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United States General Accounting Office
Washington, DC 20548

March 28, 2003

The Honorable Donald H. Rumsfeld
Secretary of Defense

Subject: *Army Stryker Brigades: Assessment of External Logistics Support Should Be Documented for the Congressionally Mandated Review of the Army's Operational Evaluation Plan*

Dear Mr. Secretary:

We are reviewing the Army's plans for deploying and sustaining Stryker brigades. We plan to complete our review and report the results in June 2003. In the meantime, the Army will be conducting an operational evaluation of the first Stryker brigade from late April through May 2003 as required by law. The purpose of this letter is to bring to your attention issues concerning the adequacy of the Army's proposed operational evaluation plan.

The operational evaluation is intended to facilitate an understanding of the initial brigade's overall capabilities. The evaluation was first directed by the conference report accompanying the 2001 defense authorization act.¹ Subsequently, Congress included the requirement in Section 113 of the National Defense Authorization Act for fiscal year 2002,² which provides that

- the Secretary of the Army is to evaluate the brigade's execution of combat missions across the full spectrum of potential threats and operational scenarios,
- the Department of Defense's Director of Operational Test and Evaluation (DOT&E) must approve the Army's operational evaluation plan before the evaluation may be conducted, and

¹ House Report 106-945 (Oct. 6, 2000), page 673.

² Public Law 107-107 (Dec. 28, 2001). See enclosure I for relevant excerpts from Section 113.

- the Secretary of Defense is to certify to Congress that the results of the operational evaluation indicate that the Stryker brigade's design is operationally effective and operationally suitable.³

In this letter, we address the adequacy of the Army's operational evaluation plans for assessing the Stryker brigades' external logistics support—that is, the personnel, equipment, and services that will augment these brigades.⁴ As you know, Stryker brigades are organized and equipped to deploy rapidly and to execute early-entry operations immediately on arrival—potentially, into remote areas of the world. By design, Stryker brigades do not have the capability to sustain operations in this type of environment beyond several days or to perform other than minor vehicle repair and equipment maintenance. Thus, the brigades require the assistance of external logistics support for essential supply and maintenance services. Integrating external logistical support with the brigades' limited support structure is therefore a key concept of the Stryker brigades' organizational and operational design and is essential to effectively supporting and sustaining these brigades in combat.

Because the Army is ready to go forward with its plans for the operational evaluation and because of your requirement to certify the results, we are sending this letter to you with recommendations for DOT&E.

Results in Brief

According to the Army's plans, external logistical support will not be formally assessed during the operational evaluation. Instead, the Army is planning to conduct separate, informal assessments of some external support concepts, but information about the scope and methodology for these assessments is not included in the operational evaluation plan that the Army will be submitting to DOT&E for its required review and approval. As a result, DOT&E will not have all of the information it needs from the Army to determine whether the operational evaluation will be conducted in a way that demonstrates that the brigades' design is both operationally effective and operationally suitable. Specifically, DOT&E will not be in a position to know whether the first brigade will be sufficiently assessed during the operational evaluation nor will it be able to determine whether the results can provide a complete understanding of the brigade's overall capabilities. This lack of information could hamper your ability to certify the results of the operational evaluation. The Army does not believe that external support should be included as a formal part of the operational evaluation because the people and processes that provide it are not a part of the brigade's organization.

³Operational effectiveness is generally defined as the overall degree of mission accomplishment of an item tested; operational suitability is the degree to which an item can be placed in use with consideration given to factors that include logistic supportability.

⁴Stryker brigades rely on reach-back operations—a concept of reaching in all directions to obtain intelligence, planning and sustainment. Reach-back may include obtaining division, corps or theater-level logistical support. Reach-back may also include obtaining logistical support from contractors, joint or host nation sources.

Accordingly, we are making recommendations to the Director of Operational Test and Evaluation regarding documentation of Army plans for assessing external logistics support during the operational evaluation and reporting on results of the external support assessment.

In commenting on a draft of this report, the Department of Defense generally concurred with our assessment and recommendations and outlined actions to address the concerns named in the report.

