Technical Report 69-13

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A Survey of Soldier Opinions About the Bayonet in the U.S. Army

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James W Dees and George J Magner

HumRRO Division No 4 (Infantry)

June 1969

Prepared for

Office, Chief of Research and Development Department of the Army

Contract DAHC 19 69 C 0018

HumRRO

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HumRRO Division No. 4 (Infantry)
Fort Benning, Georgia
The George Washington University
HUMAN RESOURCES RESEARCH OFFICE

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FOREWORD

This report presents the results of an opinion survey conducted by the Human Resources Research Office at the request of the Ad Hoc Committee formed for the establishment of a U.S. Army Infantry School (USAIS) position on the bayonet, under the authority of the Commandant, USAIS. The Chairman of the Ad Hoc Committee is LTC Joseph E. Watson.

This Technical Advisory Service study was conducted at HumRRO Division No. 4 (Infantry), Fort Benning, Georgia, where Dr. T. O. Jacobs is the Director of Research. LTC Chester I. Christie, Jr., is the Chief of the U.S. Army Infantry Human Research Unit supporting the Division. The survey was begun in August 1968 and a preliminary report on the survey results was made in November 1968.

MAJ William T. MacElrath from the office of the Director of Instruction, The Infantry School, directed the computer coding of the questionnaires. SP 4 Walter P. Greenspan supervised the work details. Mr. Charles E. Brookshire and 1LT Eugene S. Stokes of the Office of Data Systems provided the computer programing and analysis of the questionnaires. 1LT Marvin J. Pesek, 2LT John E. Arrington, SP 4 Kevin J. O'Reilly, and SP 4 David E. Myers organized the large number of computer readout tables.

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Meredith P. Crawford
Director
Human Resources Research Office

SUMMARY AND CONCLUSIONS

Problem

When in 1647 the bayonet was first placed on the single-shot musket, it was at least as important a part of the weapon as the powder and ball. Today, however, the infantryman is armed with an automatic or semiautomatic weapon, thus reducing the importance of the bayonet. The use and value of the bayonet is presently undergoing review as part of the continuing Army process of reviewing weapons and weapon systems in the light of changing combat technology. This report represents the collective experience and judgment of a sample of officers and enlisted men who were administered a questionnaire as a part of this review.

Method

A questionnaire was developed to obtain information in the following six general areas: personal data, combat experience, personal opinion concerning the combat value of the bayonet, recommendations for design changes for the bayonet, value of bayonet training, and value of the bayonet in civil disturbance and disaster relief operations.

Most of the questions were designed to be answered for each of five theaters of operations in which a subject had had experience—Europe World War II, Pacific World War II, Korea, Vietnam, and the Dominican Republic. This questionnaire was administered to 878 officers and 1192 enlisted men with combat experience. The questionnaires of 508 officers and 607 enlisted men were sufficiently complete to allow their analysis.

Results

The results of the analysis of the questionnaire responses may be summarized as follows:

- (1) Bayonet combat was infrequent in both theaters of World War II, Korea, and the Dominican Republic, and it is infrequent now in Vietnam.
- (2) The bayonet/knife is regarded as being a satisfactory bayonet but an unsatisfactory knife.
- (3) More and better bayonet training would be an improvement, but present training is adequate for the need in combat, and the respondents considered at least one other skill (marksmanship) to be much more worthy of additional training time.
- (4) Bayonet training contributes to physical conditioning, and to the instilling of motivation and discipline, but it is generally felt that other combative training (unspecified) could achieve the same or greater results in a comparable period of time.
- (5) The "survival knife" with a contoured bayonet handle, with or without a knuckle guard, is the preferred bayonet/knife style of the alternatives offered.
- (6) The bayonet is highly valued as weapon equipment for control of civil disturbances.

Conclusions

The present bayonet/knife is generally considered to be an inferior knife and frequently is not carried for this reason. However, most combat infantrymen will carry some form of cutting instrument, whether or not it includes a bayonet mount. The overwhelming recommendation of the officers and enlisted men surveyed was to retain the bayonet in an improved utility-knife configuration. Presumably, a high quality, multipurpose knife/bayonet would be more acceptable than the present bayonet/knife.

