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Combat Leaders' Guide Updated: The Leader Handbook

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13. ABSTRACT (Maximum 200 words) The <u>Combat Leaders' Guide</u> (CLG) is a job performance aid for leaders to use during periods of high stress and fatigue in continuous combat or realistic combat training. The pocket-sized handbook contains information from soldiers' manuals and other training materials in easy-to-read checklist format. It is made of waterproof and tear-resistant paper and is fastened with rings that permit insertion or deletion of material. The handbook offers easy information retrieval, can be personalized to individual and unit needs, and can be used under low light and in inclement weather. A prototype CLG was printed as a test item in 1986; a second edition was printed in 1987 and reprinted in 1990. Based on CLG requests from units deploying to Operation Desert Shield/Desert Storm, the CLG was revised. User feedback on content and research, which led to a revised CLG entitled <u>Combat Leaders' Guide: Leader Handbook</u>, is described in this report. The CLG is a generic guide and requires little updating. It has shown its usefulness in supporting unit readiness by providing a leader with doctrinal, tactical, and technical materials in a quick-reference format.				
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COMBAT LEADERS' GUIDE UPDATED: THE LEADER HANDBOOK

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Combat Leaders' Guide Updated: The Leader Handbook

INTRODUCTION

The original Combat Leaders' Guide (CLG) was developed in 1985 as an adjunct to the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) Fort Benning Field Unit's ongoing Bradley Fighting Vehicle research. The goal was to produce a standardized job performance aid for combat leaders to use during periods of high stress and fatigue in continuous combat or realistic combat training.

The CLG, a leaders' handbook, offers potential for increased operational capability by ensuring maintenance of leader readiness. For the modern leader faced with multiple and complex decisions, there is a need for a product to overcome the possible effects of performance decay over time. The CLG is a quick-reference system containing a variety of information. It is not intended to serve as a training aid, nor is it designed to replace standard training manuals; the CLG is a job performance aid for trained soldiers.

The prototype pocket-sized CLG was printed in 1986. It was produced with large type in an easy-to-read checklist format on waterproof and tear-resistant latex-coated paper. It was fastened with post screws to permit a user to insert or delete material. It thus provided fast and convenient information retrieval, could be personalized to individual and unit needs, and because of the type size and paper characteristics, was usable under low light and in inclement weather. The CLG was intended as a generic guide suitable for use by personnel at any level.

To create the CLG, critical tasks for small unit leaders and individual soldiers were examined for suitability for inclusion in a job aid. The steps in the process of task selection and CLG validation and guidelines for construction of job aids, to include the CLG, are contained in two companion reports, Evaluation of a Job Aid System for Combat Leaders: Rifle Platoon and Squad (Evensen, Winn, & Salter, 1988) and Authoring Guide: A Job Aid to Design and Produce a Combat Leaders' Guide (Winn & Evensen, 1988).

Several editions of the CLG have been published. The initial CLG, entitled Combat Leaders' Guide: Rifle Platoon and Squad (Winn, Evensen & Salter, 1987a), was printed in a pilot edition of 1,300 copies that were distributed to potential users to obtain feedback. Over 500 personnel (active duty and retired, to include National Guard) provided detailed feedback through questionnaires. Their feedback (reported in Evensen et al., 1988) was incorporated into the second edition, Combat Leaders' Guide: Platoon Leaders, Platoon Sergeants and Squad Leaders

(Winn, et al., 1987b). The subject of this paper is the newly constructed third edition, Combat Leaders' Guide: Leader Handbook (Salter, 1991, in preparation).

Background

Over 6000 prototype CLGs have been distributed worldwide, 1300 from the initial CLG, the remainder from the second edition. Requests have been filled from units throughout the United States, Europe and Korea, from TRADOC Schools and Reserve and National Guard Components. They have been tested in classroom instruction, during training exercises and unit evaluations, at the Combat Training Centers and professional development schools, by Medics and Military Police as well as by Infantry and Armor soldiers. Although the primary users have been Army personnel, a number of CLGs have gone to personnel in the other services.

However, the CLG, distributed by ARI as a prototype, is not an official Government publication, and as a job performance aid, does not fit into the limitations of the doctrinal literature program. Nor does it fit the criteria to be a Graphic Training Aid. Additionally, the cost of printing the CLG is relatively high because of the weather-resistant paper. Although local reproduction is encouraged, few copies other than the ARI-prepared series have been produced. By mid-1990 ARI had distributed almost all of its prototype copies. The steady stream of requests from the user community indicated, however, that there remained a requirement which ARI was neither tasked nor able to fulfill.

Impact of Operation Desert Shield/Desert Storm

Beginning in mid August 1990, the ARI Fort Benning Field Unit began to receive urgent requests for multiple copies of the Combat Leader's Guide from units which were deploying to Operation Desert Shield/Desert Storm. Requests from the 197th Infantry Brigade (Mech) and from the 24th Infantry Division (Mech) were followed by similar requests from the 1st Infantry Division (Mech), the 48th Infantry Brigade (Mech) (Georgia National Guard), and the 155th Infantry Brigade (Mech) (Mississippi National Guard), in anticipation of deployment. Shortly thereafter, requests were received from Fort Knox and Fort Benning for CLGs to support their training of Individual Ready Reserve soldiers. Units already in Saudi Arabia began to ask for more copies.

