

February 1999

# ARMY RANGER TRAINING

## Final Assessment of Improvements Mandated By 1996 National Defense Authorization Act



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**National Security and  
International Affairs Division**

B-281816

February 25, 1999

The Honorable Wayne Allard  
Chairman,  
The Honorable Max Cleland  
Ranking Minority Member,  
Subcommittee on Personnel  
Committee on Armed Services  
United States Senate

The Honorable Steve Buyer  
Chairman,  
The Honorable Neil Abercrombie  
Ranking Minority Member,  
Subcommittee on Military Personnel  
Committee on Armed Services  
House of Representatives

This report provides our final assessment of corrective actions taken by the Army following the deaths of four Army Ranger students in a 1995 training accident. The Fiscal Year 1996 National Defense Authorization Act requires us to provide a final assessment of the matters covered in our preliminary report and our recommendation on the need to continue the required manning levels.<sup>1</sup> Specifically, we are reporting on the status of (1) Ranger training manning levels required by the act, (2) establishing safety cell organizations required by the act, (3) corrective safety actions instituted after the accident, and (4) inspections of identified safety controls.

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**Background**

The Ranger Training Brigade, located at Fort Benning, Georgia, conducts three phases of Ranger training to develop tactical combat arms and leadership skills in infantry, airborne, air assault, mountaineering, and waterborne operations. The initial training phase is conducted at Fort Benning, the second phase is conducted in the Georgia mountains, and the third phase is conducted in river and swamp terrain in Florida. In February 1995, four Ranger students died of hypothermia while undergoing waterborne training in the Florida swamps.

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<sup>1</sup>The act (P.L. 104-106, Feb. 10, 1996) set minimum personnel manning levels for the Army's Ranger Training Brigade and specified that the manning level requirement shall expire 2 years after the date on which it is first attained. The act also required us to provide a preliminary report within 1 year of its enactment, see *Army Ranger Training: Safety Improvements Need to be Institutionalized* (GAO/NSIAD-97-29, Jan. 2, 1997), and a final report within 2 years after the Army first attains the required manning levels.

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The Army's investigation of the accident recommended corrective actions to improve Ranger training safety and preserve the lessons learned from the accident.<sup>2</sup> Corrective actions to improve the safety of Ranger training were also prescribed by the Fiscal Year 1996 National Defense Authorization Act. The act required the Army to ensure that the number of officers and the number of enlisted personnel assigned to the Ranger Training Brigade are not less than 90 percent of required levels. The Army defines requirements as the minimum number of personnel needed to perform a unit's mission effectively. This mandate was to become effective no later than February 1997 and expire 2 years after it is achieved. The act also required the Army to establish at each of the three Ranger training locations an organization known as a "safety cell," comprising individuals with sufficient continuity and experience in each geographic area to be knowledgeable of local conditions and the potential impact of weather and other conditions on training safety. The act further provided that these individuals shall serve as advisors to the officers in charge of training to assist in making training "go" and "no go" decisions in light of weather and other conditions.

Our preliminary report assessed the implementation and effectiveness of the corrective actions, the Army's progress in implementing the mandated staffing levels and safety cell organizations, and the adequacy of Army oversight to ensure that the corrective actions are sustained in the future. We recommended that the Army direct the Ranger Training Brigade to identify critical training safety controls and ensure that the Ranger training chain of command, and organizations outside the chain of command, conduct periodic inspections to determine compliance with the safety controls implemented after the accident.

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## Results in Brief

Even though the Army placed the Ranger Training Brigade on the list of units excepted from normal Army personnel priorities and raised the Brigade's personnel distribution to 90 percent of required numbers, it was not able to meet the act's required personnel levels. In February 1997, when the Army planned to first meet the act's requirement, the Brigade had 97 percent of required enlisted personnel but only 88 percent of the required number of officers. The Brigade's personnel strength was below the mandated 90-percent level for both officers and enlisted personnel from October 1997 through September 1998. While Brigade officer staffing

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<sup>2</sup>The Army's investigation also concluded that officer shortages and personnel turnover at the Florida training camp contributed to the accident by draining experience and insight and by limiting the ability to keep operating procedures current, supervise standards and policies, and observe training exercises.

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levels were below the mandate, they were significantly higher than they were at the time of the accident. If the Army continues the current 90-percent officer distribution planning level for the Brigade, it is not necessary to continue the mandated personnel levels in law.

The Army has established safety cells with personnel knowledgeable about local terrain and weather conditions, but the frequency of personnel rotations may make it difficult to provide sufficient continuity that the act requires. Specifically, the Brigade and battalion chains of command who serve as the safety cell members and supervise daily training safety decisions generally rotate to new units every 2-3 years. Because of the act's requirement that safety cell personnel have sufficient continuity and experience, the Army has recently authorized the addition of four civilian personnel to the safety cells at the Brigade and the three training battalions. The Army plans to fill these positions by September 1999.