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A Survey of Soldier Opinions About the Bayonet in the U.S. Army

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PROBLEM

The bayonet has been an infantry weapon since its invention and use in France in 1647 when it served an obviously important function for the musket-carrying infantryman. With a 300-year history, the bayonet is today one of the oldest of the infantryman's weapons. However, the technology of warfare has changed dramatically during those centuries, while there has been little change in the bayonet. When it was first placed on the single-shot musket, it was at least as important a part of the weapon as the powder and ball; after the first volleys were exchanged, it was possible to close with the enemy before he had time to reload. Today the infantryman is armed with an automatic or semiautomatic weapon; in addition, other weapons have lessened the probability of closing with an enemy in hand-to-hand combat. Thus the role of the bayonet in infantry combat has obviously changed considerably as modes of combat have changed.

The review of all weapons and weapon systems with reference to changing technology is a continuing process in the U.S. Army. The bayonet is presently undergoing such a review. Collective experience and judgment of officers and men of the Army is one of the more important sources of information to be taken into consideration in such a review. This report presents the results of a survey undertaken to provide a measure of collective experience and judgment of Army personnel with combat experience, regarding various aspects of the usefulness of the bayonet under present-day circumstances.

METHOD

SUBJECTS AND PROCEDURE

The source of the subjects used in this study are listed in Table 1. The questionnaire was not only administered to subjects at Fort Benning, Georgia,

Table 1
Sources of Subjects

Military Installations	Number Answering Questionnaires		
	Officers	Enlisted Men	
U.S. Army Infantry School Faculty			
Fort Benning	325	400	
U.S. Army Infantry School Advanced Course			
Fort Benning	300	0	
197th Infantry Brigade			
Fort Benning	16	185	
U.S. Army Training Center			
Fort Benning	58	197	
U.S. Army Training Center			
Fort Gordon	61	190	
82d Airborne			
Fort Bragg	78	220	
Total Received With Appropriate Experience	838	1192	
Total Usable Questionnaires	508	607	

Table 2
Number of Subjects
According to Present Rank

Offic	ers	Enlisted Men			
Rank	Number	Rank	Number		
21.T	5	E-2	3		
1LT	72	E-3	10		
CPT	303	E-4	78		
MAJ	75	E-5	205		
LTC	39	E-6	188		
COI.	10	E-7	76		
		E-8	40		
		E-9	7		
Total	504	Total	607		

but also was mailed to the indicated units at Fort Bragg, North Carolina, and Fort Gordon, Georgia. The survey was conducted during August-November 1968.

Completed questionnaires were analyzed only for respondents who had had combat experience with an American unit. Also, some questionnaires were eliminated because a large proportion of the questions were not answered according to instructions. The total number of questionnaires analyzed was 1115. The distribution of subjects according to rank is provided in Table 2; the distribution of combat experience according to theater of operation is shown in Table 3; the distribution of duty positions for officers and enlisted men is given in Table 4, and participation in civil disturbance and disaster relief operations is enumerated in Table 5.

Table 3

Combat Experience
(Officers and Enlisted Men)

	Theater of Operations					
Respondents	Europe WW 11	Pacific WW II	Korea	Vietnam	Dominican Republic	Total
Officers	16	8	16	460	15	545
Enlisted Men	7	7	84	565	11	707
Total	23	15	130	1025	59	1252

Table 4

Duty Position at Time of Combat Experience
(Officers and Enlisted Men)

	Theater of Operations					
Duty Position	Europe WW II	Pacific WW II	Korea	Vietnam	Dominican Republic	Fotal
Squad Member	0	1	14	103	10	128
Fire Team Leader	0	ì	3	8‡	3	91
Squad Leader	3	3	43	176	13	238
Platoon Sergeant	7	2	31	117	12	169
Platoon Leader	10	4	15	142	4	175
Company Commander	2	2	7	141	5	157
Battalion Staff	0	0	3	74	2	79
Battalion Commander	0	0	1	12	0	13
Brigade Staff	1	1	2	29	0	33
Brigade Commander	0	0	0	0	0	0
Other	0	1	11	147	10	169

The preponderance of subjects reported Vietnam experience. Where an individual had experience in more than one theater of operations, he was listed as a subject in each theater where he had served. Thus, although there were only 508 officers in the study, 545 are shown in Table 3.

Table 5 Participation in Civil Disturbance or Disaster Relief Operations (Officers and Enlisted Men)

	Officers	Kalisted Men	Total
Participation	76	135	211
No Participation	128	47.1	899

CONSTRUCTION OF QUESTIONNAIRE

The questionnaire was designed to obtain answers to many questions for five separate theaters of operations—Europe World War II, Pacific World War II, Korea, Vietnam, and the Dominican Republic. An individual subject answered for each of the theaters in which he had had experience. Thus, for analytical purposes, the questionnaire consisted of five separate sub-questionnaires, one for each theater of operations listed above.