Background

The operational evaluation is to be accomplished through observation of several training events and exercises that the brigade will undergo. The principal events include a deployment of the brigade from its home station at Fort Lewis, Washington, in late April 2003, to the Army's Joint Readiness Training Center at Fort Polk, Louisiana, and surrounding areas, where the brigade will undergo combat exercises through the end of May 2003. The brigade will conduct multiple combat missions and operations during these exercises that will be evaluated to determine its operational readiness and combat effectiveness.

The brigade that is undergoing the operational evaluation is the first of six Stryker brigades the Army plans to form through 2008. Organizing and equipping Stryker brigades is the first phase of the Army's plans to transform all of its forces into a more strategically responsive force that could more rapidly deploy and effectively operate in all types of military operations.

Army Not Evaluating External Support as Part of the Operational Evaluation

The Army is not planning to evaluate external support as a formal part of the operational evaluation. The Stryker brigades' support structure is limited by design and lacks the capability to sustain combat operations beyond several days. After that, the brigade is totally dependent upon augmentation in the form of external logistics support for replenishment of supplies and much of the vehicle and equipment maintenance for the brigade. The Army plans to informally assess some of these external support organizations and processes; but its plans for informally assessing external support are not documented for DOT&E review.

Stryker Brigades Are Designed to Have Limited Internal Support Capabilities

Integrating external logistical support with the brigades' limited internal capabilities is essential to effectively supporting and sustaining Stryker brigades. Rapid deployability and sustainability are core operational capabilities the Army envisions for Stryker brigades. To achieve the envisioned rapid deployability and to be adequately sustained in an early entry, austere environment, the brigades are

dependent upon external supporting organizations for replenishment after its initial supplies are exhausted. The brigades—by design—do not have the level of supply and transportation support personnel or the necessary equipment to move and distribute the fuel, water, and other materiel it would need for extended operations. Instead of stockpiling inventories of ammunition, spare parts, and other supplies—as a heavy mechanized brigade would do—Stryker brigades are to sustain themselves in extended combat operations by having these items delivered from numerous locations, such as Army depots and theater support bases, where they will be stored and configured for rapid shipment and distribution to the brigade. External logistics support personnel and equipment are needed to configure, transport, and distribute these supplies to the brigades.

External logistics support is also needed to enhance the brigades' limited ability to perform essential support functions such as maintenance, supply, and transportation services. The brigades' support battalion, as currently designed, has only about one third of the maintenance support capability of the current support structure of an Army heavy brigade. It does not have sufficient numbers of maintenance personnel or the capability to sustain operations without the assistance of external support organizations and resources.

The brigades are also heavily reliant upon external support provided by contractors to service and maintain its newly fielded Stryker medium-armored vehicles and complex digital command, control, communications, and computer equipment. Contractor logistics support will be needed to support the Stryker vehicles and digital systems at least until these systems are fully fielded. Because of their importance to the brigades in combat operations, the Army, through contractor logistics support, must be able to adequately maintain and support these systems anywhere in the world. External support personnel and management processes are needed to coordinate the work of the numerous contractor personnel that will be supporting the brigades.

Assessment of First Stryker Brigade's External Support Will Be Informal and Separate from the Operational Evaluation

The Army's draft plan for the operational evaluation lists the augmentation forces—including external logistical support—that are necessary “enablers” for the brigade, but the draft plan states that these enablers will not be assessed during the operational evaluation. Army officials told us that current plans are to replicate and informally assess—to the extent possible—the processes and organizations that will provide external logistical support to the brigade; however, these plans are not documented and will not be available to DOT&E for its review. Officials responsible for preparing the Army's operational evaluation plan told us that external support should not be evaluated as a formal part of the operational evaluation because the personnel and processes that provide it are not a part of a Stryker brigade's organization.

Without information about the Army's plans for assessing external logistical support, DOT&E will not be able to determine whether the brigade will be sufficiently assessed during the operational evaluation. For example, without knowing the scope and the methodology the Army plans to use for informally assessing external support, DOT&E would not be able to determine whether the operational evaluation results can be used to draw sound conclusions about the brigades' overall capabilities. The effectiveness of the brigades cannot be understood apart from their external logistical support because the brigades' organizational design and concepts of operations are reliant upon the effectiveness of the external organizations and processes that are needed to support the brigades. If external support is not thoroughly evaluated, the results from the operational evaluation will not provide a complete understanding of the first brigade's overall capabilities and not confirm that the brigade's design is operationally effective and operationally suitable. These results would form the basis of the Secretary of Defense's certification.

