29, 1995, 95-2 CPD ¶ 214 at 4. As explained below, we find that the evaluation in this area was reasonable.

1. Recognition of Importance of Cross-Country Mobility

As noted by the protester, the solicitation documents included several references to the importance of tactical and cross-country mobility. For example, the O&O Concept indicates with respect to the IBCT that "[i]ts core qualities are high mobility (strategic, operational, and tactical) and its ability to achieve decisive action through dismounted infantry assault, supported by organic direct and indirect fire platforms, and enabled by situational understanding." O&O Concept at 7. At the tactical level, according to the O&O Concept, "overmatching mobility is critical to the success of the force. The IBCT requires 100% tactical mobility, i.e., a mobility capability that equals that possessed by a mechanized formation, since it must be able to keep pace with mechanized formations when task organized within a division for high-end,

distributed operations in open and rolling terrain." O&O Concept at 13-14. In addition, the ICV specification (applying also to the MGS) in the RFP provided that "[t]he vehicle shall be capable of operating over cross-country terrain," and that the NATO Reference Mobility Model would be used to quantify mobility characteristics. ICV Performance Specification § 3.1.1.5.2. (The model was used here for calculating a vehicle's speed and the applicable percentage of no-go terrain for the vehicle in six terrain categories: Germany dry, Germany wet, Mideast dry, Mideast wet, Korea dry and Korea wet.)

Our review indicates that the agency's evaluation took into account UDLP's advantage with respect to off-road mobility. In this regard, the SSEB determined, applying the NATO Reference Mobility Model, that there were differences in the percentage of no-go terrain for the two vehicles, most significantly in the "Germany wet" category, where GM/GDLS's ICV was rated as having a no-go percentage of 22.5 percent compared to UDLP's 5.8 percent. Contracting Officer's Statement at 67.[2]

The SSA did acknowledge that the "Road March to Pristina" scenario, which was part of the Integrated O&O Assessment, "focused on the operational phase, the movement from the port to the AO [Area of Operations]." Hearing Transcript (Tr.) at 1003-1004.[3] However, the record does not support UDLP's assertion that this resulted in consideration of only a vehicle's capability to undertake a high-speed, long-distance road march, without consideration of its capability with respect to tactical mobility and dismounted close combat. The SSA testified that he recognized that it could not be assumed that the BCT would not encounter hostilities during the road march to Pristina; rather, he was aware that there may be "tactical events" along the way, and his assessment included ratings for tactical maneuver and operational agility which took the possibility of such events into account. Tr. at 1009-10, 1025-30. Indeed, the SSA testified that, while there was no effort in

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[2] The overall evaluation applying the NATO Reference Mobility Model was as follows:

	Germany Dry/Wet MPH	Germany Dry/Wet % No-Go	Mideast Dry/Wet MPH	Mideast Dry/Wet % No-Go	Korea Dry/Wet MPH	Korea Dry/Wet % No-Go
Bradley Baseline	16.6/14.5	3.5/5.0	18.7/18.5	1.3/1.3	15.9/15.8	1.2/1.2
UD ICV	16.9/14.8	4.2/5.8	18.4/18.2	3.5/3.5	18.0/17.7	1.2/1.2
GM ICV	14.7/10.5	10.1/22.5	15.7/15.4	3.6/3.8	13.5/13.2	6.4/6.3

Contracting Officer's Statement at 67.

[3] Transcript citations refer to the 4-day hearing our Office conducted regarding this protest.

the Integrated O&O Assessment to analyze any particular 72-hour small scale contingency in the area of operations, the assessment encompassed more than just merely the march to Pristina, and did take into account operations in the area of operations. Tr. at 1006-07, 1102-03.

The contemporaneous documentation of the Integrated O&O Assessment confirms that the agency considered more than just the capability for a high-speed road march. In addition to the "Road March to Pristina" scenario, the assessment included consideration of (and ratings for) (1) tactical maneuver, including survivability, Red Zone ("Ambush (% x-country No Go)," squad size, dismounted assault enabled by vehicles (signature), and vertical obstacles), and command, control, communications, computers, and intelligence (C4I); (2) operational/tactical agility, including agility, cohesiveness and crew/squad effectiveness upon arrival; (3) C-130 deployability/fight off the ramp; and (4) sustainability. AR, Tab 86, SSAC Integrated O&O Assessment for UDLP; AR, Tab 85, SSAC Integrated O&O Assessment for GM-GDLS. In this regard, UDLP's ICV (as well as its MGS) was rated as a plus, "Enhances O&O," for "Ambush (% x-country No Go)"; in contrast, GM/GDLS's ICV (as well as its MGS) was rated as only a minus, "O&O at Risk," for that category and it was noted that "[i]ncreased cross-country mobility would be beneficial." AR, Tab 86, SSAC Integrated O&O Assessment for UDLP, at 7; AR, Tab 85, SSAC Integrated O&O Assessment for GM/GDLS, at 7.

Even beyond the Integrated O&O Assessment, the record indicates that the agency recognized the difference in cross-country mobility of the vehicles. The Army Test and Evaluation Command assessed a moderate risk against GM/GDLS's vehicle on the basis that it was characterized by "significant terrain denial" and cross-country mobility that was significantly below the specification's tactical standard. AR, Tab 87, IAV System Performance Risk Assessment for the MS/LRIP Decision, at 7. Further, and most significantly, the Source Selection Decision reflects the SSA's specific determination that UDLP's proposed ICV (as well as its MGS) had superior off-road terrain mobility, including soft soil mobility, vertical climb and side slope capability, while GM/GDLS's ICV had "disadvantageous mobility" in soft soil. Source Selection Decision at 11, 22.

2. GM/GDLS Higher Speed More Significant

In response to the protester's assertion that speed was over-emphasized, the Army reports that the evaluation demonstrated that GM/GDLS's speed advantage was "an unequivocal discriminator" between the offerors, in favor of GM/GDLS. Agency Hearing Comments at 4. The agency maintains that the evaluation in this regard was reasonable; we agree.

As an initial matter, we note that the RFP documents cited by the protester repeatedly emphasize the importance of high-speed mobility; they stated that a core capability of the IBCT is high operational mobility. O&O Concept at 7, 13, 32; Operational Requirements Document at 3. For example, in explaining why the IAV

must be capable of sustained hard surface speeds of at least 40 mph, the Operational Requirements Document stated that "[o]ne of the core capabilities of the IAV equipped IBCT is the ability to move rapidly about the battlefield. . . . [The] IAV must be capable of rapid deployment/displacement to critical areas immediately upon landing/insertion and have the ability to rapidly relocate to meet emerging threats and to shape the battlefield. This speed allows the commander to rapidly move and commit his IAV equipped force." Operational Requirements Document at 8-9. Likewise, the O&O Concept stated that "the IBCT will conduct rapid tactical or operational movement to achieve positional advantage . . . . Rapid, precision maneuver permits combat elements to avoid enemy strengths, to attack from unexpected directions, to achieve surprise, or to fix the enemy with one portion of the IBCT while mounting a precise, deliberate attack on the enemy's flanks or rear." O&O Concept at 33-34.[4] Further, while the protester argues that the fact that the terrain profile included only 20 percent road shows that the agency overemphasized the road march, we agree with the agency that the terrain profile can most reasonably be read as depicting operations only during the 72-hour small scale contingency, and not during the overall 30-day operation. IAV Operational Mode Summary/Mission Profile at 2, 5.[5]

We find no basis to question the agency's position that, even with respect to operations in the area of operations during the 72-hour small scale contingency envisioned by the RFP, GM/GDLS's lesser cross-country capability was not a critical weakness. Again, as noted above, the Operational Requirements Document itself associates the requirement for a sustained speed of at least 40 mph with the need to

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[4] The importance placed by the agency on operational mobility was consistent with the agency's actual experience with the operational environment in which the IBCT is expected to be deployed. In this regard, the Operational Requirements Document indicated that "[m]ission analysis confirmed that recent operations in Balkans typified the operational environment in which the IBCT would most likely be employed." O&O Concept at 10. In explaining the importance of operational road marches, the Army reports that, during the deployment of the First Armored Division into Bosnia in 1995, mechanized units were deployed overland 600 miles from central Germany through Hungary and into Bosnia; while wheeled vehicles moved in convoy over primary roads at speeds in excess of 45 mph, tracked vehicles were loaded onto rail cars and moved separately. Agency Hearing Comments at 5; Tr. at 36-37, 106-07, 115. Likewise, the record indicates that units in Bosnia and Kosovo patrol up to 180 miles per day. Tr. at 116.