Over 600 CLGs were provided from the existing but dwindling supply of prototypes printed to support the previously noted large requests; several hundred more were distributed in small numbers as requests were received from individuals and other units. Since the CLG was in extremely limited supply, the Director of ARI's Training Systems Research Division (TSRD)

requested that a CLG be developed to meet these requests by obtaining feedback regarding its actual use under combat conditions. This research was to be based on information from soldiers conducting desert operations.

Procedure

The construction of a new and updated CLG was accomplished over several months. Data were collected from personnel who had used the existing CLG, changes were made based on this feedback, and a new Guide was developed. The specific changes to the old CLG were made after a chapter by chapter, line by line, subject matter expert review. Pages were shortened, chapters eliminated, and words changed based on the results of the feedback. The data collection procedure will be discussed first.

Survey

A CLG usage survey was developed and administered to a number of personnel who had recently used the earlier prototype CLGs. The intent of the questionnaire was to help serve as field validation/verification of the existing CLG as well as to determine items which needed to be added, deleted or changed based on desert operations or on general usage.

The actual surveys varied slightly from one unit to another. Each unit's survey was based on its own experience, although certain questions were common to all units. For example, only the unit which had actually deployed to Saudi Arabia was asked about CLG use in Desert Storm; National Guard units which had been mobilized but not sent to Saudi Arabia were asked about National Training Center (NTC) use. Only permanent party NTC personnel were asked about using the CLG as an observer/controller checklist. A sample survey is shown at Appendix A. Because of time constraints and the logistics of travelling to varied locations, the survey forms were sent to points of contact at specific locations, and distributed by personnel from the responding units. This factor undoubtedly limited the total number of forms returned for analysis.

Although several hundred surveys were distributed, only 84 useable surveys were returned. Some personnel had been given the survey in error; they had never seen the CLG, or had seen it only to review it. Input was sought only from individuals who had actually used it. Other surveys had too much missing information. Although respondents were asked for demographic information, no names or unit identifiers were sought; this anonymity may have helped insure candor in responses.

The survey began with initial questions as to how the respondent had used the CLG, and then a section to determine which chapters were used more often than others. The final part sought input on completeness and usefulness of the CLG, followed by free response open-ended questions.

Interviews

Small group and individual interviews were also conducted with personnel from these units. The audio-taped interviews took several different forms, although all were similar in their loosely structured style. In each case the interviewer started the session with an overview of the project, and the information that the CLG was about to be rewritten, and that user feedback was being sought. Specific questions were asked about items which should be changed, about what users had done to personalize the CLG, and about potential items for inclusion in an updated CLG. Information on use in the desert was also sought.

All who were interviewed were informed that they were a portion of a larger sample; but that their views as individuals would be heard. To maintain the low key atmosphere, no effort was made to obtain soldier's names, ranks or units; they were encouraged to speak freely; most did, and were not hesitant to be critical of the CLG.

All sessions were kept as informal as possible, with general questions offered for stimulus when useful discussion slackened. Finding questions did not prove difficult; finding enough time to cover everything did. Although some groups were slower to warm up than others, all were, after a very few minutes, very enthusiastic and interested in volunteering information. Generally, persons of similar rank or from the same company were interviewed together. Interviewees ranged from squad leaders through first sergeants, from platoon leaders through battalion staff. Both active duty and National Guard (on active duty) were represented.

One interview setting was for a group of approximately 25 small unit leaders; most were platoon leaders or platoon sergeants, but some were company level commanders or staff and a few were squad leaders. This semi-structured group interview lasted nearly two hours and personnel were free to leave as they had other assignments; few did. Some individuals even stayed after the end of the scheduled time to continue to talk.

Small group interviews (five) typically had 4 to 6 persons present in a dayroom/classroom setting, free from observation by others. Several persons were interviewed in pairs, and several more as individuals. Additionally, a number of interviews were conducted on the telephone. Times spent in group interviews were dependent on the interviewees' interests and the amount of time

available; the shortest interview conducted was one hour, the longest session ran well over two hours.

Survey Respondents

Survey respondents were from a unit which had returned from Operation Desert Storm, from National Guard units, and personnel from both Observer Controller and Opposing Forces (OPFOR) groups from the National Training Center (NTC) at Fort Irwin, CA.

Of the 84 useable surveys, 58 were from active duty personnel, 26 from National Guard. No attempt was made to determine if surveyed personnel were later interviewed; from their comments it was apparent that some had seen the survey but most being interviewed had not. Respondents ranged in rank from Private/Private First Class through Lieutenant Colonel. The most common enlisted grade was Sergeant First Class (12); the most common officer grade was Lieutenant (30). (Appendix B contains more demographic data.)

Not surprisingly, the most common job titles in the sample were Platoon Leader (23) and Platoon Sergeant (13). For enlisted personnel, most (33) were MOS 11B (Infantry), 11C (Indirect Fire) (14) or 11M (Bradley) (10) but others were mechanics, commo, combat support and combat service support personnel. Time in service ranged from one year to 29 years. For National Guard 3 years was the most frequent response; for active duty the most frequent response was 5 years.

Respondents indicated varying amounts of time using the CLG. For some it was a new item, received only in anticipation of deployment to Operation Desert Storm (a few months); others had used CLGs for a long time. The time ranged from a low of one month to a high of five years. The most common response was either six or 12 months (tie with 9 each). All had the opportunity to use the CLG in either the National Training Center or Saudi Arabia desert environment; many had used it in both.