The Army has completed and institutionalized most of the recommended corrective actions, and they appear to be functioning effectively. The Brigade has improved safety controls at the Florida Ranger camp by developing systems to better monitor and predict river and swamp conditions. It has moved waterborne training exercises outside high-risk areas and eliminated discretion to deviate from established training lanes. At all three training phases, medical evacuation procedures have been revised, rehearsed, and inspected; physician assistants have been assigned to the Brigade and training battalions; and a Brigade communications officer has been assigned. In addition, the Brigade now requires that its training companies be commanded by branch-qualified captains.

Although frequent inspections have been conducted since the accident, they did not evaluate continued compliance with the training safety controls, as we recommended in our preliminary report, nor were the results of the inspections adequately documented. Documented evaluations of the training safety controls would help ensure that the corrective actions are continued and lessons learned from the accident are sustained in the future.

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## Army Increased Brigade Personnel but Many Factors Have Hindered Meeting Mandated Levels

At the time of the 1995 accident, the Ranger Training Brigade had a staffing priority that authorized it to be staffed at about 85 percent of its personnel requirements. In response to the mandated 90-percent level, the Army excepted the Brigade from normal Army staffing priorities<sup>3</sup> and raised the Brigade's officer distribution and enlisted personnel authorizations to 90 percent of the required numbers. It expected to staff the Brigade at this level in February 1997. Despite these measures, the Army was not able to assign and maintain the numbers of officers and enlisted personnel the act required for most months since that time. The Brigade staffing level has improved since the accident, even though the Army has not maintained staffing at the mandated level.

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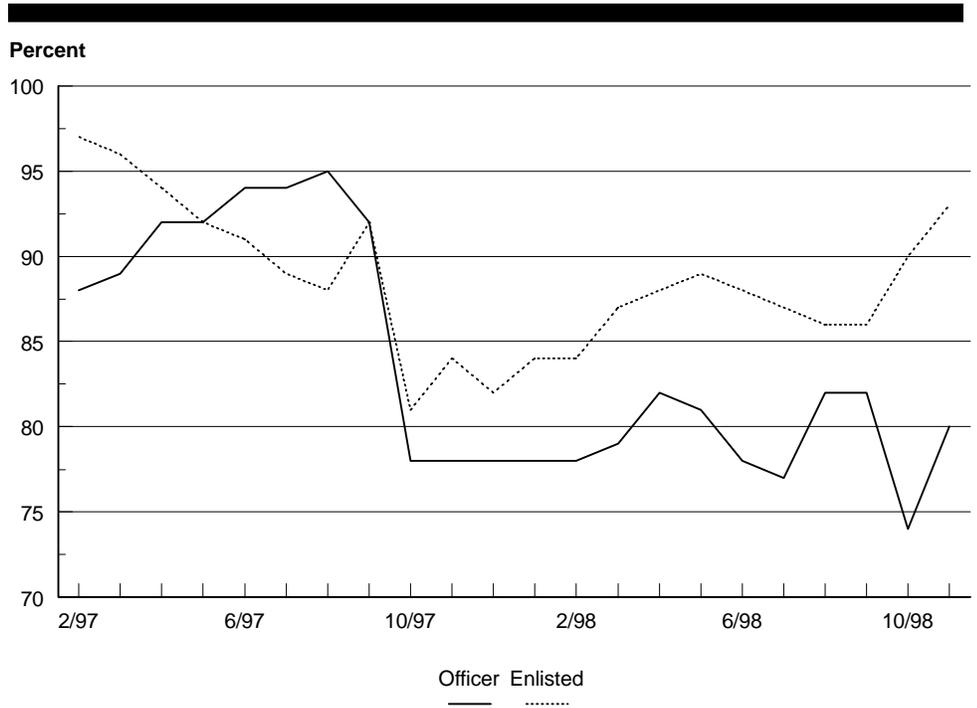
## Mandated Officer and Enlisted Personnel Levels Have Not Been Sustained

Although in the aggregate, the Brigade was assigned 96 percent of its required personnel in February 1997, it had only 88 percent of the required number of officers. The Brigade's officer strength has remained below the mandated 90-percent level for most of the time between February 1997 and November 1998 and fell to under 80 percent for 9 months. While the Brigade was able to maintain higher enlisted personnel levels because of the Army priority for assigning enlisted Ranger instructors, its enlisted strength overall was also under the mandated level for 14 months from February 1997 through September 1998, as shown in figure 1.

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<sup>3</sup>Because of Army-wide shortages of personnel, the Army uses a tiered system to allocate personnel to its units. The Army gives top priority to staffing Department of Defense (DOD) agencies, major commands, training centers, and special operations forces. These entities receive about 100 percent of their personnel requirements. Second priority is given to early deploying Army divisions, which normally receive about 95 percent of their personnel requirements. The Army Training and Doctrine Command (TRADOC) and its schools, including the Brigade, receive a "fair share" of the remaining officers and enlisted personnel, usually about 85 percent of their personnel requirements. TRADOC receives a higher priority for enlisted instructors, usually about 98 to 100 percent of instructor requirements.