The questions were drawn from six general areas:

- (1) Personal data.
- (2) Combat experience.
- (3) Personal opinion concerning the combat value of the bayonet.
- (4) Recommendations for design changes for the bayonet.
- (5) Value of bayonet training.
- (6) Value of the bayonet in civil disturbance and disaster relief operations.

For design validation, the questionnaire was administered to 17 NCOs stationed at the U.S. Army Infantry School (USAIS). Difficulties found in the questionnaire in this "pilot run" were corrected. Further changes were accomplished in coordination with the USAIS Ad Hoc Committee for the establishment of an Infantry School position on the bayonet for whom the survey was being conducted.

A copy of the 37-item questionnaire appears in the Appendix to this report. The combined frequencies of the officer and enlisted responses are entered in the questionnaire. For ranking questions, the frequency of the rank of 1 is given. For numerical response questions, such as age, the average (mean) is given.

ANALYSIS

All of the sign ficance or probability values furnished in this report were obtained using the Chi Square statistic.

In answering questionnaires, individuals often ignore one or two questions or answer incompletely. Rather than invalidate the entire questionnaire in such cases, the following rules were applied in the analysis: (a) all meaningful responses were recorded, and (b) in the compilation of the interaction of two questions, if an individual did not respond on one of the questions his response on the paired question was not tabulated. These circumstances produced a random variation in the number of subjects tabulated for given questions and combinations of questions, but should not have affected the functional significance of the data.

In addition, there were 37 instances among the officers and 100 among the enlisted men where an individual had experience in more than one theater of operations. For mathematical reasons, this makes statistical comparisons involving theaters of operations not completely valid. However, since the amount of overlap of subjects for theaters is small (about 12%), the effects on Chi Square analysis are very moderate and, for practical purposes, can be dismissed.

RESULTS

COMBAT EXPERIENCE REGARDING THE BAYONET

Was It Carried?

Since, in order for a weapon to be used, it must be carried into combat, data were compiled (Tables 6 and 7) for officers and enlisted men, respectively, on the frequency with which individuals reported that their units carried the bayonet into combat. When Tables 6 and 7 are compared, it is evident that more

Table 6

Number of Officers Who Reported the Bayonet Being
Carried in Combat by the Men in Their Unit

	Theater of Operations						
Percentage	Ewopr 44 II	Pacific WW II	Auten	Virtum	Derratise and Republic	ित्रज्ञ	
10% or less				.	• •		
of the men	3	1	i	160	1	lists	
25%	2	0	1	52	0	55	
50ኖ	1	0	1	51	3	70	
75%	3	1	}	59	0	66	
90% or more							
of the men	7	~,	36	135	13	196	

Pesting Vietnam against other theaters combined

Chi Square 59.44, H 4, p=001

officers believed that the bayonet was carried into combat by the men in their units than did enlisted men (p<.001). This difference between responses by officers and enlisted men is due primarily to a difference in Vietnam experience. As is evident from Tables 6 and 7, the bayonet has been carried proportionally less often in Vietnam than in the other four reported conflicts combined (p<.001 for both officers and enlisted men).

The percentage of combat actions in which the bayonet was actually fixed to the weapon is reported in Table 8. Considering the two extremes—that is, those who said that the bayonet was fixed on the weapon less than 50% of the time versus those who said that the bayonet was fixed on the weapon more than 50% of the time—the proportions stating it was fixed less than 50% of the time are:

3 to 1-Pacific World War II

10 to 1-Korea

20 to 1-Europe World War II

20 to 1-Dominican Republic

60 to 1-Vietnam

Table 7

Number of Enlisted Men Who Reported the Bayonet
Being Carried in Combat by the Men in Their Unit

	Thester of Operations						
Percentage	kuropi NN 11	Partin WW II	Korra	Victnam	lominic an Republic	Total	
10% or less		.					
of the men	2	0	\$	302	6	311	
25%	1	0	5	55	3	64	
50°c	1	1	2	11	1	19	
754	1	2	11	36	1	51	
90% or more							
of the men	2	3	58	130	30	223	

Testing. Vietnam against other theaters combined

Chi Square 124 43. dr. 4. p. 001

Testing Interaction of totals of Tables 6 and 7

Chi Square 29-61, # 4, p. 901.