Results

Generally the interviews supported and expanded upon the findings from the surveys. The interviews made possible in depth questioning on specific items, and helped shape the new version of the CLG. The questionnaire results are treated on a question by question basis; the interviews are not detailed per se, but are summarized by their incorporation into each section. Some overall generalizations can be made. They are based on the sum of the collected data, particularly on the verbal comments made in group session and interviews, but supported by the paper copy questionnaires.

Size of the CLG

The primary concern, voiced in every interview and repeatedly on the free response sections of the survey, was that although the existing CLG is both useful and useable, it is too bulky. The constantly repeated request was that it be made thinner, smaller, and therefore lighter. Armored personnel and vehicle drivers have little difficulty in finding a place to put the CLG (e.g., bustle rack) but light forces and anyone without a vehicle indicated that the CLG is too heavy to keep in the shirt pocket, rapidly becomes uncomfortable in the uniform cargo pocket, and when placed in the rucksack, is too difficult to access when needed.

Overall Comments and Concerns

Several other items became apparent, primarily during the interviews. Generally, the longer an individual has had a CLG the better it is liked, and more ways are found to use it. Personnel with extensive experience with the job aid have found ways to make it work for them. Additionally, the assessment of the utility and completeness of specific content areas was directly related to the particular job the respondent held. Many respondents had in some manner personalized the CLG, primarily by removing unwanted pages, or by finding a better method of fastening pages.

Some concerns were voiced about the target audience for the CLG, and the request that the content be better reflective of the intended user's likely taskings. Material which is appropriate for a squad leader may be too basic for a platoon sergeant; the platoon leader's needs are quite different from those of an officer in a battalion staff position. The adage about not being able to please everyone becomes particularly relevant in the attempt to revise the CLG.

Desert Operations

With respect to the overall problem of desert operations, and potential inclusions to the CLG, the users made several comments. First, and most often voiced, was that the desert is a condition like rain or night or snow. The condition makes ordinary tasks more difficult to perform, but requires no changes to performance standards and no new tasks. They acknowledged that some things are more difficult in a desert environment (e.g., adapt to temperature extremes, judge distance, build fighting positions) but these items fail criteria for inclusion in a job aid (e.g., time dependency, frequency of performance) as detailed in Winn & Evensen, 1988. In sum, using the CLG in the desert was seen as no different from using it in a non-desert environment. Its intended use as a memory jogger is not environmentally bound.

Survey Information

Responses to survey items are discussed here; other results are at Appendix C. A question about personalization of the CLG elicited responses on only a small portion of the surveys; most comments cited removal of specific pages or sections not relevant to their mission or duty position. Some indicated that they had reordered the sections to better identify and locate the most frequently used material.

Some comments were offered also on the post screws which fasten the CLG. These comments were echoed in the interviews. The screws permit removal of the pages, but the large size of the book required 1 1/4" posts which could not be shortened when pages were deleted. There was also some concern about difficulty in keeping the book open while writing because of the inflexibility of the screws.

Another question asked "Are there any situations where you didn't have it but wished you did?" Few specific answers were given (e.g., on ARTEPs, during EIB testing, on the M16 range). One commented, "Yes, since joining the Army;" another, who had used a CLG for 3 years, said "I wish I had carried it more religiously, all the time."

CLG usage. For the question "How have you used your CLG?" respondents could mark as many answers as applied. The most frequently checked response was "Memory jogger" where 58 of 84 persons checked this response. "Prep for FTX/STX" was second (43) with "Planning for operations" and "Teaching guide" tied for third at 42. "Preparing training materials" received the fifth highest number of responses (34). The total number of responses (443) averaged over 5 per respondent. (See Appendix C for full tabulation.)

Specific chapter usage. The next portion of the questionnaire attempted to determine which sections or chapters were used frequently and which were used less often. The 24 individual chapter titles were listed in order, followed by a brief description of the chapter content. Section 25 covered the abbreviations, and 26 covered the additional CLG job aids: grid squares, vinyl pockets, ruler and the phonetic alphabet. Beside each title was a place where frequency of use could be indicated by checking "A Little" or "A Lot."

Deliberately, the only instruction was to "check any sections you use frequently and any sections you use very little." Nothing indicated whether all sections had to be checked, or whether just a portion of them could be marked. The intent, apparently successful by the varying response tendencies exhibited, was to not structure the responses too heavily, and to elicit an honest assessment. Some respondents checked every

section as receiving a lot or a little use; others checked most but not all sections. Still others checked only a few of the 26 sections at all. The survey results reported were supported by the interview data, and inquiry revealed that very few would have marked a "Not at All" column had one been offered. Many respondents volunteered that they had read the entire book and had even re-read some of the little used sections, although they had actually used only selected parts on a regular basis.

A tally of the numbers of marks in the "A LOT" and "A LITTLE" columns for each of the 26 sections shows some definite patterns. Table 1 shows these results. Twelve of the 26 sections were rated either "A LITTLE" or "A LOT" by 86% or more of the respondents indicating that these were ones which provoked the most responses. Of the 12, three (Plan, Attack and Defend) showed 70% or more responding "A LOT", four (Land Navigation, Medical, Vehicle Recovery and EPW) had more than 70% responding "A LITTLE." The other five (Rules, Move, Patrol, NBC, and Commo) were more nearly evenly split in the frequency rating. It would appear that Plan, Attack and Defend are the most often used sections of the book; this was confirmed by the interviews.