**Figure 1: Ranger Training Brigade Personnel Levels, February 1997 Through November 1998**



At the end of November 1998, when we completed our review, the Brigade was assigned 59 (or 80 percent) of its 74 required officers and 596 (or 93 percent) of its required enlisted personnel. Although the number of assigned officers was below the act’s requirement, it was significantly higher than it was at the time of the accident, when only 38 officers were assigned. Further, although the Brigade was assigned less than the required number of enlisted personnel from October 1997 through September 1998, it did have over 90 percent of its required number of enlisted Ranger instructors.

As of November 1998, the Brigade would have needed eight more officers to meet the mandated 90-percent level. Fort Benning officials said that they would be unable to assign any additional officers until captains undergoing advanced infantry officer training become available in December 1998.

Data on the Brigade’s numbers of required and assigned officers and enlisted personnel by month are included in appendix I.

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**Many Factors Have Contributed to Shortfalls in Meeting Required Personnel Levels**

Many factors have contributed to the Army's shortfalls in meeting the required numbers of officers and enlisted personnel, including unplanned losses of officers, shortages of branch-qualified captains<sup>4</sup> and certain enlisted specialties, unfilled requirements for other service's instructors, and higher personnel requirements.

Army officials at Fort Benning told us that the unplanned loss of personnel was the primary reason for not meeting the mandated officer level. The Brigade lost several officers who resigned their commissions or were injured while conducting Ranger training exercises. When these unexpected losses occurred, it was not possible to immediately reassign officers from other Army units to fill them. Fort Benning officials told us that replacing experienced and branch-qualified captains was particularly difficult because they are in short supply throughout the Army. As a result, Fort Benning was unable to immediately replace the officers lost by the Brigade and had to wait for graduates of the Infantry Officer Advanced course at Fort Benning to become available.

Some of the shortfall of enlisted personnel was due to unfilled requirements for instructors from the other services. For fiscal year 1998, the Army determined that the Air Force, the Navy, and the Marine Corps were to provide 20 instructors, and for fiscal year 1999, 16 instructors, based on the numbers of students they collectively planned to enroll in the Ranger course. However, the other services have not provided the numbers of instructors required. For example, thus far, in fiscal year 1999, the Marine Corps has provided only 2 of the 13 instructors. If the services had met their instructor requirements, the Army would have achieved the mandated enlisted personnel level in most months since February 1997. Table 1 shows the number of students the Army and other services planned to enroll in the Ranger course in fiscal year 1999 with the required and assigned instructors.

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<sup>4</sup>Branch-qualified captains are those who have had advanced training and have served in command positions in the field to which they are assigned.

**Table 1: Army and Other Services' Fiscal Year 1999 Enrollment and Required and Assigned Instructors**

| <b>Service</b> | <b>Students<sup>a</sup></b> | <b>Required instructors</b> | <b>Assigned instructors<sup>b</sup></b> |
|----------------|-----------------------------|-----------------------------|---|
| Army           | 2,245                       | 281                         | 279                                     |
| Marine Corps   | 100                         | 13                          | 2                                       |
| Navy           | 12                          | 2                           | 0                                       |
| Air Force      | 9                           | 1                           | 0                                       |

<sup>a</sup>Planned enrollment in fiscal year 1999.

<sup>b</sup>As of November 1998.

Two other factors contributed to personnel shortages in the Brigade. First, the Army had difficulty assigning the required numbers of enlisted training support personnel, such as medics and signal systems specialists, because there were, and still are, relatively small numbers of personnel with these specialties in the force. Second, in October 1997, the Army added 7 additional personnel requirements for officers and 86 additional requirements for enlisted personnel. Because the numbers of assigned personnel did not significantly change along with the added requirements, the percentages of assigned to required personnel declined significantly. Although Army officials at Fort Benning thought they could fill these positions within several months, both officer and enlisted personnel levels remained well below the mandated levels throughout fiscal year 1998.

### Other Assignments and Civilian Personnel Shortages Reduce the Availability of the Brigade's Personnel

The actual number of personnel available is often less than the number of personnel assigned to the Brigade. At any given time, some Brigade personnel are attending Army schools or are assigned to other duties, such as recruiting, thus reducing the actual number of personnel available to conduct and support Ranger training. As in all Army units, Brigade personnel periodically attend Army schools to complete their career training requirements or perform other duties for their units. In November 1998, the Brigade was assigned 59 (or 80 percent) of its 74 required officers. However, 3 of the 59 officers were attending schools or performing other full-time duties. As a result, the Brigade only had 76 percent of its required officers available. In addition, Ranger training battalion commanders must often assign soldiers to fill vacant civilian personnel positions. In November 1998, the Brigade had only 10 (or 20 percent) of its 49 required civilian personnel. To compensate for these shortages, battalion commanders periodically assigned Ranger training personnel to maintenance, supply, administrative, and other jobs—a

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common practice throughout the Army when civilian personnel requirements cannot be met.