Table 8

Percentage of Combat Situations in Which the
Bayonet Was Fixed on the Weapon
(Officers and Enlisted Men.)

	Theater of Operations					
Percentage	Furspe NW II	Parific unii	Korea	Vietnam	Dominic an Republic	Total
10% or less	18	9	76	950	\$7	1100
25%	2	1	21	36	11	74
50°c	2	2	13	16	2	35
73%	ì	1	8	7	1	18
90% or more	0	2	3	Q	2	16

Testing Vietnam against all others combined

Chi Square 128.7, dt 4, p 001

It is quite evident that the bayonet is being fixed on the weapon much less often in Vietnam than was the case in the other conflicts listed (p < .001).

Was It Used?

The men were also asked "What percentage of the individuals in your units actually engaged an enemy soldier with the bayonet?" Of the 1236 responses, 103%, or 84%, were "none" or "almost none." Fewer than 1% of the responses indicated that more than 50% of the men in their units had engaged an enemy soldier with the bayonet.

The above facts indicate that the bayonet frequently was not carried in combat, when it was carried, it was seldom fixed; when it was fixed, it was seldom used. Thus, the bayonet probably does not account for a significant number of enemy casualties.

Further corroboration of this view is provided in Table 9. The men were asked to rank four combat situations in which the bayonet was used. "Special operations" was the most frequently given choice, this being due entirely to the

Table 9

Frequency of Use of the Bayonet in Various Types of Combat Situations (Officers and Enlisted Men)

Combat Situation	First Choice in All Theaters	No Use of Bayonet Noted
Offense	160	686
Defense, Prepared Positions	81	709
Hasty Defense	70	714
Special Operations (patrols, raids, ambushes, tunnel		
clearing)	339	596

influence of the data from the Vietnam conflict experience. It is important to note that most subjects indicated insufficient experience to allow ranking two or more of the alternatives, thus indicating that most of them had very little knowledge of the use of the bayonet.

Effect on Morale

Another factor to be considered is the value of the bayonet for morale purposes, so

the personal attitudes of the men concerning the bayonet are important. The men were asked if they would feel confident of their ability in a situation which required that they use the bayonet against an enemy soldier. Seven-hundred-eighty-five, or 70% of the responses were affirmative. Thus, most of the men felt that they could handle the bayonet as well as was necessary. However, when asked whether the possession of the bayonet gave them or the men in their unit added confidence and aggressiveness, less than 50% of the men answered "yes."

The subjects were also asked to rate the importance of carrying the bayonet in combat (Table 10). Feelings concerning the bayonet covered the full range from "no value" to "an indispensable weapon."

Table 10

Rating of the Importance of Carrying the Bayonet in Combat
(Officers and Enlisted Men)

	Theater of Operations					
Rating	Europe WW II	Pacific WW II	Korea	Vietnam	Dominican Republic	Total
An indispensable weapon	3	3	22	106	8	112
A very useful weapon	7	7	34	204	19	271
A useful weapon	9	3	48	355	19	131
Little value	4	2	24	320	13	363
No value	0	0	1	36	0	37

Placing these rankings in the perspective of the previous data, the attitude of the majority of the respondents concerning the bayonet would be: (a) They are confident in their ability to use the bayonet when necessary, and (b) the possession of the bayonet did not give either them or the men in their unit additional confidence or aggressiveness. Since most men felt confident of their ability to use the bayonet but did not gain any confidence from carrying the weapon, it would appear that most men feel that there are too few occasions to use the bayonet for it to be an important weapon. However, in view of the wide range

of the response when the bayonet was rated, as shown in Table 10, it is probable that the minority opinion would be strongly contradictory.

USE OF THE BAYONET AS A KNIFE OR TOOL

Another question to which the questionnaire was directed concerns the effectiveness of the bayonet as a knife or tool. The rankings of noncombat usage of the bayonet for both officers and enlisted men are shown in Table 11. Until Vietnam, the primary noncombat functions of the bayonet among those listed have always been opening containers and probing. In Vietnam, cutting brush has become the predominant noncombat function.