[5] Although the protester suggests that assuming that the IBCT will undertake high-speed road marches is inconsistent with the fact that the towed 155 mm (M198) artillery piece that will initially be deployed with the brigade is limited to a top speed of 45 mph, the record indicates that the agency expects ultimately to replace this gun with a lightweight artillery piece with a higher speed.

be able "to move rapidly about the battlefield," Operational Requirements Document at 8-9; this is consistent with the SSA's position that GM/GDLS's higher speed offers a tactical advantage. Tr. at 921-23. Furthermore, the agency maintains, and testimony at the hearing confirms, that the increasing prevalence of roads, and the fact that operations in the urban and complex terrain for which the IBCT is optimized are likely to be canalized (funneled) into the road network, makes roads an increasingly important factor in mobility. Contracting Officer's Statement at 67; Tr. at 32, 125-26, 130-33, 180, 1088. Indeed, the terrain breakdown in the RFP includes in the small scale contingency profile 50 percent primary and secondary road. IAV Operational Mode Summary/Mission Profile at 5. This is significant, since the record indicates that GM/GDLS's wheeled ICV will enjoy an advantage relative to UDLP's tracked ICV on secondary roads as well as primary roads. (Although GM/GDLS's advantage on secondary roads can diminish when secondary roads are wet or rough, the agency reports that there are no likely conditions under which UDLP's tracked vehicle will have an advantage on such roads.) Contracting Officer's Statement at 68; Agency Hearing Comments at 35-36 n.1; Tr. at 179-181, 221-24.

Even with respect to cross-country movement and the relative percentages of no-go terrain, where UDLP's tracked vehicles were evaluated as having an advantage and GM/GDLS's as having a weakness, the agency notes that the medium risk assessed against GM/GDLS in this regard was primarily due to the high percentage of no-go terrain in the "Germany wet" category, which was only one of six terrain categories. Contracting Officer's Statement at 136. Further, the agency reports that GM/GDLS's ICV performed well during cross-country movement during sample testing. (The only vehicle that became stuck on the cross-country course was UDLP's ICV. Agency Hearing Comments at 6.) The agency notes in this regard that GM/GDLS's vehicles include [DELETED], and thereby improve mobility in softer, more slippery soils (such as those in the "Germany wet" category). Agency Hearing Comments at 35-36 n.1; Contracting Officer's Statement at 68; Tr. at 814. Indeed, the O&O Concept incorporated into the RFP recognized that the mobility requirements for the IBCT can be met by "any of a variety of medium-weight armored track or wheeled systems." O&O Concept at 14.

We conclude that the agency reasonably accorded greater weight to GM/GDLS's evaluated advantage with respect to higher sustained speed than to UDLP's advantage with respect to cross-country mobility.[6]

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[6] Noting that its ICV was evaluated as having a maximum speed of 40.2 mph and rated at risk for achieving the required sustained hard, dry surface speed of 40 mph, AR, Tab 83, BCT IAV SSAC/SSA Brief, Oct. 12, 2000; Source Selection Decision at 11, UDLP asserts that the agency failed to conduct meaningful discussions in this regard. According to the protester, had it been advised of the agency's concern, it would have modified its ICV to increase the sustained speed. This argument is without merit. During discussions, the Army issued to UDLP Item for Discussion (IFD)

(continued...)

Reliability

The protester challenges the agency's calculation of predicted reliability. In this regard, the RFP required that the ICV (excluding government furnished equipment) have a reliability of 1,000 "mean miles between critical failure (i.e. system abort)" (MMBCF). ICV Performance Specification § 3.1.1.7.2.

In reviewing offerors' reliability predictions, the Army considered whether the baseline reliability data for the reliability prediction were based on reliability failure scoring criteria comparable to the IAV criteria here; whether the baseline data were based on operating in comparable terrain; reliability improvement since the baseline tests; increased equipment complexity; and specific IAV mission equipment package configurations and weapons installations.

UDLP cited in its proposal as the baseline for its ICV reliability prediction (of [DELETED] Mean Miles Between Failure) the government's 1987 M113A3 Initial Production Test results, covering the performance of two vehicles over 9,714 miles, and which scored 4.5 mission failures, for a demonstrated 2,159 Mean Miles Between Critical Mission Failure. The M113A3 criteria provided that "criticality factors" would be assessed, which resulted in ratings such as .5 failures or partial failures, and that crew correctable failures would not be scored as critical failures. In 1995, however, the Army issued guidance, apparently reflecting its practice since approximately 1989, which eliminated the use of the criticality factors and the practice of not scoring crew correctable failures as critical failures. As a result, applying the current critical failure criteria, the SSEB rescored as a 1.0 critical failure the one failure (a leak in the cooling system) originally scored as a .5, and rescored as a potential additional critical failure an engine vapor lock incident originally scored as a crew correctable failure; this resulted in a range of [DELETED] critical failures, or approximately [DELETED] MMBCF.

Further, since the 1987 M113A3 test was conducted using a mission profile of 40 percent cross-country, while the IAV mission profile in the OMS/MP envisioned 50 percent cross-country (at least during the small scale contingency), the SSEB

(...continued)
No. P-P-U1-336. Although this IFD focused on the agency's concern with whether UDLP would comply with the specification requirement for the IAV to accelerate from 0-to-50 meters in 8 seconds, it also clearly advised UDLP that "[t]he spec[ification] requirement calls for a maximum speed of at least 40 mph. The vehicle was considered to have marginally met this requirement," and UDLP's response indicated that testing showed an average top speed of 40.2 mph. IFD No. P-P-U1-336. Thus, UDLP was on notice of the agency's concern regarding its compliance with the 40-mph requirement.

made a 10-percent downward adjustment to the baseline based on the SSEB's engineering judgment that the increased cross-country travel would lead to reliability degradation because of increased shock, vibration and introduction of contaminants. Although UDLP proposed an approximately [DELETED] percent improvement for component enhancements and an approximately [DELETED] percent degradation for added line replaceable units (LRU) and complexity, the SSEB determined that these considerations essentially offset each other, and therefore treated them as a wash, with no adjustment. However, the SSEB did adjust the resulting value for the expected effect on reliability of adding the ICV's remote weapon station. Contracting Officer's Statement at 107-108; Agency Hearing Comments at 81-83; Tr. at 598-611; see AR, Tab 141, M113A3 IPT (1986-1987) Data Reevaluated; AR, Tab 197, M113A3 Initial Production Test Scoring Conference Minutes, Mar. 23, 1988; AR, Tab 217, M113A Test Incident Reports; AR, Tab 216, Failure Definition and Scoring Guidelines for the M113 Family Vehicles (Feb. 1978).

GM/GDLS referenced in its proposal three sets of test data, totaling over 90,662 reliability test miles, which were scored against operational mission failure criteria that the agency determined were broader than the critical failure criteria used for the IAV. In 1991, the Army Materiel Systems Analysis Activity (AMSAA) had rescored the results from one of these tests, for the LAV-25--a predecessor to the LAV offered in the procurement--conducted in the period 1984 to 1985 over 63,133 miles, using criteria the agency reports were essentially the same as the criteria formally adopted in 1995, and which are reasonably equivalent to the IAV criteria applied here. Since the IAV can operate with more than one flat tire, AMSAA (in accord with the recommendation of the original scoring committee) rescored the results to eliminate the 4 (of 15 total) failures attributable to flat tires, and then added an assumed 12th hull failure; this resulted in an overall increase in the mean miles between failure from 4,209 to 5,261 (erroneously reported as 5,161). The SSEB applied the resulting adjustment factor to the two additional data points referenced by GM/GDLS. In addition, since the LAV-25 test data were based on using a mission profile of 40 percent cross-country, while the IAV mission profile in the IAV Operational Mode Summary/Mission Profile envisioned 50 percent cross-country, the SSEB made the same 10-percent downward adjustment to the baseline as it did for UDLP. Likewise, the agency concluded, as it did for UDLP, that reliability growth was offset by additional complexity, and made similar adjustments to account for mission equipment package configurations and weapons installation. Contracting Officer's Statement at 108; Agency Hearing Comments at 85; Agency Comments, Feb. 28, 2001, at 6; Tr. at 612-18; see AR, Tab 122, Reliability, Availability, and Maintainability (RAM) Report for the Armored Gun System (AMSAA report), July 1991; Tab 129, Final Report on IPT Comparison Test and Extended Durability Test of the LAV-25, July 1987; AR, Tab 136, Reliability Failure Definition and Scoring Criteria (FDSC) Development Guidelines.