Other sections bearing note are those which show relatively low numbers of respondents (indicating that some people rated them in neither category) with a higher frequency of "A LITTLE." This would presumably cover those individuals who rated most chapters, but put the less used ones in the "LITTLE" column. These least used sections (less than 86% responding and 70% or more "A LITTLE") are Mines/demolitions, Continuous Operations, Air Defense, Conversion Tables, Air Assault Operations, Abbreviations, Grids, etc. Although these findings are very obviously influenced by the particular sample (many mechanized infantry and perhaps no air assault personnel), the patterns are reinforced by the interviews which echoed the general usage tendencies noted above.

The question "Which section do you use the MOST?" was rarely answered. If answered, Chapter 2 (PLAN) (14 comments), Chapter 8 (PATROL) (5) and Chapter 5 (DEFEND) (4) were often cited, but as stated, most respondents simply did not answer the question. The reason for this is unknown, whether they did not notice it because of its location on the page, or whether they did not have a "most used" section. The interviews confirmed that the planning section, particularly the operation order, was most frequently used.

Table 1

Chapter Usage Frequencies and Percentages

Chapter Name	Responses					
	Total	%	Lot	%	Little	%
Basic combat rules	75	89	40	53	35	47
Plan	74	88	54	73	20	27
Move	72	86	32	44	40	66
Attack	74	88	52	70	22	30
Defend	76	90	59	78	17	22
Delay	70	83	23	33	47	67
Withdraw	68	81	25	37	43	63
Patrol/Recon	64	88	38	51	36	49
Combat in cities	68	81	12	18	56	62
Target acquisition	71	84	24	34	47	66
Mines/Demolitions	70	83	21	30	49	70
NBC	77	92	44	56	33	43
Land navigation	74	88	21	28	53	72
Medical	73	87	20	27	53	73
Conops	66	79	10	15	56	85
Air defense	67	80	15	22	52	78
Vehicle recovery	72	86	16	22	56	78
Weapons	70	83	33	47	37	53
Commo	74	88	32	43	42	57
EPW	72	86	13	18	59	82
Supplies/Logistics	70	83	38	54	32	46
Fire support	71	84	40	56	31	44
Conversion tables	69	82	17	24	52	76
Air assault operations	66	79	9	14	57	86
Abbreviations	70	83	17	24	53	76
Grids, Phonetic alphabet, Ruler, Pockets	69	82	19	28	50	72

Note. Responses refers to the number who marked the section in either column; the % indicates the proportion of the entire 84 respondents. The LOT and LITTLE columns are followed by % which indicate the proportion of the respondents who selected each.

Use and usefulness. Another series of five questions covered recent usage of the CLG. They were answered by circling either 1 (A Great Deal), 2 (Some), 3 (Not Much), or 4 (Not at All). Results are shown at Table 2. The response "Some" was most frequent, with very low percentages of responses in the "Not at All" category.

Three final questions in similar format covered the content of the CLG in general. The rating scale went from 1 (Very Complete, Effective or Useful) to 4 (Very Incomplete, Ineffective or Not Useful at All).

Table 2

Usage and Usefulness--Frequencies and Percentages

Question	1	%	2	%	3	%	4	%	N*
In the past six months, how often have you used your CLG?	17	24%	25	35%	18	25%	11	15%	71
To what extent did you use the CLG to prepare for individual and/or collective training?	14	25%	26	46%	10	18%	6	11%	56*
To what extent did you actually use the CLG in training exercises?	9	12%	35	47%	14	19%	7	9%	75
To what extent did you use the CLG in planning?	26	36%	28	39%	11	15%	7	10%	72
To what extent did you use the CLG to check others' performance?	12	17%	23	33%	20	29%	15	21%	70
How complete is the information in the CLG?	15	21%	46	65%	9	13%	1	1%	71
How useful is the CLG to you in performing your job?	28	39%	38	53%	4	6%	2	3%	72
Overall, how effective is the CLG?	25	35%	41	57%	6	8%	0	0%	72

Note. * The second question was not included on one set of surveys; another set of surveys had none of the 8 questions.

The answers to these questions can be compared to similar questions asked on the initial CLG feedback form administered in 1986 and reported in Evensen, et al., 1988. In that case, as here, respondents were generally quite favorable toward the CLG. The CLG on which that feedback was based, the original CLG: Rifle Platoon and Squad (Winn, et al., 1987a), was quite different from the current book (CLG: Platoon Leaders, Platoon Sergeants and Squad Leaders) (Winn, et al., 1987b), the sample size was much larger (437 vs 84), and the population of respondents more diverse, but the impression of a useful and useable book remains valid.

Open ended questions. The final set of questions attempted to get at potential additions, deletions and changes to the CLG as written. Many respondents did not answer this part at all or simply wrote short answers ("too bulky", "good", "none"). The suggested additions were not significant in number, and tended to be requests for specific information that was either job related (motor pool personnel requesting more vehicle recovery information) or something that, although potentially useful, was beyond the scope of the CLG (mechanized infantry preventive maintenance checklists).

Few ideas were offered for specific deletions, with the exception of some of the contents of the fire support section (e.g., calling for naval gunfire, aircraft delivered ordnance) or the target acquisition section (e.g., Warsaw Pact Artillery Vehicles, sound ranges at night). In contrast, however, the interview sessions concentrated on specific changes and interviewees often made chapter by chapter and page by page comments. The survey forms produced only isolated comments about tasks which should be changed (errors or updated information), and most of these simply made suggestions that sections be shortened.