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### Unique Ranger Training and Personnel Requirements Are Not Recognized in Army Personnel Distribution Priorities

Both Ranger training and the requirements for the personnel that conduct the training are unique. Unlike training at other TRADOC schools, Ranger training is conducted around the clock, under hazardous conditions, at three separate locations in difficult mountainous, river, and swamp terrain. The training is designed to subject students to hot and cold weather temperature extremes and mental and physical stresses, including nutritional and sleep deprivation—conditions that are intended to approach those found in combat. To conduct this type of training, Ranger instructors, battalion and company commanders, and support personnel must be qualified to function effectively under similar conditions. Therefore, many Brigade personnel are required to have special qualifications, including airborne and Ranger qualifications, and some are required to have swimmer and diver qualifications. Personnel with these qualifications are in short supply and in high demand throughout the Army. However, the current Army officer distribution policy gives top priority units, such as special operations forces, 100 percent of their requirements for these kinds of specialties. Without the higher priority the Army implemented to meet the mandated levels, the Brigade would receive only about 85 percent of its officer requirement. The Brigade would therefore compete with higher priority units and other TRADOC schools to obtain personnel with these specialized qualifications. The Army's enlisted distribution policy, however, does give a higher priority to the Brigade for enlisted instructors because it needs between 60 and 180 days to train and certify personnel to become fully qualified Ranger instructors.

Further, assigning personnel is complicated because, unlike other Army training units, the Brigade's headquarters and three training battalions are located in separate geographic areas. While Army commanders usually move personnel between positions within their units to compensate for any losses, the Brigade's ability to do so is limited because reassigning personnel from one training battalion to another involves permanent changes of station for soldiers and their families. Therefore, when losses occur, the Brigade must wait for available personnel from other Army units rather than move personnel internally between battalions.

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## Army Plans to Staff Safety Cells With Civilians

The act specified that safety cell personnel at each location must have sufficient continuity and experience to be knowledgeable of local terrain, weather, and other conditions. Currently, members of the Brigade and the battalions' chains of command, including the Brigade and battalion commanders, serve in the safety cells and supervise daily training safety decisions. While these people have developed a high degree of experience and knowledge of local conditions, the frequency of their rotations to new units may prevent the safety cells from obtaining individuals with sufficient continuity in the local training areas. Army officers usually rotate to new units every 2 years, enlisted personnel about every 3 years. In contrast, Army civilian employees do not rotate jobs as frequently and thus would appear to provide the continuity envisioned in the act.

In 1996, the Infantry Center at Fort Benning and the Brigade considered requesting civilian personnel for the safety cells but decided to adopt the current approach of having Brigade personnel serve in the safety cells. However, in September 1998, TRADOC reconsidered this approach and began work on a plan to authorize hiring four civilians for the safety cells at the Brigade and at each of the three training battalions. Army officials at Fort Benning told us they plan to develop job descriptions, identify candidates, and hire staff for the safety cells by September 1999.

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## Corrective Safety Actions Are Incorporated in Standard Operating Procedures

The Army's investigation of the accident recommended corrective actions to improve (1) risk assessments of training conditions, (2) command and control of training exercises, and (3) medical support and evacuation procedures. We reported in our preliminary report that the risk assessments had been improved, command and control procedures had been revised, and evacuation and medical support capabilities had increased. In addition, in September 1997, the Army Inspector General reviewed the corrective actions and waterborne training safety controls at the Florida Ranger camp and concluded that they were in place and functioning as intended.

During our review, we found that the corrective actions had been institutionalized in Brigade standard operating procedures<sup>5</sup> and that the safety control measures and medical evacuation procedures remained in place and appeared to be functioning effectively. Specifically, the Brigade continued to apply safety improvements at the Florida Ranger camp, such as command and control systems to better monitor and predict river and

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<sup>5</sup>Brigade standard operating procedures include those of the Brigade's headquarters and the three training battalions.

swamp conditions, and to conduct waterborne training exercises in designated training lanes outside of high-risk areas. At all three training locations, medical evacuation procedures had been revised, rehearsed, and inspected; and physician assistants had been assigned to the Brigade and training battalions. In addition, the Brigade has improved safety and the supervision of training by requiring that its training companies be commanded by experienced and branch-qualified captains. To better supervise training safety, the Brigade also assigns an officer and an enlisted noncommissioned officer to serve as training liaisons to accompany and monitor each Ranger class through all three phases of training.

A complete description and status of all corrective actions are included in appendixes II through V.

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## Safety Inspections Do Not Evaluate or Document Compliance With Training Safety Controls

Our preliminary report assessing Ranger training safety recommended that TRADOC, the Army Infantry Center, Fort Benning, the Ranger Training Brigade, and organizations outside the chain of command, such as the Army Inspector General, conduct periodic inspections to determine compliance with the safety controls implemented after the 1995 accident. Since 1997, the Army Infantry Center commander has conducted 6 personal safety inspections, and Brigade commanders have conducted 23 personal safety inspections. Also, Fort Benning has conducted two command and staff inspections, and the Brigade has conducted three command and staff inspections.<sup>6</sup> In addition, the Army Inspector General has visited all three phases of Ranger training and, in September 1997, completed an inspection of the safety controls.