Table 11

Frequency With Which Noncombat Functions Were Selected as the Most Important Noncombat Function for the Bayonet/Knife (Officers and Enlisted Men)

	Theater of Operations										
Noncombat Functions	Europe WW II	Pacific WW II	Korea	Vietnam	Dominiera Repub.	Total					
Cutting brush	1	5	17	371	12	106					
Cutting oven containers	6	7	39	194	21	270					
Prying open containers	8	3	35	162	21	229					
Probing	6	1	\$1	239	2	289					
Digging	2	1	11	39	\$	57					

The preference of the officers and the enlisted men for the bayonet as opposed to a sheath knife or some other choice for hand-to-hand combat is shown in Table 12. More than half of the men chose the sheath knife. Thus, the majority

Table 12

Preference for Bayonet Used as a Knife or a
Sheath Knife for Hand-to-Hand Combat
(Officers and Enlisted Men)

	Theater of Operations											
Chorce	Europe WW II	Pacific WW II	Korea	Vietnam	Dominican Republic	Total						
Sheath knife	14	10	72	613	31	743						
Bavonet	6	4	12	252	18	322						
Cther	3	1	15	140	5	164						

of the officers and enlisted men questioned do not believe that the bayonet is a satisfactory combat knife. The respondents were also asked to state the percentage of the combat actions in which a sheath knife, or a bayonet used as a knife, was used in hand-to-hand combat by the men in their units (Table 13). It is obvious from these data that knife fighting is comparatively rare.

Table 13

Percentage of Actions Involving Use of a Sheath Knife or a
Bayonet Used as a Knife in Hand-to-Hand Combat
(Officers and Enlisted Men)

	Theater of Operations											
Percentage	Europe WW II	Pacific WW II	Korea	Vietnam	Dominican Republic	Total						
None or almost none	17	8	83	769	57	934						
Less than 5%	3	6	28	165	5	207						
10%	l	0	12	45	0	58						
25%	1	1	2	16	0	20						
50% or more	0	l	1	25	0	27						

The number of men who carry a sheath knife instead of a bayonet is probably a good measure of the success of the bayonet as a knife (Table 14). Although the abandonment of the bayonet in favor of the sheath knife was not common in any of our previous wars, it is common in Vietnam (p < .001). Also, a large number of men carried a sheath knife in addition to the bayonet. (These data are recorded in Question 18 of the Appendix.)

Table 14

Number Reporting That the Men in Their Unit Carried

Sheath Knives Instead of the Bayonet

(Officers and Enlisted Men)

n	Theater of Operations											
Percentage of Unit	Europe WW 11	Pacific WW II	Korea	Vietnam	Dominican Republic	Tota						
Almost no one	12	5	76	212	30	335						
10%	4	3	29	193	8	237						
25°c	1	4	7	174	7	193						
50%	2	0	9	181	2	194						
75% or more	3	0	2	239	7	251						

Testing: Vietnam versus all others combined. Chi Square = 137.39, df = 4, $p \le .001$.

EQUIPMENT FOR CONTROL OF CIVIL DISTURBANCES

Slightly over 80% of the individuals in this study rated the bayonet as indispensable or very useful weapon equipment in civil disturbance (riot control) and disaster relief operations. When asked to rank the importance of several reasons for including the bayonet in equipment for control, almost 80% of the men indicated the bayonet has a psychological effect upon rioters and looters, and another 13% said it enables control without gunfire.

DESIRED CHANGES IN BAYONET

The subjects were asked to indicate the nature of their desired changes in the bayonet, if any (Table 15). The obviously most popular choice was "retain

Table 15
Recommended Action
(Officers and Enlisted Men)

	Resp	ondents	Total		
Recommended Action	Officers	Enlisted Men			
1 Retain the bayonet as it is	17	29	16		
2. Retain and modify the bayonet to provide a sharpened cutting edge	61	96	160		
3. Retain and modify bayonet to make a better multi-purpose knife	349	327	676		
1. Eliminate bayonet and furnish a					
sheath knife	68	124	192		
5. Eliminate the bayonet	7	26	33		
Fotal	505	602	1107		

Lesting. Difference of frequencies of choice from equal distribution, officers and enlisted men combined.

Chi Square 1,253 07, at 4, p 001

and modify payonet to make a better multi-purpose knife" (p<.001). In Table 16 the first choice blade style preferences of officers and enlisted men for the bayonet/knife and the sheath knife are listed. The most obvious first choice for both bayonet/knife and sheath knife is the "survival knife." The second choice for the bayonet/knife is "the bayonet as it is, but sharpened."