For the question "What do you like best about the CLG?", the compact size and water resistant paper were the most often mentioned physical attributes, and the function as a memory jogger lead usage comments. The checklist format, the overall readability and the handiness of the information were also cited.

In response to "What do you like least?" the primary response was "Too bulky" or "Too big/heavy for my pocket." There were complaints on the numbers of blank pages, or pages only half filled; suggestions ranged from reducing print size to eliminating all blank space. There were several comments on the fastening screws and suggestions for their replacement with cord or rings for easier page turning.

Changes to the CLG

As noted previously, most of the comments from the interview session and from the surveys focused on shortening the book or reducing the bulk, by eliminating pages or sections, or drastically reducing the content of some sections. In only a few instances were new pages requested as additions to the CLG. These pages, containing personnel data record forms for the primary target audience, company level leaders and below, are located among the pages in the new section entitled Miscellaneous.

For comparison purposes, Table 3 below indicates how the old and new guide differ in size and structure. Sections refer to the number of tasks or parts within each chapter. Additionally, blank pages and partial pages from the earlier edition have been eliminated in the new. The totals shown in the columns do not add up to the total number of pages partially because the original CLG had some blank pages. Additionally, the new CLG has, in some cases, two items on the same page. The total number of pages on the prototype was 255 (510 sides); the new CLG has 104 (208 sides). The new book is therefore less than half as thick as the prototype CLG.

Some minor formatting changes to the Table of Contents and to the method of pagination were also made, based on the user feedback. The old Table of Contents was characterized as confusing, and most respondents did not like the old page numbering system. Similarly, there has been some reordering of the chapters and slight cosmetic changes to other sections of the book. Several diagrams were added, the post screws were replaced by ring fasteners, and the number of pockets was reduced from five to two. For ease of identification, the newest CLG is enclosed in tan covers, easily distinguishable from the original brown CLG and the second prototype edition grey CLG. The title Combat Leaders' Guide: Leader Handbook was chosen to show the continuity with the two previous books, but, by designation as a leader handbook, also to indicate the generic nature of the contents.

Table 3

A Comparison of the Old and the New CLG

Chapter Name	Old CLG - 1987			New CLG - 1991		
	Chapter Number	# of Sections	# of Pages	Chapter Number	# of Sections	# of Pages
Introduction	-	1	2	-	1	1
Table of Contents	-	1	2	-	1	10
Basic Rules	1	3	4	1	2	2
Plan	2	10	28	2	10	21
Move	3	8	10	3	6	6
Attack	4	3	6	4	3	5
Defend	5	15	36	5	14	29
Delay	6	2	4	6	1	2
Withdraw	7	6	20	7	6	12
Patrol/Recon	8	14	50	8	14	24
Combat in Cities	9	4	11	19	3	4
Target Acquisition	10	15	25	-	-*	-
Mines/Demo	11	11	28	13	7	10
NBC	12	11	18	8	8	10
Land Navigation	13	17	22	14	7	8
Medical	14	13	21	16	9	11
Continuous Opns	15	5	7	-	-*	-
Air Defense	16	4	6	18	4	3
Vehicle Recovery	17	4	10	17	2	3
Weapons	18	4	5	-	-*	-
Commo	19	5	14	12	5	6
Law of War/POW	20	3	10	20	2	3
Supplies/Logistics	21	6	12	11	3	4
Fire Support	22	32	46	10	6	7
Conversion Tables	23	2	2	-	-*	-
Air Assault Opns	24	17	40	15	11	11
Abbreviations	25	1	12	22	1	6
Miscellaneous	-	-	-	21	6	9
Total	25	217	451	22	131	207

Note. Starred items are included in other sections in the new book.

Validation

After the Combat Leaders' Guide: Leader Handbook was completed, it was distributed to nine individuals for their feedback on and review of the contents. Each of these persons was familiar with the previous CLGs and was aware that the new

CLG was to replace the old. The group included one individual without prior military service; this individual was selected to insure clarity and completeness for the novice reader.

The eight content reviewers were subject matter experts. Two were former Army officers, one now retired, the other currently in the Army Reserve, and the other three officers are presently on active duty. This officer group was comprised of two Captains, a Major, a Lieutenant Colonel, and a Colonel. The noncommissioned officers in the review included three Sergeants First Class, two active duty and one formerly active duty, now National Guard. The range of experience of the military personnel ranged from over 10 years to 30, in Armor and Infantry (Mechanized and Light, to include Ranger) with appropriate command positions. Five of the eight are also combat veterans, representing experience in one or more of the conflicts in Korea, Vietnam, Grenada, Panama and Saudi Arabia.

The readers reviewed independently and commented freely. Their overall comments, changes, and corrections were then incorporated into the final version.

Discussion

The lingering potential problems with the CLG are two. It is impossible to please everyone - there will always be some disagreement as to the appropriate content and the emphasis given to each section within the Guide. As noted earlier, the interest in or allegiance to each section is related to the individual's present job description. This issue has been resolved in favor of focus on a wide range of Infantry skills. Information which has only a limited audience has been deleted; personnel with specialized skills (e.g., Military Police) can use the book for its overall Infantry information, and use other sources for information relating only to Military Police.