However, the scope and results of the personal inspections conducted by the Infantry Center and Brigade commanders have not been documented. We were, therefore, unable to determine whether (1) the commanders' inspections focused on the identified safety control measures or (2) the commanders had determined that safety controls were working effectively.

While the scope and results of the Infantry Center's and the Brigade's command and staff inspections were documented, these inspections covered a broad range of unit activities, including safety. However, the safety related portion focused entirely on general safety procedures, such

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<sup>6</sup>Army Inspection Policy, Army Regulation 1-201, gives commanders the flexibility to establish both the frequency of and criteria for the inspections.

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as fire prevention measures, not on training safety. Also, although the Ranger training chain of command was briefed on the scope and results of the Army Inspector General's safety control inspection, a written report was not done.

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## Conclusions and Recommendations

Since the mandated staffing goal was instituted, the Ranger Training Brigade staffing level has improved, even though the Army has not maintained staffing at the mandated 90-percent level. A key factor in this improvement has been the Army's decision to give priority to staffing the Brigade. Without sufficient priority, we believe that unplanned losses and other problems that have kept the Brigade's officer strength below the mandated 90-percent levels would, over time, degrade officer strength to the levels that existed at the time of the accident. In view of the increased personnel levels since the accident, and provided that the Army continues the current staffing priority for the Brigade, we do not believe that it is necessary to maintain mandated personnel levels in law.

Additionally, the failure to evaluate specific training safety controls and document the results of such evaluations provide inadequate assurance that safety measures and controls are in place and functioning effectively. Inspections are vital in ensuring that corrective actions instituted after the accident are sustained.

We, therefore, recommend that the Secretary of the Army

- continue the current 90-percent officer distribution planning level for the Ranger Training Brigade and
- direct that future inspections of the Brigade include evaluations of training safety controls and that the inspections' results are documented.

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## Agency Comments

In written comments on a draft of this report (see app.VI), DOD concurred with the report and its recommendations. DOD stated that the Secretary of the Army has directed that the officer and enlisted strength of the Brigade be sustained at or above the 90-percent distribution level and that the Commander, Total Army Personnel Command, has established procedures to ensure compliance. DOD also stated that the Army has conducted frequent inspections to evaluate training safety controls and has moved to address the documentation of training safety controls inspections.

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DOD also noted that its goal is to provide safe, tough, and realistic training to Brigade students and that it believes it is meeting this goal. DOD also provided technical comments that we incorporated where appropriate.

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## Scope and Methodology

To determine the status of the mandated Ranger training manning levels, we reviewed and analyzed personnel requirements and numbers of officers and enlisted personnel assigned to the Ranger Training Brigade from February 1997 through November 1998. We reviewed changes in Army and Fort Benning personnel policies, plans, and distribution priorities to assess the measures taken to increase personnel to the mandated levels. To assess the adequacy of current personnel levels and the need to continue the mandated levels, we analyzed personnel requirements and obtained the views of Department of Army, TRADOC, and Fort Benning officials. We assessed the status of establishing training safety cells by reviewing the duties, qualifications, and experience of safety cell members and interviewing Fort Benning and Ranger officials.

To determine the status of the corrective actions and determine whether they are functioning effectively, we received briefings from Brigade officials, observed training exercises, and reviewed safety procedures at each Ranger battalion's facilities. To determine whether the Army has adequately inspected compliance with the identified safety controls, we interviewed Brigade officials and reviewed Army and Infantry Center inspection regulations, procedures, and records.

We conducted our review at Department of Army headquarters, Army Infantry Center, Ranger Training Brigade headquarters, and the Ranger training battalions at Fort Benning, Dahlonga, Georgia, and Eglin Air Force Base, Florida.

Our review was conducted from September through November 1998 in accordance with generally accepted government auditing standards.

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We are sending copies of this report to the Chairmen, Senate and House Committees on Appropriations, Senate Committee on Armed Services, and House Committee on Armed Services and to the Secretaries of Defense and the Army. Copies will also be made available to others upon request.

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The major contributors to this report are listed in appendix VI. If you or your staff have questions about this report, please call me on (202) 512-5140.

A handwritten signature in black ink that reads "Mark E. Gebicke". The signature is written in a cursive style with a large, stylized 'M' and 'G'.