As reported in the Source Selection Decision, based on these calculations, the agency projected that most of GM/GDLS's ICV configurations would achieve an MMBCF ranging from [DELETED], while most of UDLP's ICV configurations would

achieve an MMBCF ranging from [DELETED]. In other words, the agency determined that the awardee's vehicles would travel much further before a failure than the protester's. The SSA determined that the fact that GM/GDLS's ICV was expected to experience [DELETED] fewer critical failures than UDLP's represented "exponentially superior combat readiness" and "dramatically heightened ICV availability on the battlefield" that "directly affects both soldier safety and survivability, as well as the potential for successfully accomplishing the mission." Source Selection Decision at 15.

The protester questions each step in the agency's calculations, asserting that, based on proper calculations, its ICV should have been credited with an MMBCF of [DELETED] and that the MMBCF of the awardee's ICV could have been as low as [DELETED]. UDLP Hearing Comments at 149-50. We find that UDLP's arguments furnish no basis to question the agency's essential determination that GM/GDLS's ICV was likely to be significantly more reliable than UDLP's. We discuss the various aspects of UDLP's position below.

1. UDLP Reliability

a. Starting Point for Reliability Calculation

As an initial matter, we note that the protester's reliability calculations appear to be based on an erroneous starting point; UDLP adopted a higher reliability starting point in its FPR than it had previously claimed, and that was not apparent from the reliability scoring report it cited in support of its starting point. In its initial proposal, UDLP referred to a "demonstrated 2,159 MMBMAF," that is, Mean Miles Between Mission Affecting Failure, or an "M113A3 history demonstration test scored MMBF" (apparently, Mean Miles Between Failure) of 2,159; based on that starting point, it claimed an ultimate, adjusted Mean Miles Between Mission Affecting Failure/Mean Miles Between Failure of [DELETED] for its ICV. UDLP Proposal, vol. 4, at 4-1, 4-6, 4-14 to 4-15. In support of its claim that "the M113A3 demonstrated reliability is 2,159 MMBMAF," UDLP cited the M113A3 Initial Production Test Scoring Conference Minutes (a March 1998 report on the 1987 M113A3 Initial Production Test results), as well as a 1996 UDLP memo, and stated that "[t]he final scoring conference minutes by [Test and Evaluation Command] (March 1988) documented an MMBF of 2,159 based on scored MAFs [Mission Affecting Failures]." Id. at 4-1, 4-6, 4-15. As noted by UDLP, the scoring conference minutes report in fact indicated a demonstrated reliability of 2,158.7 mean miles between failure for the M113A3. AR, Tab 197, M113A3 Initial Production Test Scoring Conference Minutes, Mar. 23, 1988.

During discussions, the Army advised UDLP that its information was based on inconsistent failure definitions, mixing Mission Affecting Failures with Mission Abort (System Abort) Failures; the agency informed UDLP that "[t]he reliability requirement in the Perf[ormance] Spec[ification] is stated in terms of System Abort Failures," and instructed the offeror to "clarify all your predictions in the same terms

of System Abort Failures as in the Spec." IFD No. SPR-U2-117. In its FPR, UDLP cited the same scoring conference minutes report (as well as the 1996 UDLP memo) that was cited in its initial proposal), but stated that "[t]he final scoring conference minutes by TECOM (March 1988) documented an MMBF of 2,764 miles based on scored MAs." UDLP FPR, vol. 4 at 4-6, 4-14. (Elsewhere in its final proposal, UDLP cited a "demonstrated 2,764 MMBMA of the M113A3." Id. at 4-1.) In effect, UDLP apparently revised downward the number of assessed failures for the M113A3 test from the officially reported 4.5 to approximately [DELETED] (that is, the 9,714 miles of the test divided by the claimed reliability of [DELETED]). Based on the resulting revised upward M113A3 reliability number starting point, it claimed in its final proposal a predicted Mean Miles Between Failure of [DELETED] for its ICV. Id. at 4-1, 4-14 to 4-15.

The Army essentially disregarded the new starting point number in UDLP's final proposal and, as discussed above, based its reliability prediction on the officially scored 4.5 M113A3 mission failures, for a demonstrated 2,159 MMBCMF starting point. The Army then made the adjustments (discussed above) in the number of failures, and arrived at an approximate [DELETED] MMBCF.

The protester now questions whether all of the reported 4.5 M113A3 mission failures should have been accepted by the agency as failures for purposes of calculating its ICV's reliability. This argument provides no basis for questioning the agency's reliability calculation.

As an initial matter, this argument is untimely. The Army disclosed during discussions that the starting point for its reliability calculation was 2,159 MMBF, UDLP Letter, Mar. 28, 2001, and UDLP in its initial protest noted that both the agency and UDLP had used the same starting point of 2,159 MMBCF. Protest, Dec. 4, 2001, at 65. Similarly, in its comments on the agency report, the protester stated that "UDLP started with the M113A3 reliability test results of 2159 MMBCF. UDLP then considered its thirteen years of reliability growth activities . . . ." UDLP Report Comments at 272-73. In its comments on the hearing, however, UDLP for the first time argued that only three of the M113A3 scored failures qualified as critical failures for purposes of the IAV reliability calculation. UDLP Hearing Comments at 138. Since this argument questioning the number of critical failures used in the Army's calculation was raised more than 10 days after UDLP knew of the agency's approach of starting with the reported M113A3 test results, it is untimely. See 4 C.F.R. § 21.2(a)(2) (2000).

In any case, UDLP's final proposal did not support an upward rescoring of the M113A3 test results. Although UDLP had asserted during discussions that its reliability number would be significantly higher if only mission abort failures were considered, and its final proposal generally referred to an agency direction to use Mean Miles Between Mission Abort (MMBMA), UDLP failed to explain in its final proposal precisely how it calculated the M113A3 starting point it referenced, that is, the basis for including in the IAV calculation only [DELETED] of the officially

assessed 4.5 M113A3 critical failures. UDLP Response to IFD No. SP-R-U2-117; UDLP FPR, vol. 4. In this regard, we note that the RFP required offerors to "[i]dentify predicted or demonstrated system level reliability for each IAV variant or configuration," and to discuss "failure definition, data sources, and operating environment profile showing applicability to the IAVs." RFP, Table L/M, at 35. It is an offeror's obligation to submit an adequately written proposal. See Alaskan Publications, B-283272, Oct. 27, 1999, 99-2 CPD ¶ 102 at 8. Given this failure to explain in its proposal the precise basis for its upward rescoring of the official M113A3 test results, we have no basis to question the agency's use of the officially reported 2,159 Mean Miles Between Critical Mission Failures when calculating UDLP's projected reliability. In this regard, we note that, as calculated by the Army, starting with 2,159 Mean Miles Between Critical Mission Failures, making UDLP's [DELETED] percent upward adjustment for reliability growth and the [DELETED] percent downward adjustment for increased LRUs and complexity, and then adjusting for addition of the remote weapon station (using UDLP's estimate), the resulting MMBCF actually is only [DELETED] miles, that is, significantly below the level claimed by UDLP in both its proposal and its protest. Agency Hearing Comments at 84.

b. Reliability Growth

UDLP for the first time in its protest asserts that it increased its reliability value by [DELETED] percent, from [DELETED] MMBCF, to account for reliability growth in the years after the M113A3 test results, and then decreased it by [DELETED] percent, to [DELETED] to allow for integration risk, resulting in a net increase. UDLP Hearing Comments at 140-41. The protester questions the agency's rejection of its view and treatment of its reliability growth instead as being offset by integration risk and additional complexity. However, the protester's argument is based on numbers that are not reflected in its FPR. As noted by the agency, UDLP's Proposal No. 1 final proposal actually reflected only a [DELETED] percent upward adjustment for reliability improvements (from [DELETED]), such that there actually was a net decrease when its [DELETED] percent downward adjustment for more LRUs and increased complexity were considered. UDLP FPR, vol. 4, at 4-1.[7] Thus, the agency's offsetting approach actually was more favorable to the protester than its own proposal, which would have resulted in a net decrease in reliability because reliability growth was more than offset by more LRUs and increased complexity.