Secondly, there is still some concern over the intended audience for the CLG. While there have been users across ranks and functional areas, the appropriate target audience must probably be the company level and lower leaders, especially the platoon leader, the platoon sergeant and squad leader. Personnel at battalion level and higher tend to have other sources for job-related information and staff personnel have ready access to job-specific manuals and publications. Although the CLG has many sections with content useful at all levels and for all branches, much of the material not relevant to the company level has been deleted.

Conclusions

The Combat Leaders' Guide: Leader Handbook represents the first research into and major revision of the prototype CLG since 1986. It resulted in a book more immediately useable through a reduction in size while maintaining the concept and content parallel to that of the previous editions. This was accomplished through rewriting the tasks, and use of more densely filled pages while retaining the large-print, easy to read checklist form. The result is a job performance aid that is both useful and useable.

Finally, it is apparent that the CLG continues to meet a user need. One of the interviewees, in fact, admitted that the reason he came so willingly to the interview session was in hopes of obtaining an additional copy of the CLG. Such a comment was quite typical, and throughout the effort to update and revise the CLG user support has been extremely high.

Although there is no formal requirement for a job aid for the small unit leader, and although other job aids such as the Ranger Handbook (U.S. Army Infantry School, 1985) are available, requests continue for copies of the CLG. These requests, starting immediately after the initial publication of the original prototype CLG, continuing to and throughout Operation Desert Storm, and unabated since then, indicate that the CLG is a much desired product. The Combat Leaders' Guide fills a soldier need.

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Appendix A
SURVEY FOR PERSONNEL WHO HAVE USED THE COMBAT LEADERS' GUIDE
a pocket-sized job aid checklist, with gray or brown cover

RANK _____ DUTY POSITION _____ MOS _____ YEARS IN SERVICE _____

Approximately how long have you had your CLG?

How have you customized it to make it serve your needs better?

How have you used your CLG? (Check all that apply.)

- | | | |
|---|--|--|
| ☐ Basic training aid | ☐ Garrison training | ☐ During STX/FTX |
| ☐ CTT/SQT training | ☐ Supervising others | ☐ After-action review |
| ☐ Desk reference | ☐ Planning for opns | ☐ Teaching guide |
| ☐ Memory jogger | ☐ Prep for STX/FTX | ☐ Study Guide |
| ☐ During NTC rotation | ☐ Desert Storm/Shield | ☐ Other (please describe) |
| ☐ Preparing training materials | | |

Are there any situations where you didn't have it but wished you did? Where and when?

Check any sections you use frequently and any sections you use very little. The words in parentheses are to help you remember the content of each section.

A LOT A LITTLE

- | | | |
|--------------------------|--------------------------|--|
| ☐ | ☐ | 1. BASIC COMBAT RULES (leading, tactics) |
| ☐ | ☐ | 2. PLAN (TLPs, OPORD, METT-T) |
| ☐ | ☐ | 3. MOVE (actions during march, at halt) |
| ☐ | ☐ | 4. ATTACK (preparation for attack, consolidation, reorganization) |
| ☐ | ☐ | 5. DEFEND (priority, OPs, fighting positions, range cards, limited visibility) |
| ☐ | ☐ | 6. DELAY (screen) |
| ☐ | ☐ | 7. WITHDRAW (plan, enemy pressure, relief in place) |
| ☐ | ☐ | 8. PATROL/RECON (patrol base, reports, raid, ambush) |
| ☐ | ☐ | 9. COMBAT IN CITIES (attack, defend) |
| ☐ | ☐ | 10. TARGET ACQUISITION (SPOTREP, signatures, vehicle ID, WORM) |
| ☐ | ☐ | 11. MINES/DEMOLITIONS (install, remove) |
| ☐ | ☐ | 12. NBC (report, marking, dosimeter, unmasking) |
| ☐ | ☐ | 13. LAND NAV (intersection, resection, azimuth, GM angle) |
| ☐ | ☐ | 14. MEDICAL (evaluation, heat, cold, MEDEVAC) |
| ☐ | ☐ | 15. CONOPS (stress, sleep) |
| ☐ | ☐ | 16. AIR DEFENSE (engaging, control, passive) |
| ☐ | ☐ | 17. VEHICLE RECOVERY (procedures, equipment, capabilities) |
| ☐ | ☐ | 18. WEAPONS (M60, SAW) |
| ☐ | ☐ | 19. COMMO (radio, wire) |
| ☐ | ☐ | 20. EPW (principles, handling) |
| ☐ | ☐ | 21. SUPPLIES/LOGISTICS (pre-combat checks, graphics, collection points) |
| ☐ | ☐ | 22. FIRE SUPPORT (principles, artillery/mortar, call for fire) |
| ☐ | ☐ | 23. CONVERSION TABLES (metric) |
| ☐ | ☐ | 24. AIR ASSAULT OPERATIONS (briefing, PZ, LZ, chalks) |
| ☐ | ☐ | 25. ABBREVIATIONS |
| ☐ | ☐ | 26. GRIDS, PHONETIC ALPHABET, RULER, POCKETS |

Which section do you use the **MOST** ?

Circle the number that best describes your answer.