Mark E. Gebicke  
Director, Military Operations  
and Capabilities Issues

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# Contents

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|   |    |
|---|----|
| Letter  | 1  |
| Appendix I<br>Ranger Training<br>Brigade Personnel<br>Levels, February 1997<br>Through<br>November 1998                     | 16 |
| Appendix II<br>Status of Actions to<br>Improve Safety<br>Management: Risk<br>Assessments                                    | 17 |
| Appendix III<br>Status of Actions to<br>Improve Safety<br>Management:<br>Command and<br>Control, Equipment,<br>and Training | 18 |
| Appendix IV<br>Status of Actions to<br>Improve Safety<br>Management: Medical<br>Support and<br>Evacuation<br>Procedures     | 19 |

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**Contents**

---

|   |  |          |
|---|--|----------|
| <b>Appendix V</b><br><b>Status of Actions to</b><br><b>Preserve Lessons</b><br><b>Learned</b> |  | 20       |
| <b>Appendix VI</b><br><b>Comments From the</b><br><b>Department of</b><br><b>Defense</b>      |  | 21       |
| <b>Appendix VII</b><br><b>Major Contributors to</b><br><b>This Report</b>                     |  | 23       |
| <b>Table</b>  | <b>Table 1: Army and Other Services' Fiscal Year 1999 Enrollment</b><br><b>and Required and Assigned Instructors</b> | <b>7</b> |
| <b>Figure</b>   | <b>Figure 1: Ranger Training Brigade Personnel Levels,</b><br><b>February 1997 through November 1998</b>             | <b>5</b> |

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**Abbreviations**

|        |                               |
|--------|-------------------------------|
| DOD    | Department of Defense         |
| TRADOC | Training and Doctrine Command |

# Ranger Training Brigade Personnel Levels, February 1997 Through November 1998

| Fiscal year/month | Officers |          |         | Enlisted personnel |          |         | Brigade total |          |         |
|-------------------|----------|----------|---------|--------------------|----------|---------|---------------|----------|---------|
|                   | Required | Assigned | Percent | Required           | Assigned | Percent | Required      | Assigned | Percent |
| <b>1997</b>       |          |          |         |                    |          |         |               |          |         |
| February          | 66       | 58       | 88      | 557                | 539      | 97      | 623           | 597      | 96      |
| March             | 66       | 59       | 89      | 557                | 533      | 96      | 623           | 592      | 95      |
| April             | 66       | 61       | 92      | 557                | 521      | 94      | 623           | 582      | 93      |
| May               | 66       | 61       | 92      | 557                | 514      | 92      | 623           | 575      | 92      |
| June              | 66       | 62       | 94      | 557                | 505      | 91      | 623           | 567      | 91      |
| July              | 66       | 62       | 94      | 557                | 494      | 89      | 623           | 556      | 89      |
| August            | 66       | 63       | 95      | 557                | 490      | 88      | 623           | 553      | 89      |
| September         | 66       | 61       | 92      | 557                | 510      | 92      | 623           | 571      | 92      |
| <b>1998</b>       |          |          |         |                    |          |         |               |          |         |
| October           | 73       | 57       | 78      | 643                | 522      | 81      | 716           | 579      | 81      |
| November          | 73       | 57       | 78      | 643                | 539      | 84      | 716           | 596      | 83      |
| December          | 73       | 57       | 78      | 643                | 526      | 82      | 716           | 583      | 81      |
| January           | 73       | 57       | 78      | 643                | 541      | 84      | 716           | 598      | 84      |
| February          | 73       | 57       | 78      | 643                | 541      | 84      | 716           | 598      | 84      |
| March             | 73       | 58       | 79      | 643                | 558      | 87      | 716           | 616      | 86      |
| April             | 73       | 60       | 82      | 643                | 569      | 88      | 716           | 629      | 88      |
| May               | 73       | 59       | 81      | 643                | 574      | 89      | 716           | 633      | 88      |
| June              | 73       | 57       | 78      | 643                | 563      | 88      | 716           | 620      | 87      |
| July              | 73       | 56       | 77      | 643                | 557      | 87      | 716           | 613      | 86      |
| August            | 73       | 60       | 82      | 643                | 552      | 86      | 716           | 612      | 85      |
| September         | 73       | 60       | 82      | 643                | 552      | 86      | 716           | 612      | 85      |
| <b>1999</b>       |          |          |         |                    |          |         |               |          |         |
| October           | 74       | 55       | 74      | 639                | 574      | 90      | 713           | 629      | 88      |
| November          | 74       | 59       | 80      | 639                | 596      | 93      | 713           | 655      | 92      |

Note: Percentages have been rounded.