Conclusions

If evaluation plans for the external support concepts embodied in the brigades' organizational design are not documented, DOT&E will have incomplete information to determine the sufficiency of the Army's plans for the operational evaluation. Lacking credible results from the operational evaluation, the Secretary of Defense would have insufficient information, we believe, with which to reach judgments regarding the operational effectiveness and the operational suitability of the brigades' design.

Recommendations for Executive Action

We recommend that the Director of Operational Test and Evaluation not approve the Army's operational evaluation plan until the Army provides DOT&E with (1) documentation of how it will assess external logistics support during the operational evaluation, to include the methodology that will be used for the assessment and (2) assurance that the results of the assessment will be included in the Army's final report on the operational evaluation.

Agency Comments and Our Evaluation

In commenting on a draft of this report, the Department of Defense generally concurred with our assessment and recommendations and outlined actions to address the concerns named in the report. Additionally, the Army briefed us on its plans to address our concerns.

In responding to our recommendation that the Director of Operational Test and Evaluation not approve the Army's operational evaluation plan until the Army provides his office with documentation of how it will assess external logistics support, the Department concurred and noted that the operational evaluation plan must include details on the evaluation of external, reach-back logistics. The Department stated that both the operational evaluation plan and the operational execution plan will be reviewed for adequacy once received.

The Department also concurred with our recommendation that the Army's final operational evaluation report should include results from the evaluation of logistics reach-back. The Department said that the Director of Operational Test and Evaluation would have personnel on-site during the execution of the operational evaluation who will be prepared to provide comment on the Army's final report.

Department of Army officials briefed us on their plans to assess external logistics support, including the data collection and analysis methodology it will use. Army officials also told us that they will submit the plan to DOT&E for its review and approval. Further, the officials assured us that the results of the assessment will be included in the Army's final report on the operational evaluation. If the Army executes its plan as now envisioned, it will meet the intent of our recommendations.

Enclosure II contains the full text of the Department's comments.

Scope and Methodology

To obtain information on plans for evaluating the first Stryker brigade's external support concepts, we interviewed officials from the Army's Forces Command responsible for the operational evaluation; I Corps officials at Fort Lewis, Washington, responsible for planning and executing the operational evaluation; DOD's Office of the Director, Operational Test and Evaluation, which is required by law to review the Army's operational evaluation plan; and the Office of the Deputy Under Secretary of the Army for Operations Research, the Army's lead agent for the operational evaluation.

We analyzed Army information on the organizational design and operational concepts for Stryker brigades to gain an understanding of the logistics challenges of supporting and sustaining the brigades. We reviewed documents and interviewed officials from the Army's staff elements responsible for operations and plans, logistics, and force development. We also met with representatives and reviewed documents from the Army's Tank-automotive and Armaments Command and Combined Arms Support Command to learn about support and sustainment options for the Stryker brigades. In addition, we interviewed staff from the Army Training and Doctrine Command's Brigade Coordination Cell and garrison commands at Fort Lewis for information relating to support and sustainment plans for the first two Stryker brigades.

Our review was conducted from May 2002 through February 2003 in accordance with generally accepted government auditing standards.

We are sending copies of this report to the Chairmen and Ranking Members of the Senate Committee on Armed Services; Subcommittee on Defense, Senate Committee on Appropriations; House Committee on Armed Services; and Subcommittee on Defense, House Committee on Appropriations. It will also be available at no charge on GAO's Web site at <http://www.gao.gov>. If you or your staff have any questions on the matters discussed in this letter, please contact me at (202) 512-8365, or my

Assistant Director, Lee Furr, at (202) 512-5426. Key contributors to this report are listed in enclosure III.

Sincerely yours,

A handwritten signature in black ink, appearing to read "W. Solis". The signature is fluid and cursive, with a large loop at the beginning and a horizontal line extending to the right.

William M. Solis, Director
Defense Capabilities and Management

Enclosures

**SECTION 113 PUBLIC LAW 107-107 PROVISIONS
PERTAINING TO OPERATIONAL EVALUATION**

“(h) OPERATIONAL EVALUATION.—(1) The Secretary of the Army shall conduct an operational evaluation of the initial interim brigade combat team. The evaluation shall include deployment of the team to the evaluation site and team execution of combat missions across the full spectrum of potential threats and operational scenarios.