IN THE LAST SIX MONTHS, HOW OFTEN HAVE YOU USED YOUR CLG?	1 A Great Deal	2 Some	3 Not much	4 Not at all
TO WHAT EXTENT DID YOU USE THE CLG TO PREPARE FOR INDIVIDUAL AND/OR COLLECTIVE TRAINING?	1 A Great Deal	2 Some	3 Not much	4 Not at all
TO WHAT EXTENT DID YOU ACTUALLY USE THE CLG IN TRAINING EXERCISES (FTX, ARTEP, etc.)?	1 A Great Deal	2 Some	3 Not much	4 Not at all
TO WHAT EXTENT DID YOU USE THE CLG IN PLANNING?	1 A Great Deal	2 Some	3 Not much	4 Not at all
TO WHAT EXTENT DID YOU USE THE CLG TO CHECK OTHERS' PERFORMANCE?	1 A Great Deal	2 Some	3 Not much	4 Not at all
HOW COMPLETE IS THE INFORMATION IN THE CLG?	1 Very Complete	2 Complete	3 Incomplete	4 Very Incomplete
HOW USEFUL IS THE CLG TO YOU IN PERFORMING YOUR JOB?	1 Very Useful	2 Useful	3 Not Useful	4 Not Useful at all
OVERALL, HOW EFFECTIVE IS THE CLG?	1 Very Effective	2 Effective	3 Ineffective	4 Very Ineffective

Based on your experience, what tasks or sections should be added?

Which tasks or sections should be deleted?

Which tasks should be changed? How?

What do you like best about the CLG?

What do you like least?

Appendix B

Demographic Information--Survey Respondents (N = 84)

Numbers of respondents by rank

<u>Rank</u>	<u>Active</u>	<u>Guard</u>
Private/PFC	2	0
Specialist	7	0
Sergeant	13	0
Staff Sergeant	6	3
Sergeant First Class	8	4
Master Sergeant	1	0
Sergeant Major	1	0
Lieutenant	14	16
Captain	5	3
Lieutenant Colonel	1	0

Number of years in service (Active N = 58) (Guard N = 26)

<u>Years</u>	<u>Active</u>	<u>Guard</u>	<u>Years</u>	<u>Active</u>	<u>Guard</u>
1 year	2	0	12 years	0	0
2 years	4	3	13 years	2	0
3 years	6	4	14 years	2	1
4 years	7	3	15 years	4	0
5 years	8	0	16 years	0	2
6 years	3	2	17 years	1	2
7 years	6	2	18 years	1	1
8 years	1	3	19 years	2	0
9 years	2	0	22 years	1	0
10 years	3	2	27 years	0	1
11 years	2	0	29 years	1	0

Active Mean number of years in service = 8.14; Median = 6

Guard Mean number of years in service = 8.65; Median = 7

Duty Position [Some respondents gave no answer; some marked more than one]

<u>Position</u>	<u>Frequency</u>	<u>Position</u>	<u>Frequency</u>
Platoon Leader	23	Company Commander	6
XO	4	Staff (BN or higher)	4
Asst/Platoon Sergeant	14	Master Gunner	2
Tank/Bradley Commander	3	Driver	2
Asst/Squad/Team Leader	14	Squad member/Crew	3
Misc	3		

Grid Lines	Add or remove this map feature.
Hdg (Heading)	Select map location for three-digit value (0-360 degrees).
Heat (rounds)	Green, Amber, Red, Black (status).
Move Vehicle	Any location on map data base (six-digit resolution).
None (driver)	Activate no waypoint (for STI).
Nuc Cloud Ht (deg)	n/a, 1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 (degrees).
Nuc Cloud Wid (deg)	n/a, 1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 (degrees).
Nuc Crtr Diam (m)	n/a, 50, 100, 150, 200, 250, 300, 350, 400, 450 (meters).
Number (enemy)	1, 2, 3, 4, 5, 7, 10, 20, 30, 40, 50, 60, 100 (elements).
Number (Shell report)	1, 2, 3, 4, 5, 7, 10, 15, 20, 30, 40, 50, 60, 75, 100 (shells).
Number Shells (NBC)	n/a, 1, 2, 3, 4, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50 (shells).
Obs (observed enemy)	1, 2, 3, 4, 5, 7, 10, 20, 30, 40, 50, 60, 75, 100 (elements).
Obs Loc (observer)	Six-digit coordinate and map prefix.
Own Act	Gnd Atk, Air Atk, Fire, Defend, Delay, Recon.
Rivers	Add or remove this map feature.
Roads	Add or remove this map feature.
Sabot (rounds)	Green, Amber, Red, Black (status).
Select By Age	5, 10, 15, 30, 60 minutes, Reset (for deletion of posted icons).
Select By Pointing	Select posted icons on tactical map for deletion.
Shift: Add/Drop (m)	0, A50, A100, A150, A200, D50, D100, D150, D200 (for adjusting indirect fire).

Shift: Left/Right (m)	0, L50, L100, L150, L200, R50, R100, R150, R200 (for adjusting indirect fire).
Smoke	Green, Amber, Red, Black (status).
Stored Route Headers	Select a route for review.
Target (location)	Six-digit coordinate and map prefix.
Vegetation	Add or remove this map feature (not available at 1:125,000 and 1:250,000).
Waypoint (Commander)	Six-digit coordinate with map prefix.
Waypoint (Driver)	Select individual waypoint (for Steer-To-Indicator).
What (enemy)	Tank, Helo, FW Air, Arty, Truck, Troops, ATGM, PC.
What (friendly)	Arty, C2, Mech, Mortars, Scout, Supp, Tank.
What (obstacle)	Abati, Blown Bridge, Minefield, Tank Ditch.
Where (obstacle)	Pair of six-digit coordinates with map prefixes.
Where (FLOT)	Pair of six-digit coordinates with map prefixes.
.50 CAL (rounds)	Green, Amber, Red, Black (status).
7.62 mm (rounds)	Green, Amber, Red, Black (status).