# Status of Actions to Improve Safety Management: Risk Assessments

| <b>Planned actions</b>  | <b>Status</b> | <b>Comments</b>  |
|---|---------------|--|
| 1. Develop a standard operating procedure to capture and use river level forecast information from local agencies.                          | Completed     | Weather, river, and swamp information obtained from local and federal agencies is integrated in training decision-making. Also, three remote weather sensors on the Yellow River provide real-time water depth and temperatures. |
| 2. Update risk management assessment.   | Completed     | Risk management assessments have been completed for all training activities.   |
| 3. Update daily risk assessment.  | Completed     | Daily risk assessments capture information on changing weather, water level, temperature, student conditions, and readiness of support systems.  |
| 4. Update current immersion guide.  | Completed     | The water immersion guide is briefed at the beginning of each day and updated as conditions change.  |
| 5. Standardize the in-walkers briefing for instructors.   | Completed     | Written standardized briefing formats are used for daily briefings of instructors at all three Ranger training battalions.   |
| 6. Provide commanders critical requirements analysis of class/platoon strengths and weaknesses as each class moves to a new training phase. | Completed     | Medical and other information on selected students and student platoons is forwarded to each training phase's incoming commander.  |
| 7. Erect staff markers on the lanes.  | Completed     | The Army Corps of Engineers erected 32 water depth markers along the Yellow River and training lanes in the swamps.  |
| 8. Examine the effectiveness of the current buddy system.   | Completed     | System reviewed, and it remains a first line of safety defense. When assigned buddy is not available, teams will move to three-person system.  |
| 9. Reinstate the system of assigning tactical officers to each class.   | Completed     | The 6th Battalion now assigns a captain or senior noncommissioned officer and a staff sergeant to each class with responsibility for class cohesion, student advocacy, feedback to battalion commanders, and other issues.       |
| 10. Conduct refresher training on the use of the immersion guide.   | Completed     | Lesson added to the Ranger course program of instruction.  |
| 11. Identify and mark weak swimmers.  | Completed     | Weak swimmers are identified during the combat water survival test and marked on their headgear and equipment.   |
| 12. Obtain physiological monitoring software.   | Completed     | Experimental monitoring software was provided to Ranger medical clinics. Due to implementation problems, the Brigade has discontinued its use.   |
| 13. Conduct nutrition and immunization study.   | Completed     | The Brigade Commander has increased meals provided Ranger students from 1-1/2 to 2 per day based on Army nutritional studies.  |
| 14. Develop personnel status monitoring system technology for possible use in Florida.  | Completed     | Experimental monitors tested in June 1996, but no procurement made.  |

# Status of Actions to Improve Safety Management: Command and Control, Equipment, and Training

| Planned actions  | Status    | Comments   |
|--|-----------|--|
| 1. Develop standard operating procedures for conducting training at the Florida Ranger Training Battalion.                   | Completed | Procedures have been written and included in the Brigade and the three training phases daily operating procedures.   |
| 2. Clearly identify each training lane.  | Completed | The Florida battalion identified specific lanes from the Yellow River through the swamps. The lanes were narrowed and adjusted to avoid hazardous areas. Students are not allowed to deviate from designated boat drop sites and training lanes. |
| 3. Develop a training and certification program for instructors.   | Completed | The Brigade developed a standardized instructor certification program. The program focuses on the development of instructor competency, experience, and application of procedures, safety, and risk management.                                  |
| 4. Upgrade tactical operations center ability to monitor operations.   | Completed | Communications and computer upgrades were installed and they are functioning effectively at Florida and mountain phases.   |
| 5. Purchase earplug/silent radios.   | Completed | The Florida battalion acquired whisper mikes for use with Motorola radios during training exercises.   |
| 6. Ensure that all patrols are equipped, trained, and prepared to conduct stream crossing operations.                        | Completed | Florida battalion students must demonstrate their ability to properly construct a one-rope bridge in 8 minutes prior to entering the swamp.  |
| 7. Develop a decision paper on the use of precision lightweight global position receivers by instructors during emergencies. | Completed | A Brigade decision paper concluded that global position receivers will be used by medical evacuation helicopters and Ranger instructors. The Brigade acquired 66 receivers to track the movement of students.                                    |
| 8. Develop standard packing lists for instructors, medics, and aeromedevac crews.  | Completed | Equipment and supply packing lists for instructors, medics, and aeromedevac crews have been updated.   |
| 9. Review the winter rucksack packing list.  | Completed | The winter packing list has been reviewed, and minor changes were made. Instructors inspect student rucksacks to ensure they have been tailored, weight distributed, and waterproofed.   |
| 10. Add a waterproofing class to program of instruction.   | Completed | A waterproofing lesson has been added to the Ranger course program of instruction.   |