Table 16

Blade Style Preferences for Bayonet/Knife and Sheath Knife
(Officers and Enlisted Men)

DI .	1.6.1	w	ipon					
Dia	Blade Styles							
The bayonet as it is		; 0	25					
The bayonet as it is, but sharpened		338	192					
Double-edged (commando)		167	177					
Single-edged (stilleto)		3.3	26					
Survival knife		101	510					
Bowie knife		> 109	183					
Lotal		1097	1113					

The handle styles preferred for a sheath knife are shown in Table 17. Since the handle style is irrelevant when a bayonet is fixed to the rifle, no distinction was made between a bayonet handle and a sheath knife handle. The handle style preferred by the officers was the contoured bayonet handle, the enlisted men preferred the contoured handle with a knuckle guard.

Table 17
Handle Style Preferences for Sheath Knife
(Officers and Enlisted Men)

Handle Studies		Quest	Total	
Handle Styles	Officers	Enlisted Men	1 otal	
Standard bayonet		23	37	60
Contoured bayonet		154	133	287
Standard with knuckle guard		23	47	70
Contour with knuckle guard		135	177	312
Commando knife handle		133	160	293
Commando knife handle with guard		39	59	98

TRAINING IMPLICATIONS

When asked whether they felt confident in their ability to face an enemy soldier in bayonet combat, 785 of the 1115 responses (70%) were affirmative. Thus, the majority of the men feel themselves to be at least as competent in the use of the bayonet as an enemy soldier they are likely to face.

Table 18

Frequency of Ranks for Combat Skills
 According to Need for
 Additional Training Time
 (Officers and Enlisted Men)

(; l . C) B		Rank											
Combat Skills	1	2	3	4	5	Rank							
Bayonet Training	1 17	352	178	175	271	2							
Knife fighting	98	229	384	244	131	3							
Judo	96	218	234	356	180	4							
Karate	99	189	181	214	402	5							
Marksmanship	703	89	107	93	104	1							

However, this does not mean that they believe that additional bayonet training is not needed. The frequency with which the value of additional training time in five combat skills was ranked one through five for officers and enlisted men combined is shown in Table 18. Bayonet training topped the list among the hand-to-hand combat skills. However, marksmanship, which had been placed in the ranking in order to compare the value of hand-to-hand combat skills with some other combat skill, was the overwhelming first choice for additional training. Thus although bayonet training is considered to be one of the more important

hand-to-hand skills, most individuals believe that training time and resources can be better spent on at least one combat skill other than hand-to-hand combat.

Since bayonet training is often mentioned as having value as a physical conditioner, the subjects were asked to rate the bayonet training from this viewpoint (Table 19). The great majority reported that the physical conditioning aspects of bayonet training were at least "worthwhile." However, when asked "Do you feel that other combative training could be substituted for bayonet training and achieve the same or

Table 19
Rating of the Value of Bayonet Training for Physical Conditioning (Officers and Enlisted Men)

D	Resp	m	
Rating	Officers	Enlisted Men	Total
Extremely valuable	125	135	260
Valuable	170	160	330
Worthwhile	134	151	285
Of little value	69	123	192
Of no value	9	38	47

higher level of physical conditioning in a comparable time period?", 60% of the men replied in the affirmative.

The value of bayonet training as a method of instilling motivation and discipline was studied in a similar manner. Again, the contribution of bayonet training to motivation and discipline was considered to be at least "worthwhile" by a majority. However, 56% of the officers and men believed that other combative training could achieve the same or a higher degree of motivation and discipline in a comparable time period.

CEREMONIAL OCCASIONS

The majority of officers and enlisted men (63%) believe the bayonet should be carried on ceremonial occasions.

DISCUSSION

It is apparent from the results of the questionnaire that the vast majority of combat infantrymen of the U.S. Army have never engaged an enemy soldier in bayonet combat, and that only a small number of enemy casualties result from the use of the bayonet. Data from Vietnam indicate a further reduction in emphasis from previous wars on carrying and fixing the bayonet. This might well be due to the light, rapid-firing weapons with more ammunition readily available (20-round magazines) that give the Vietnam combat infantryman increased firepower, thus reducing the need for an emergency weapon such as the bayonet. Also, the increased length of the rifle with the bayonet mounted makes it more cumbersome in the dense brush of Vietnam.