[7] There was a similar decrease in UDLP's initial proposal, which reflected [DELETED].

c. Additional Failures

UDLP challenges the agency's determination to rescore as a 1.0 critical failure the leak in the cooling system, originally scored as a .5 failure, and to add as a potential critical failure the engine vapor lock incident that originally was left uncounted as a crew correctable failure. This argument is without merit. The test incident report for the cooling system failure indicates that a 4-inch crack in a cooling reservoir led to overheating, engine shutdown and replacement of the cooling tank. AR, Tab 217, M113A3 Test Incident Reports. Since this would appear to interfere with the operation of the engine, clearly an essential function, we have no basis to question the Army's determination that this was a critical failure.

As for the engine fuel vapor lock incident, the agency points out that, under the 1995 revised scoring criteria, the fact that a failure can be corrected by the crew no longer prevents it from being considered a critical failure; as stated in the revised criteria, "[e]ach failure event should be recorded based on its impact on system performance, regardless of who accomplishes the corrective action." AR, Tab 136, Reliability Failure Definition and Scoring Criteria (FDSC) Development Guidelines, Mar. 15, 1995, at 13. Noting that vapor locks will cause an engine to shut down and thus abort the mission, and that the original scoring conference had considered another vapor lock incident to be a critical failure, the agency maintains that it was appropriate to treat the above, second vapor lock incident as a critical failure. Agency Hearing Comments at 82. UDLP responds by citing the provision in the 1978 M113 Failure Definition and Scoring Guidelines, which state that "a repetitive malfunction after the first occurrence is not chargeable as a mission or system failure if the common cause of the series of malfunctions is positively identified and proven to have been corrected by adequate testing." AR, Tab 216, Failure Definition and Scoring Guidelines for the M113 Family Vehicles (Feb. 1978), at § 7(d). The protester generally asserts that it successfully corrected the problem after 1987 and so advised the agency. Declaration of UDLP Program Manager, Feb. 25, 2001, at ¶ 17. UDLP's assertion notwithstanding, it has specifically described neither its corrective action nor the required confirmatory testing and, in any case, it is not clear whether this subsequent improvement in the M113A3 was already accounted for in UDLP's general claimed reliability growth. Further, even if this evaluated potential failure were removed from the reliability calculation, it appears that UDLP's ICV still would have a significantly less favorable reliability rating than GM/GDLS's. UDLP Hearing Comments at 138 n.59.

d. Recent Reliability Information

The protester asserts that in August 2000 it submitted to the agency negotiator recent reliability information that the agency failed to take into account in calculating the predicted reliability for its ICV. The protester also claims it was misled by the agency during discussions concerning the reliability issue; according to the protester, it was advised that it would receive credit for meeting the desired reliability objective of a MMBCF of 2,000. The protester maintains that, had it been

advised of the agency's continuing concerns with respect to the reliability of its ICV, it "immediately would have inquired as to how the Army could have reached that conclusion in light of the supplemental reliability data that the company had provided to" the agency negotiator and, "[i]n the unlikely event that procuring officials had informed UDLP that [DELETED] even after reviewing UDLP's supplemental data, UDLP would have offered [DELETED]. UDLP Hearing Comments at 172-77; UDLP Post-Hearing Rebuttal Comments at 58-62. The agency negotiator denies having received any such reliability data in August. The negotiator also states that he advised UDLP that, while the agency would incorporate the 2,000-mile requirement into its model contract, this would not affect the government estimate of UDLP's reliability and the agency would assess UDLP's risk of meeting the requirement. Contracting Officer's Statement, attach., Declaration of Government Estimator; AR, Tab 225, Declaration of Government Estimator, Feb. 1, 2001.

We need not determine whether UDLP in fact furnished additional reliability data to the agency in August, since we find reasonable the agency's position that the information, even if submitted, does not warrant a higher predicted reliability score. As noted by the agency, the additional reliability information includes data for only three (approximately) "500-mile" endurance tests, none of which was witnessed by the government or subject to reliability scoring, and each of which included potential or actual critical failures. According to the agency's analysis, there were four catastrophic, critical failures in one test, a critical failure in another test, and two potential critical failures in the third test. Agency Comments, Mar. 8, 2001, at 3. Further, although the protester asserts that it would have offered [DELETED] if additional negotiations revealed that the agency's concerns were not alleviated even after consideration of the additional reliability information, the agency--having advised UDLP of its continuing, previously raised concern and having in response obtained a copy of UDLP's additional reliability information--was not required to raise the matter again with UDLP to furnish it still another opportunity to address this area. See Professional Performance Development Group, Inc., B-279561.2 et al., July 6, 1998, 99-2 CPD ¶ 29 at 5 n.3 (once offeror has received adequate discussions regarding an area of concern, agency is not required to advise offeror of continuing concerns during successive rounds of discussions). In any case, given the clearly inadequate support the August data provided for UDLP's reliability predictions, it is not apparent why UDLP would not at that time have proposed [DELETED] if it believed it would have materially improved the reliability prediction for its ICV, and if it was in fact willing to propose such [DELETED]. We conclude that the agency's evaluation of UDLP's ICV's reliability was reasonable.

2. GM/GDLS Reliability

The protester challenges the calculation of predicted reliability for GM/GDLS's ICV. We find its arguments in this regard to be without merit. For example, UDLP argues that the Army failed to account for the results of ICV bid sample tests, in particular GM/GDLS's, in its projected reliability calculations; according to the protester, this was contrary to RFP § M.1.4, which provides that "[t]he results of the Bid Sample evaluation will be used to verify the content of the written portion of the offeror's proposal and will be considered in conjunction with the evaluation of . . . the Predicted Reliability Element within the Supportability Area." However, this provision does not specify any particular approach to taking into account the results of the bid sample testing. The agency reports that the bid sample data were not used in its actual reliability calculations because the ICVs were not production vehicles and had logged too few miles (approximately only 1,994 miles for GM/GDLS's ICVs); in this latter regard, the agency notes that the government's planned testing of the awardee's vehicles will be based on accumulating 18,000 miles on three ICVs and at least one vehicle of the other configurations. Tr. at 622. The agency explains, however, that the SSEB did examine the bid sample failures to determine if there were systemic reliability problem indicators, but found none; most of the significant events were explainable as quality problems (rocker arm incidents for UDLP) or the result of the hurried nature of preparing the vehicles (loose bolts in the GM/GDLS ICV's steering, causing a loss of steering). Agency Hearing Comments at 74, 85. We conclude that there was nothing improper in the agency's consideration of the bid sample test results.

The protester also challenges the results of the original scoring of GM/GDLS's July 1987 Initial Production Test LAV-25 test results, which were subsequently rescored by the Army Materiel Systems Analysis Activity (AMSAA) in accordance with the revised reliability scoring criteria. The protester generally alleges that some of the incidents during Initial Production Test and durability testing which were not scored as contractor chargeable were as serious as those scored as critical failures for the UDLP M113A3. UDLP Supplemental Protest (Jan. 25, 2001) at 3; UDLP Report Comments (Feb. 5, 2001) at 275; Tr. at 644-46. This argument is unpersuasive. Since the IPT test report characterized the unscored incidents--including the three specific incidents cited by UDLP at the hearing--as "GFE [government furnished equipment], maintenance, or crew induced," it is not apparent why they should be charged as critical failures for the LAV. Further, as indicated above, a number of these incidents occurred during the LAV durability testing, which apparently was not rescored by AMSAA, and the miles for which were not included in the numerator of the reliability calculation. Finally, in the absence of strong evidence demonstrating the unreasonableness of such action, we believe the agency could reasonably rely on the rescoring, which was done prior to the current dispute by an independent organization with greater access to the relevant information as to the precise nature

of the incidents in question. AR, Tab 122, Reliability, Availability, and Maintainability (RAM) Report for the Armored Gun System (AMSAA report), July 1991; Tab 129, Final Report on IPT Comparison Test and Extended Durability Test of the LAV-25, July 1987, at 7-10.