# Status of Actions to Improve Safety Management: Medical Support and Evacuation Procedures

| Planned actions   | Status                        | Comments  |
|---|-------------------------------|---|
| 1. Determine system necessary to ensure safe medical evacuation.                | Completed                     | Air, water, surface, and ground evacuation procedures have been planned, rehearsed, and inspected. Joint medical evacuation procedures have been established among the Ranger training battalions and local medical services. |
| 2. Develop a mass casualty standard operating procedure.                        | Completed                     | Mass casualty procedures have been included in each Ranger training battalion's standard operating procedure.   |
| 3. Initiate a project to build a road into the swamp area in Florida.           | Determined to be not feasible | The former battalion commander concluded that the road is not critical for safe training and that following an environmental assessment, high construction and environmental mitigation cost estimates, it is not justified.  |
| 4. Determine fuel requirement for medevac helicopters at Florida training site. | Completed                     | A 2,000-gallon tanker is on hand at the Florida camp and two tankers with about 10,000 gallons fuel capacity are on hand at the Georgia mountain camp.  |
| 5. Implement plan to revert to full-time Ranger medic manning.                  | Completed                     | All three Ranger training battalions now have full-time, Ranger-qualified medics.   |
| 6. Obtain CO <sub>2</sub> inflatable one-man rafts.                             | Completed                     | The Florida Ranger camp acquired 21 CO <sub>2</sub> inflatable rafts, which are used by each Ranger instructor team.  |
| 7. Obtain hypothermia bags.   | Completed                     | Six hypothermia bags were issued to each of the Ranger training battalions.   |
| 8. Develop a system to check packing list for medevac helicopters.              | Completed                     | All medevac emergency equipment is inspected for accountability and serviceability upon arrival at the training battalions.   |
| 9. Reinforce training and rehearsals of medical attachments.                    | Completed                     | Fort Benning Medical Command has developed training guidelines for medics and Physician's Assistants in each camp.  |
| 10. Ensure compliance with previous cold weather procedures.                    | Completed                     | Revised standard operating procedures outline cold and hot weather training procedures.   |

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# Status of Actions to Preserve Lessons Learned

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| <b>Planned actions</b>                             | <b>Status</b> | <b>Comments</b>  |
|--|---------------|--|
| 1. Determine how best to preserve lessons learned. | Completed     | 1977 and 1995 accident summaries have been integrated into instructor certification programs and are required reading for new members of the chain of command.<br><br>VCR tape summarizing the 1977 and 1995 accidents was produced and is in use in the instructor certification program.<br><br>Monument to students who died was erected at the site of the accident. |
| 2. Continue formal command inspection program.     | Completed     | Although all battalions have been inspected, the inspections do not focus on training-related safety.  |
| 3. Review complete waterborne procedures.          | Completed     | The Army Inspector General completed a review of waterborne procedures in September 1997.  |

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# Comments From the Department of Defense



ACQUISITION AND  
TECHNOLOGY

## OFFICE OF THE UNDER SECRETARY OF DEFENSE

3000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-3000

FEB. 05 1999

Mr. Mark E. Gebicke  
Director, Military Operations  
and Capabilities Issues  
National Security and International  
Affairs Division  
U.S. General Accounting Office  
Washington, DC 20548

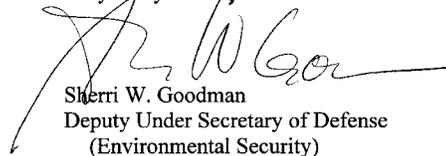
Dear Mr. Gebicke:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "ARMY RANGER TRAINING: Final Assessment of Safety Improvements Mandated By 1996 National Defense Authorization Act," dated January 12, 1999 (GAO Code 703263/OSD Case 1732). The Department concurs with the report.

The Secretary of the Army has directed that the officer and enlisted strength of the Ranger Training Brigade be sustained at or above of the 90% distribution level. The Commander, Total Army Personnel Command, has established procedures to ensure compliance. The Secretary of the Army directed that documented evaluations of training safety controls continue. The Army has conducted frequent inspections to evaluate training safety controls and moved to address the documentation of training safety control inspections. It is the goal of the Department to provide safe, tough, and realistic training to the students of the Ranger Training Brigade. The DoD believes it is meeting this goal.

With regard to application of risk management principles, DoD Instruction 6055.1, "DoD Safety and Occupational Health Program," directs the DoD Components and leaders at all levels to ensure that safeguards are integrated into all aspects of training and are not add-on considerations. The Army has been in the forefront of implementing this policy. Technical comments were provided directly to the GAO staff for consideration. The DoD response to the GAO recommendation is enclosed. The DoD appreciates the opportunity to comment on the draft report.

Very Truly Yours,



Sherri W. Goodman  
Deputy Under Secretary of Defense  
(Environmental Security)

Environmental Security



Protecting Our Future

**GAO DRAFT REPORT - GAO CODE 703263/OSD CASE 1732**

**"ARMY RANGER TRAINING: Final Assessment of Safety  
Improvements Mandated by 1996 National  
Defense Authorization Act"**

**DEPARTMENT OF DEFENSE COMMENTS**

**RECOMMENDATION 1:** The GAO recommended that the Secretary of the Army (1) continue the current 90 percent officer distribution planning level for the Ranger Training Brigade and (2) direct that future inspections of the Ranger Training Brigade include evaluations of training safety controls and that the inspections' results are documented. (pp. 18-19/GAO Draft Report)

**DOD RESPONSE:** Concur. The Secretary of the Army has directed that the officer and enlisted strength of the Ranger Training Brigade (RTB) be sustained at or above of the 90% distribution level. The Commander, Total Army Personnel Command, has established procedures to ensure compliance. The Secretary of the Army has also directed that documented evaluations of training safety controls continue.

# Major Contributors to This Report

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