APPENDIX C
Glossary of Acronyms and Abbreviations

Appendix C

Survey Results

1. Approximately how long have you had your CLG?
 [Not all surveys contained this question and not all respondents answered the question.]

<u>Time</u>	<u>Frequency</u>
1 - 5 months	4
6 months	9
7 - 9 months	4
1 year	9
14 months	1
1 1/2 years	4
2 years	7
2 1/2 years	1
3 years	3
3 1/2 years	1
5 years	2

2. How have you used your CLG? (Check all that apply.)
 [Shown in rank order by percent. Differences in surveys account for differing numbers possible.]

	<u>Times Selected</u>	<u>Percent</u>	<u>Number Possible</u>
Memory jogger	58	69	84
Prep for STX/FTX	43	51	84
Planning for opns	42	50	84
Teaching guide	42	50	84
During NTC rotation/NTC	36	43	84
Preparing training materials	34	40	84
During STX/FTX	32	38	84
Desk reference	32	38	84
CTT/SQT training	27	32	84
Basic training aid	23	27	84
Garrison training	23	27	84
After action review	21	25	84
Supervising others	16	19	84
Other	ARTEP 2	2	84
	EIB 1	1	84
Study guide	27	47	58
As OC checklist	2	4	49
Initial train up mobil.stat.	16	62	26
Home station training	13	50	26
Summer camp	1	4	26
Desert Storm/Shield	7	77	9

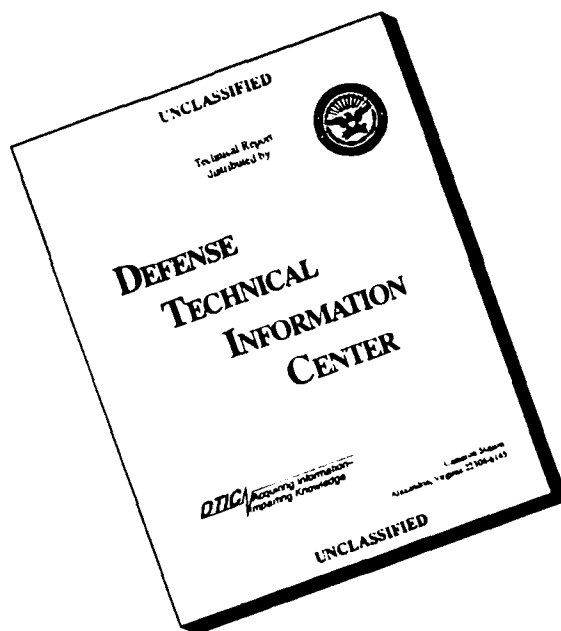
APPENDIX C

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Act	Activity
ADJUST	Adjust (indirect fires)
Agg	Aggregate Function
Air Atk	Air Attack
AMMO, A	Ammunition
ARI	Army Research Institute
Arty	Artillery
ATCCS	Army Tactical Command and Control Systems
ATGM	Anti-Tank Guided Missile
Atk Loc	Attack Location
Auto Adv	Automatic Advance (waypoint updates)
C ² , C2	Command and Control
CAL	Caliber
CCD	Command and Control Display
CCTB	Close Combat Test Bed
Cdr Intent	Commander's Intent
CFF	Call For Fire
CITV	Commander's Independent Thermal Viewer
CLR FLD	Clear Field
COM	Center Of Mass
Crit. Short	Critical Shortage(s)
CRT	Cathode Ray Tube
CVCC	Combat Vehicle Command and Control
DCD	Directorate of Combat Developments
Dest	Destroyed
EOM	End Of Mission (indirect fires)
Equip, E	Equipment
F	Fuel
FFE	Fire For Effect (indirect fires)
FLOT	Forward Line of Own Troops
FRAGO	Fragmentary Order
FW Air	Fixed Wing Aircraft
GARB	Green, Amber, Red, Black (status)
Gnd Atk	Ground Attack
Hdg	Heading
Helo	Helicopter
Intel	Intelligence
IVIS	Intervehicular Information System
Log	Logistics
LRF	Laser Range Finder
Mech	Mechanized
mm	millimeter
MOA	Memorandum Of Agreement
MOPP	Mission Oriented Protective Posture
n/a	not available
NATO	North Atlantic Treaty Organization
NAV	Navigation
NBC	Nuclear, Biological, Chemical
Nuc Cloud Ht	Nuclear Cloud Height

Nuc Cloud Wid	Nuclear Cloud Width
Nuc Crtr Diam	Nuclear Crater Diameter
Obs	Observed
Obs Loc	Observer's Location
OPORD	Operations Order
O/T	Observer/Target (line, indirect fires)
PC	Personnel Carrier
Pers, P	Personnel
POSNAV	Position Navigation
PREP	Prepare (report)
Recon	Reconnaissance
RIU	Radio Interface Unit
SIMNET	SIMulated NETworking
SINCGARS	Single Channel Ground and Airborne Radio System
SITREP	Situation Report
STI	Steer-To-Indicator
Supp	Supply
TACOM	Tank Automotive Command
TOC	Tactical Operations Center
USAARMC	United States Army Armor Center
UTM	Universal Transverse Mercator (grid system)
WP, W#	Waypoint (navigation, number)

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