We conclude that the Army reasonably determined that GM/GDLS's ICV would likely be significantly more reliable than UDLP's. More specifically, we find no basis to question the SSA's position that the difference in reliability represented "exponentially superior combat readiness" and "dramatically heightened ICV availability" on the part of GM/GDLS's ICV such that would "directly affect soldier safety and survivability, as well as the potential for successfully accomplishing the mission." Source Selection Decision at 15.

Selection of GM/GDLS ICV--Conclusion

Although the SSA recognized UDLP's significantly lower price/cost and its advantage with respect to schedule, one of the two most important evaluation areas, he found these advantages to be offset by GM/GDLS's overall significant superiority with respect to performance, the other most important evaluation area, and supportability. Again, the SSA determined that GM/GDLS's exceptionally advantageous sustained speed (which he reasonably considered to be more significant than UDLP's superiority with respect to cross country mobility), significantly superior all-around integral horizontal 14.5 mm AP armor protection, enhanced ride quality with lower interior noise and vibration, lower external acoustic signature, and significantly greater likely reliability, resulted in significantly enhanced soldier survivability and combat readiness. While UDLP has raised a number of challenges to the evaluation in the performance and supportability areas, the two most important of which we have discussed above, our review of the record furnishes no basis for questioning the SSA's overall determination that GM/GDLS's advantages in this regard, which went to the likelihood that the IBCT would successfully perform its contemplated mission with the least casualties, were such as to outweigh UDLP's price/cost and schedule advantages. In sum, we find that the selection of GM/GDLS's ICV was not unreasonable.

Mobile Gun System (MGS)

The protester also challenges the Army's selection of the GM/GDLS MGS. Although we agree with the protester that the evaluation does not fully reflect certain of the weaknesses associated with GM/GDLS's MGS, as discussed below, we conclude that the selection of GM/GDLS's MGS was not unreasonable when considered in light of the selection of GM/GDLS's ICV, which we have found to be not unreasonable.

Schedule

The protester challenges the Army's evaluation under the schedule area. As noted above, the RFP and the incorporated Operational Requirements Document stated that there is "an immediate and urgent need" for the IBCT. RFP, Executive Summary; Operational Requirements Document at 1. However, the RFP permitted offerors to propose other than off-the-shelf equipment to meet this need:

> The Program Objective may be achieved through the acquisition of: off-the-shelf equipment, non-developmental items, non-developmental items with integration of components, traditional development, systems' integration (multiple ground combat vehicles with sustainment solutions or vehicles with non-vehicle solutions), a mix of the aforementioned staggered over time and across variants, or other solutions.

RFP, Executive Summary. The RFP did caution, however, that:

> The Army does not anticipate a lengthy development program and considers extensive development of solutions to be counter to the thrust of this acquisition due to the time, cost and risk associated with such an approach.

Id. Again, according the RFP:

> A critical program objective is to achieve the earliest possible Brigade First Unit Equipped (FUE)/Initial Operational Capability (IOC) of capable IAVs. The Government does not intend to engage in extended variant/configuration development programs. Extended development is considered to be efforts requiring approximately 24 months or longer of development, including Government Test Activity, to complete EMD. Such a development effort would be inconsistent with the RFP's emphasis on (a) early Brigade Fielding, (b) [research, development, test and evaluation] funding profiles and (c) the overall program objective to quickly achieve a capable interim force. Offerors are encouraged to consider carefully the merits and probability of success, based on the evaluation criteria in the RFP, of a proposal submission which reflects, in part or in whole, variant/configuration development activity exceeding approximately 24 months.

RFP § M.1.13.

In the event that an offeror proposed a vehicle that was not production ready, as was the case with GM/GDLS's proposed MGS, the solicitation provided that:

> Only vehicles considered ready for production are approved for Low Rate Initial Production (LRIP). All vehicle systems identified below, as requiring development effort will be required to have the following prior to being approved for production: 1) have a stable production design and a complete manufacturing technical data package, 2) be producible and supportable, 3) have validated manufacturing and production processes, and 4) have demonstrated, through testing, system capabilities complying with the performance specification requirements. These items will be presented at the Production Readiness Review (PRR) as identified in C.5.4.5, and only upon approval by the Government be ready for LRIP.

RFP, Amend. No. 0005, § H.24.

UDLP's schedule was evaluated as more favorable than GM/GDLS's--the SSA was "particularly concerned about the length of the [GM/GDLS] development effort," and he considered GM/GDLS's schedule to be "substantially inferior" and "a significant disadvantage." Source Selection Decision at 21, 26-27. UDLP nevertheless asserts that the GM/GDLS evaluated schedule presented to the SSA understated the actual likely schedule and that, in any case, even as evaluated, the schedule was inconsistent with the fundamental terms of the solicitation; it concludes that GM/GDLS's MGS proposal was unacceptable.

1. GM/GDLS's MGS Evaluated Schedule

a. Availability of Required Test Vehicles

The protester asserts that the evaluated schedule for GM/GDLS's MGS is based on a mistaken assumption as to the availability of required test vehicles. In its evaluated schedule for GM/GDLS's MGS, the Army assumed that an initial order for 12 MGSs would be placed at the time of assumed award in November 2000 and that 5 of these vehicles would be used for the required government production verification test (PVT) and live fire test and evaluation (LFT&E); it was assumed that the remaining 3 of the 8 vehicles required for PVT and LFT&E would come from Delivery Order No. 02, to be issued in May 2002 upon successful completion of PRR. SSEB Evaluated MGS Schedule. However, unlike UDLP, GM/GDLS did not include the pilot vehicles required for engineering and manufacturing development (EMD) testing in the EMD scope of work. As a result, the Army intended to place the first delivery order for 12 vehicles for testing--described as "Production Vehicles" in the section B schedule of GM/GDLS's model contract--under section H.3 of the contract, which likewise provides that GM/GDLS's ordering charts "are applicable to the production vehicles only and exclude option provisions." RFP §§ B (at 11 of 53), H.3.4. UDLP concludes that GM/GDLS's contract thus provides for the ordering of only production vehicles and not vehicles for EMD testing.

UDLP's argument is unpersuasive. As noted by the agency, while it may have to order the initial MGSs for testing under ordering provisions for "production vehicles," GM/GDLS's FPR included a schedule that specifically indicated that MGSs from the first delivery order were intended to be used for PVT and LFT&E. Agency Post-Hearing Rebuttal Comments at 5; Agency Comments, Mar. 8, 2001, at 1; GM/GDLS FPR Master Program Schedule MGS Variant, attach. A-7; GM/GDLS FPR Production Plan Qty. [Quantity], Attach. A-8.