“(2) The operational evaluation under paragraph (1) may not be conducted until the plan for such evaluation is approved by the Director of Operational Test and Evaluation of the Department of Defense.

“(i) LIMITATION ON PROCUREMENT OF INTERIM ARMORED VEHICLES AND DEPLOYMENT OF IBCTs.—(1) The actions described in paragraph (2) may not be taken until the date that is 30 days after the date on which the Secretary of Defense—

- Reports. “(A) submits to Congress a report on the operational evaluation carried out under subsection (h); and
 - Certification. “(B) certifies to Congress that the results of that operational evaluation indicate that the design for the interim brigade combat team is operationally effective and operationally suitable.
- “(2) The limitation in paragraph (1) applies to the following actions:
- “(A) Procurement of interim armored vehicles in addition to those necessary for equipping the first three interim brigade combat teams.
 - “(B) Deployment of any interim brigade combat team outside the United States.
- “(3) The Secretary of Defense may waive the applicability of paragraph (1) to a deployment described in paragraph (2)(B) if the Secretary—
- “(A) determines that the deployment is in the national security interests of the United States; and
 - “(B) submits to Congress, in writing, a notification of the waiver together with a discussion of the reasons for the waiver.”

Comments from the Department of Defense



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MAR 14 2003

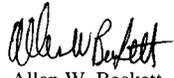
Mr. William M. Solis
Director, Defense Capabilities and Management
U.S. General Accounting Office
Washington, DC 20548

Dear Mr. Solis,

This is the Department of Defense (DoD) response to the GAO draft report, "ARMY STRYKER BRIGADES: Assessment of External Logistics Support Should Be Documented for the Congressionally Mandated Review of the Army's Operational Evaluation Plan," dated February 21, 2003 (GAO Code 350323).

The Department generally concurs with the report. Detailed DoD comments on the draft GAO recommendations are provided in the enclosure. The DoD appreciates the opportunity to comment on the draft report.

Sincerely,


Allen W. Beckett
Principal Assistant

Attachment
As stated



**GAO DRAFT REPORT DATED FEBRUARY 21, 2003
GAO-03-484R/GAO CODE 350323**

**“ARMY STRYKER BRIGADES: ASSESSMENT OF EXTERNAL
LOGISTICS SUPPORT SHOULD BE DOCUMENTED FOR
THE CONGRESSIONALLY MANDATED REVIEW OF
THE ARMY’S OPERATIONAL EVALUATION PLAN”**

**DEPARTMENT OF DEFENSE COMMENTS
TO THE RECOMMENDATIONS**

RECOMMENDATION 1: The GAO recommended that the Director of Operational Test and Evaluation not approve the Army’s operational evaluation plan until the Army provides his office with documentation of how it will assess external logistics support during the operational evaluation, to include the methodology that will be used for the assessment. (Page 7/Draft Report).

DOD RESPONSE: DOD concurs with the GAO assessment that the Operational Evaluation (OE) Plan must include details on the evaluation of external, reachback logistics. In conditionally approving the Stryker Brigade Combat Team Operational Evaluation (OE) Plan submitted by U. S. Forces Command (FORSCOM), the Department of the Army noted the “use of Reachback ... must be evaluated” to include logistics. DOD fully expects the updated Operational Evaluation (OE) Plan will include provisions for the assessment of logistics reach-back. Both the OE Evaluation Plan and OE Execution Plan will be reviewed for adequacy once received in mid-March 2003 timeframe. DOT&E will additionally have personnel onsite during the execution of the OE who will be prepared to provide comment on the Army’s final report.

RECOMMENDATION 2: The GAO recommended that the Director of Operational Test and Evaluation not approve the Army’s operational evaluation plan until the Army provides his office with assurance that the results of the assessment will be included in the Army’s final report on the operational evaluation. (Page 7/Draft Report).

DOD RESPONSE: DOD concurs with GAO that the Army’s final OE report should include results from the evaluation of logistics reach-back.

GAO STAFF ACKNOWLEDGMENTS

Acknowledgments

Key contributors to this report include, Kevin Handley, Karyn Angulo, Pat Seaton, Frank Smith, and Susan Woodward.