Noting that the Army concedes that a vehicle used for PVT and LFT&E must be a production representative vehicle, Agency Comments (Mar. 8, 2001) at 4, UDLP next contends that the agency's reliance on vehicles from Delivery Order No. 1 for five of the eight vehicles required for PVT and LFT&E is unreasonable because those vehicles will not be production representative vehicles.[8] This argument, too, is without merit. In its model contract, GM/GDLS agreed that PVT and LFT&E would be conducted "using materiel, which is built to a production configuration using normal manufacturing methods and tooling." Model Contract §§ E.11.1, E.11.2. Further, we agree with the agency that GM/GDLS's proposal otherwise was reasonably susceptible of the interpretation that the vehicles from Delivery Order No. 01 that would be used for PVT and LFT&E would be, in the words of GM/GDLS's offer, "on-line production" vehicles, built at the same production facilities that would be used to produce the subsequent contract production quantities, and thus could be considered production representative units. GM/GDLS Proposal, Master Program Schedule, MGS Variant, Attach. A-7, and vol. 2, 4-5, 4-16, 4-24; Response to IFD No. S-GM-426; Agency Comments, Mar. 20, 2001, at 1-2; Agency Comments, Mar. 13, 2001, at 1. We conclude that the agency reasonably found that the five vehicles from Delivery Order No. 1 which are to be used for PVT and LFT&E will be production representative vehicles.

b. RFP Funding Restrictions

The protester argues that the evaluated GM/GDLS MGS schedule is inconsistent with the RFP's funding restrictions. The RFP provides that an "offeror's proposed prices/costs must accommodate the following planned [Fiscal Year] 00 reprogramming and [Fiscal Year] 01 President's budget," and identifies a total of $119 million in development funds that will be available for Fiscal Years 00 and 01. (A total of $362 million in development funds was available for the entire contract period.) RFP Executive Summary. The protester asserts that research and

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[8] In this regard, we note that Department of Defense Directive No. 5000.2-R (Archived), Mandatory Procedures for Major Defense Acquisition Programs and Major Automated Information System Acquisition Programs (May 11, 1999), provides that "[t]he independent operational test activities shall use production or production representative articles for the dedicated phase of [Operational Test & Evaluation] that supports the full-rate production decision . . . ." Section 3.4.5.

development funds are required for purchasing the engineering and manufacturing development (EMD) vehicles, and calculates that, if Delivery Order No. 01 vehicles are used for EMD, the resulting overall required R&D funding will exceed the RFP funding limit by approximately $21 million. In response, the Army states that, although it currently intends to use research, development, test and evaluation funds to acquire the Delivery Order No. 01 vehicles, it believes that using production funds would also be appropriate because the vehicles ultimately will be deployed to users in the field and not retained as permanent test vehicles. Agency Comments (Mar. 13, 2001) at 2. In any case, the agency denies that the funding profile was intended to establish a mandatory requirement such that proposals in violation of the requirement must be rejected.

We need not determine whether GM/GDLS's proposal as interpreted by the agency is inconsistent with the RFP's funding profile since, even if the agency in effect has waived the funding requirements, there is no basis for finding competitive prejudice to UDLP as a result of the alleged waiver. Specifically, the protester has not shown that it would have increased its development efforts so as to improve its competitive position had it known that an additional $21 million in development funds were available at the start of the contract. Where the record does not demonstrate that, but for the agency's actions, the protester would have had a reasonable chance of receiving the award, our Office will not sustain a protest, even if a deficiency in the procurement is found. McDonald-Bradley, B-270126, Feb. 8, 1996, 96-1 CPD ¶ 54 at 3; see Statistica, Inc. v. Christopher, 102 F.3d 1577, 1581 (Fed. Cir. 1996).

c. Program Management Office Schedule

In further arguing its position that the evaluation understated the probable schedule for development and deployment of GM/GDLS's MGS, the protester notes that the agency Program Management Office (PMO) prepared a different, later schedule that was used to brief Army and Department of Defense officials. This PMO schedule was used by the Army Systems Acquisition Review Council (ASARC) in determining on November 8, 2000--after the SSA had internally announced his source selection decision at an SSAC/SSA meeting on October 20, on the same day he signed the original Source Selection Decision (November 8, that is), and before he announced the award on November 16--that the criteria for Defense Acquisition Board (DAB) approval for entry into development/early production had been met, and then was used at the DAB's readiness meeting on November 16. The PMO schedule indicated that, in the absence of an in-lieu-of (ILO) replacement for the MGS, the most probable First Unit Equipped would be April 2004, that is, 8 months after the August 2003 date assumed by the SSA/SSEB, and 37 months after the RFP objective date of March 2001. It further indicated that the most probable Initial Operational Capability would be June 2005, that is, 19 months after the November 2003 date assumed by the SSA/SSEB and 45 months after the RFP objective date of December 2001. Contracting Officer's Statement at 22, 37-42; AR, Tab 186, IAV ASARC Slides, Nov. 8, 2000. UDLP concludes that the PMO schedule is the more reasonable schedule.

The existence of the later PMO schedule does not demonstrate that the SSEB/SSA schedule was an unreasonable estimate of the likely actual GM/GDLS MGS schedule. UDLP concedes that several of the differences in the assumptions underlying the PMO and SSEB/SSA schedules, and which accounted for the PMO's later overall schedule--including the PMO's assumption of a later award date, the decision by the Director of Operational Test and Evaluation to conduct Initial Operation Test and Evaluation with elements of a battalion rather than with a single company, and an extension of the period after brigade vehicle fielding and before Initial Operational Capability--would have affected the schedules of both offerors. UDLP focuses on the single most significant difference between the schedules--the fact that, while the SSEB/SSA assumed that performance of the first delivery order (to be placed at the time of award) would overlap the 24-month MGS development period, the PMO assumed that the first delivery order would be placed only after a 24-month development period. Contracting Officer's Statement at 41-43; UDLP Report Comments at 75-80. The protester asserts that the PMO schedule is the one consistent with the RFP and GM/GDLS's proposal. However, its position in this regard appears to be based largely on its mistaken assumption that the SSEB/SSA's assumed first delivery order under the GM/GDLS contract would amount to the commencement of low-rate initial production (LRIP); according to the protester, such an LRIP order placed before any of the MGS development had been started would be improper. UDLP Report Comments at 79. The flaw in this argument is that GM/GDLS's proposal in fact contemplated that the MGSs acquired under the initial delivery order would not be an LRIP order but, rather, would cover vehicles to be used for EMD testing. (Indeed, it is difficult to understand how EMD would be completed without using the MGSs for EMD testing.)[9] Thus, UDLP's argument furnishes no basis for questioning the reasonableness of the schedule the SSEB/SSA used in evaluating GM/GDLS's MGS proposal.[10]

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[9] We note that the Program Management Office's current schedule, allowing for such differences as the date of award and protest-related delays, and based upon the PMO's current assumption of an early order for MGSs for EMD testing, is generally consistent with the SSEB/SSA's. Tr. at 668; Agency Hearing Comments at 21.

[10] UDLP also argues that it was improper for the evaluated GM/GDLS MGS schedule to assume that LRIP would commence during EMD. However, we agree with the agency that nothing in the RFP prohibited, and we find no other basis to prohibit, concurrency of EMD and LRIP. In this regard, we note that Department of Defense Directive No. 5000.2-R (Archived) provides that "Low Rate Initial Production (LRIP) occurs while the Engineering and Manufacturing Development [EMD] phase is still continuing as test results and design fixes or upgrades are incorporated." Section 1.4.4.

2. Acceptability of GM/GDLS MGS Schedule

The protester argues that the lengthy development period required for GM/GDLS's MGS is unacceptable on the basis that it is inconsistent with the stated "immediate and urgent need" for the IBCT and the warning in the RFP that the "Government does not intend to engage in extended variant/configuration development programs." RFP, Executive Summary, § M.1.13; Operational Requirements Document at 1.

In our view, the protester's interpretation fails to take into account the solicitation as a whole. Specifically, as the Army notes, the RFP did not prohibit development periods of 24 months or longer, but instead merely cautioned that "[o]fferors are encouraged to consider carefully the merits and probability of success, based on the evaluation criteria in the RFP, of a proposal submission which reflects, in part or in whole, variant/configuration development activity exceeding approximately 24 months." RFP § M.1.13 Thus, GM/GDLS's schedule was not unacceptable, and the question for our review is whether the SSA took into account in his decision the fact that GM/GDLS's MGS schedule included a lengthy development period. He clearly did take this into account. As discussed above, the SSA expressed concern about the length of the GM/GDLS development effort, finding that GM/GDLS's MGS schedule was "substantially inferior" to UDLP's so as to represent a "significant disadvantage" for GM/GDLS and a "significant advantage" for UDLP. Source Selection Decision at 21, 26-27.

The protester asserts that the SSA's evaluation in this area, albeit already favorable to UDLP, improperly reflected consideration of the availability of an In-Lieu-Of (ILO)--the ICV Anti Tank Guided Missile Variant (ATGM) with a to-be-modified TOW warhead with a "Bunker Buster Capability"--as a substitute for the MGS during the period after the first IAVs are to be deployed and before the MGS would become available, and that this had the effect of improperly mitigating UDLP's schedule advantage.

This argument is without merit. First, even if the agency's concerns with respect to GM/GDLS's schedule were in fact somewhat mitigated by the availability of the ILO ATGM (which the SSA vigorously denies), it is not apparent how this made a difference in the source selection given the fact that the Army already had recognized UDLP's significant advantage in this area. Tr. at 901-02, 944, 1092. Moreover, we do not agree that it was improper for the Army to consider the availability of the ILO ATGM. In this regard, the O&O Concept, incorporated into the RFP, specifically contemplated that it might be necessary to initially equip the IBCT with surrogate equipment:

> Units will be equipped, per approved tables of organization and equipment (TOE), to the extent possible from commercial-off-the-shelf (COTS) and government-off- the-shelf (GOTS) equipment to meet the

> requirements stated within this O&O document. However, not all equipment specified within TOEs may be immediately available for the initial two Brigade Combat Teams within the next 12 to 18 months. Instead, other items of equipment (surrogates) more readily available may be issued in lieu of TOE specified systems.

O&O Concept, at 6. Further, since the solicitation provided for consideration of proposals requiring development extending for as long 24 months or more, RFP § M.1.13, we think it was at least implicit that the agency might turn to surrogate equipment to meet its immediate needs for fielding the IBCTs. This being the case, there was nothing unreasonable in the agency's considering the availability of the ATGM in evaluating GM/GDLS's schedule.

MGS Performance

The protester argues that GM/GDLS's MGS was unacceptable because it did not comply with two aspects of a Band 2 ammunition storage requirement, and that this was not adequately taken into account in the evaluation. Specifically, UDLP argues that the GM/GDLS MGS does not meet the specification requirements for ready availability and storage of primary armament rounds. In this regard, the MGS specification provided as follows:

> 3.1.2.2.5 Storage. The MGS must have the capability to store 17 primary armament rounds, 14 of which are in a ready configuration. Primary armament ammunition shall be separated from the crew to enhance crew protection from secondary explosions/fire. Separation will protect the crew from residual effects of 14.5 mm Armor Piercing ammunition that may enter the ammunition area. Separation will isolate the crew from mechanical ammunition handling if used.

RFP, MGS Mobile Gun System Performance Specification § 3.1.2.2.5. The MGS specification further provided that "[t]he MGS primary armament shall provide for a sustained rate of fire of at least six rounds per minute." Id. § 3.1.2.2.2.4.

GM/GDLS proposed to equip its MGS with [DELETED].[11] The proposal described a sequence to fire all [DELETED] rounds that resulted in a maximum rate of fire of [DELETED]. GM/GDLS Proposal, vol. 3, at 1-405, 1-409, 1-720; 1-860 to 1-875.

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[11] Spall was defined during the hearing as the secondary effects of a projectile impacting the vehicle, including fragments of the projectile and of the object struck by the projectile. Tr. at 447-49.

The Army issued several IFDs questioning GM/GDLS's approach, initially advising the firm that it considered its proposal unclear with respect to the ready round requirement:

> The offeror does not adequately address the ready round requirement for the main gun. [DELETED]. The offeror should provide a discussion of methodology [DELETED] of the required fourteen ready rounds.

IFD No. P-P-GM-116, June 17, 2000. GM/GDLS responded that [DELETED]. IFD No. P-P-GM-116, GM/GDLS Response (June 20, 2000).

Thereafter, on July 8, the Army issued another IFD in which it characterized GM/GDLS's response to both the ready round requirement and the ammunition separation requirement, as a "[d]eficiency," that is, "a material failure of a proposal to meet a Government requirement or a combination of significant disadvantages in a proposal that increases the risk of unsuccessful contract performance to an unacceptable level," such that "[f]ailure to correct a deficiency will preclude an offer from being considered for award." IFD No. P-P-GM-382, July 8, 2000. The Army found GM/GDLS's approach deficient because the weapon system [DELETED] and the "[m]ain gun ammunition is not separated from the crew in a manner which will adequately protect against secondary explosions/fires." Id. GM/GDLS responded to this IFD by essentially repeating the explanation of its position that it complied with the ready round requirement, and also noted with respect to the ammunition separation requirement that [DELETED]. IFD No. P-P-GM-382, GM/GDLS Response (July 8, 2000). The focus of GM/GDLS's response was on its measures "to keep spall and secondary explosions from reaching the 105 mm ammunition altogether." Id. In this regard, GM/GDLS noted the protection offered by [DELETED]. Id.

Agency evaluators specifically rated GM/GDLS as meeting the storage requirement with high risk because the proposed operational solutions--[DELETED]--did "not totally compensate for the weapon system [DELETED], and because, "if the vehicle is penetrated, there is negligible physical separation of the crew adequate to provide any protection from secondary explosions and fires from the main gun ammunition." AR, Tab 71, SSEB GM/GDLS Performance Evaluation, MGS Performance Specification § 3.1.2.2.5.[12] In the SSAC/SSA Brief, GM/GDLS's MGS was generally credited with a disadvantage with respect to the storage requirement on the basis that [DELETED]. AR, Tab 83, BCT IAV SSAC/SSA Brief, Oct. 12, 2000, GM-GDLS MGS 105mm.

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[12] In contrast, the ammunition in UDLP's MGS was stored [DELETED], which the Army considered to be an advantage. AR, Tab 76, SSEB UDLP Performance Evaluation, MGS Performance Specification § 3.1.2.2.5.

The Army maintains that the GM/GDLS MGS met the ready round requirement. The Army notes in this regard that [DELETED], which exceeds the rate of fire requirement of 6 rounds/minute; the agency concluded that, since [DELETED], the storage requirement of 14 ready rounds was satisfied.

The Army's current focus on the overall average firing rate for the GM/GDLS MGS's [DELETED] rounds does not fully respond to the contemporaneous concerns repeatedly raised by the Army's own evaluators with respect to the cannon [DELETED]. Nor does the fact that [DELETED] respond to the [DELETED], which was the focus of the contemporaneous evaluation. In this regard, we note that, according to the Army itself, "[i]n an anti-armor role, a combat vehicle must be ready to quickly engage multiple 'tank type' targets in an extremely volatile and dynamic battlefield. The inability to engage in these scenarios would be fatal to equipment and crew." Agency Hearing Comments at 42. The agency notes that the primary purpose of the MGS is to perform infantry support missions, including breaching walls and penetrating bunkers, with anti-armor as primarily the responsibility of the ATGM ICV variant, but concedes, as it must, that the MGS does have an anti-armor role. According to the MGS specification, the "MGS primary armament shall have the capability to deliver high explosive munitions in an anti-personnel mode and engage and destroy a variety of level II armored vehicles (light skin and armored through T-62) as a self defense capability from a range of 33 meters out to a minimum range of 2000 meters." RFP, MGS Performance Specification § 3.1.2.2.2.1. Further, the importance assigned to the rate of fire for the MGS, as demonstrated by both the existence of the 6 rounds/minute minimum requirement and the fact that [DELETED], appears to confirm that the MGS is expected to engage in "up tempo," possibly anti-armor engagements [DELETED]. AR, Tab 83, BCT IAV SSAC/SSA Brief, UDLP MGS 105 mm (1&3). Given that the GM/GDLS MGS's [DELETED], we find that the evaluation did not reasonably take into account the seriousness of the MGS's weakness in this regard.

As for the ammunition separation element of the ammunition storage specification, in responding to UDLP's protest and explaining why the GM/GDLS MGS met this requirement, the Army focuses on the effectiveness of the [DELETED] against spall and its thermal properties. Agency Hearing Comments at 44. However, its current position with respect to the effectiveness of GM/GDLS's [DELETED] appears inconsistent with the contemporaneous concerns expressed by the agency during the evaluation--that if the vehicle is penetrated, the physical separation is not "adequate to provide any protection from secondary explosions and fires from the main gun ammunition." AR, Tab 71, SSEB GM/GDLS Performance Evaluation, MGS Performance Specification § 3.1.2.2.5.

Notwithstanding our conclusion, we do not agree with UDLP that these weaknesses required the Army to reject GM/GDLS's proposal as unacceptable. In this regard, the RFP described the ready round and ammunition separation requirements in fairly general terms; it did not specify a particular degree of or approach to ammunition separation and crew protection, or provide a definition of ready round, that had to be

satisfied in order for a proposal to be found acceptable.[13] Further, considering the evaluation as a whole, there is no reason to believe that according more weight to these weaknesses would have affected the award decision. First, GM/GDLS's MGS proposal was reasonably evaluated as superior in supportability and in performance areas other than ammunition storage. Further, even with respect to the ammunition storage requirement, which was only a less important, Band 2 requirement, the record indicates that UDLP's MGS may offer a lesser overall capability than GM/GDLS's in some significant respects. Although UDLP's MGS was rated as having an advantage under the storage specification because it [DELETED], and its [DELETED] was favorably evaluated, the Army has made a strong showing that there was significant risk to stored ammunition (and thus crew) associated with its design. Specifically, given its lesser, 7.62 mm integral armor protection over most of the vehicle (that is, other than the frontal 60-degree arc, where there was 14.5 mm AP protection), and the more exposed location of its ammunition, the Army maintains that there is a higher probability that shells striking UDLP's MGS would penetrate and ignite the ammunition. Agency Hearing Comments at 43-44; Tr. at 453-461. Finally, and most significantly, the record shows that commonality among vehicles weighed very heavily in GM/GDLS's favor in the MGS award decision. We discuss this consideration below.

Commonality and the Selection of the GM/GDLS MGS

Beyond GM/GDLS's MGS's significant performance and supportability advantages, the record indicates that the enhanced commonality that would result from selecting GM/GDLS's MGS was an overriding consideration once its ICV had been selected. In this regard, section M.1.2.4 of the RFP stated:

> Offerors are further cautioned that in light of the importance of commonality within the evaluation process, it is possible that a highly rated MGS proposal that lacks commonality with a highly rated ICV (including all configurations) proposal may not receive an award. Similarly, it is possible that a highly rated ICV (including all

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[13] Further, there has been no showing that UDLP would have altered its Proposal No. 1 to its competitive advantage if it had been aware of the manner in which the agency would evaluate the ammunition storage requirements. See UDLP Post-Hearing Reply Comments (Feb. 28, 2001) at 21-22; RGII Technologies, Inc.--Recon. and Protest, B-278352.2, B-287352.3, Apr. 14, 1998, 98-1 CPD ¶ 131 at 8 (unfair competitive prejudice from a waiver or relaxation of the terms and conditions of the RFP for one offeror exists only where the protester would have been able to alter its proposal to its competitive advantage were it given a similar opportunity; cf. Rockwell Elec. Commerce Corp., B-286201, Dec. 14, 2000, 2000 CPD ¶ __ at 9).

> configurations) proposal that lacks commonality with a highly rated MGS proposal may not receive an award.

RFP § M.1.6.4. Not only was commonality included as an evaluation element, but the Operational Requirements Document --which was incorporated into the solicitation--provided that "[c]ommonality will be maximized between the ICV and all other IAV platform variants and configurations." Operational Requirements Document at 8. According to the Operational Requirements Document:

> To reduce the logistics footprint and sustainability of the force as a whole, commonality must be achieved to the greatest extent possible. Ideally, common chassis, components, and subcomponents will be achieved, thus reducing the need for differing maintenance personnel, spare parts, and tools. The result will be demand reduction and sustainment efficiency measures which will contribute to the IBCT's ability to operate with a reduced logistics footprint. Commonality will also increase the combat effectiveness of the force by allowing crewmembers to switch from one function to the next without loss in efficiency (interchangeability) and by supporting and enabling dismounted assault operations with a family of IAVs. Commonality also reduces training load both on the IBCT and institution.

Id.

The SSA recognized in the source selection decision that both UDLP's and GM/GDLS's MGSs had been rated good and were essentially comparable with respect to commonality when evaluated on an MGS-only basis. However, since GM/GDLS's ICV and MGS base designs were identical--in contrast with UDLP's Proposal No. 1, under which its ICV had little commonality with its MGS--the SSA found that the combination of the GM/GDLS MGS and ICV offered far superior commonality among the combined IAV variants. The SSA explained in the source selection decision that GM/GDLS's

> far superior ICV and MGS commonality will result in a smaller, more deployable and flexible capability, with a significantly smaller logistics footprint due to the commonality benefits of reduced training and smaller parts/tools burdens, as well as operational efficiencies resulting from cross-leveling of parts and interchangeable crew functions. The commonality advantages of the [GM/GDLS] MGS, over that of UDLP, are extremely significant and directly relate to the essential mission objectives of the BCT.

Source Selection Decision at 24-25. In addition, the SSA noted:

> Operationally, selection of the [GM/GDLS] MGS would result in the entire BCT, including all IAVs, having comparable sustained speed

> mobility on hard surface roads . . . . This will allow all required BCT assets to roadmarch at essentially the same speed and provide for all necessary capabilities to simultaneously be available at a mission location, following a road march, to engage the threat.

Id. at 22-23. Further, in apparent reference to his prior selection of GM/GDLS's faster ICV, the SSA observed that a BCT equipped with the UDLP MGS "would face several unpalatable roadmarch options as a result of the slower UDLP MGS sustained speed on hard surface roads." Id. at 23. Specifically, the MGSs could begin the road march before the balance of the BCT, which would expose the MGSs to unacceptable risks; the remainder of the BCT could march ahead without the MGSs, which would deprive the remainder of the BCT of the support of the MGSs and conflict with the combined arms concept of the BCT; or the BCT could march at the speed of the MGSs, thus significantly delaying the road march.

In his hearing testimony, the SSA explained in more detail the rationale for not making a split award, that is, an award of the ICV to GM/GDLS and the MGS to UDLP. The SSA testified that, not only would there be significant supportability advantages from making a single award, there would be significant operational difficulties from making a split award. With respect to the factors he considered in not making a split award, the SSA testified:

> The predominant factors relate back to . . . commonality and supportability and overall performance. And I was assisted in that by the operational assessment that was made in looking at the importance of having commonality across all of those platforms from an operational sense. And so you get tremendous supportability improvements by not creating something which is different which would require a different support structure. In this case, track vehicle mechanics and the additional fuel requirements for those systems.
>
> In the operational characteristics, it was noted if you split the award, when you gave a track and a wheeled solution to the Army, that in addition to increasing the support requirements, you also would change the way that [the] commander had to operate that unit, because you would have different mobilities and speeds at which that unit could operate. So you were forcing an operational burden . . . on those commanders.

Tr. at 914-15. According to the SSA, combining a track component with a wheeled component

> means that you have different speeds and mobility conditions which those two parts of your units would operate. And so if you were conducting high-speed convoy operations, you would have had to split

> your organization so they could move with like speeds. That's both an operational and safety issue which you have to address. . . .
>
> One of the most difficult things to do in military units is to achieve an integrated use of all of your assets. We train and we work very hard to bring the pieces together so they're brought to bear on the enemy as a whole, not as separate pieces. Very infrequently do you do unsupported attacks where you would take one of a kind and go in. You're setting up the conditions, when you change the characteristics of a unit like that, to cause them to have to operate at the capability of the least of their ability, or to split it so they can take advantage of some characteristic of one, and you lose the integrating factor of bringing them to bear at the same time.

Tr. at 915-17, 1072-79.

In view of the above significant advantages that would accrue to the Army from a single award to GM/GDLS for both the ICV and MGS, and the significant disadvantages with respect to BCT operations and supportability that would accrue in the event of an MGS award to UDLP, as well as the significant performance and supportability advantages offered by GM/GDLS's MGS, we find that the determination to make award to GM/GDLS for the MGS, as well as for the ICV, was not unreasonable.

The protest is denied.

Anthony H. Gamboa
General Counsel