The possession of this weapon does not appear to give the majority of the men a significant increase in confidence or aggressiveness. However, the majority do feel confident in their ability to handle the bayonet as well as is necessary. These facts taken together indicate that the bayonet is not considered to be an important weapon by the majority of the combat infantrymen, and that present training is believed by the men to be sufficient for their requirements. However, the wide dispersion of answers on some questions indicates that the minority opinion might be strongly contradictory.

The bayonet is often supported as a morale builder; some commanding officers have used it as an instrument around which to rally morale. While this approach

could not be treated directly in this questionnaire, it is appropriate to note that less than 50% of the men believed that the bayonet added significantly to the confidence and aggressiveness of the men in their unit.

Although the bayonet is intended to serve also as a knife, the large number of individuals who carry a sheath knife in addition to, or in lieu of, the bayonet indicates that most of the men do not find the weapon to be a satisfactory knife. Many of the officers and enlisted men indicated that simply sharpening the bayonet would make it satisfactory. However, the steel from which the bayonet blade is made does not hold an edge well.

The preferred blade and handle styles as selected by the men answering this questionnaire were the present survival knife with a contoured bayonet handle, perhaps with a knuckle guard. The officers did not indicate a preference for the knuckle guard; the enlisted men did. Whatever knife style is adopted (if any), attention should be given to the noncombat uses of a bayonet/knife. In the Vietnam conflict, this is primarily cutting brush. In the four other theaters of operations considered, prying and cutting open containers were the primary noncombat uses of the bayonet/knife.

However they felt about the value of the bayonet in combat, over 80% of the individuals in this study rated the bayonet as an indispensable or very useful weapon in control of civil disturbances; over 90% feel that it has a psychological effect on rioters and looters and makes it easier to exercise control without the use of gunfire. It is possible that new riot weapons such as chemical mace may tend to diminish the usefulness of the bayonet in these circumstances, but the current opinion of the officers and enlisted men who responded to this questionnaire is unequivocal.

Although the men indicated that additional training time for the bayonet would be valuable, given their choice between additional training time for the bayonet and time for at least one other combat skill, marksmanship, the overwhelming choice was for marksmanship. The men indicated that bayonet training was a good physical conditioner, and also that it was effective in instilling motivation and discipline. However, the majority also indicated that other combative training could achieve the same or a higher level of physical conditioning, motivation, and discipline in a comparable time period.

Appendix

QUESTIONNAIRE RESPONSES FROM OFFICERS AND ENLISTED MEN

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Instructions for Administration of Bayonet Questionnaire

- 1. This interview should be given only to infantry officers and enlisted men who served with U.S. Army units. Advisors should not be included.
- 2. The numbers in parentheses () in the questionnaire will be used in the computer analysis. They are not important to you.
- 3. The questions that concern your unit are for the unit for which you were responsible. For positions lower than platoon leader or platoon sergeant, answer for your platoon.

I. Personal Data--Officers

1.	(73) A	ge: 30.0
2.	(74) F	Present Grade:
	5	2LT
	72	1LT
	303	CPT
	75	MAJ
	39	LTC
	10	COL
3.	(75) i	low long have you been in the Army?
	8.5	years
4.	What is	s your present duty assignment?
	-	
5.	(76)	What was your last duty assignment?
	<u>77</u>	Platoon Leader
	39	Company XO
	176	Company Commander
	<u>75</u>	Battalion Staff
	12_	Battalion Commander
	50	Brigade Staff
	6_	Brigade Commander
	25	Division Staff
	5_	Corps Staff or Above
		Other:

6. For each of your combat areas, please check the duty position or equivalent you held at the time.

	(77) Europe WW II	(78) Pacific WW II	(79) Korea	(80) Vietnam	(81) Dominican Republic
Squad Member	0	0	1	14	
Fire Team Leader	0	0	1_		0
Squad Leader	1	1	6_	4	_1_
Platoon Sergeant	2	0	8	9	1
Platoon Leader	10	<u> 4</u>	15	142	
Company Commander	2	2	7	141	5
Battalion Staff	0	0	3_	74	_2_
Battalion Commander	0	0	1	12	0
Brigade Staff	1	_1_	2	29	0
Brigade Commander	0	0	0	0	0
Other (Specify)	0		2	33	0

7.	(82)	Have you	ever	participated	in	civil	disturbance	or	disaster
		relief or	perat	ions?					

<u>76</u> Yes <u>428</u> No

8.	If the answe	er to Quest	ion 7 was af:	firmative,	please write	in below	the
	following:	where, app	roximate dat	e, and $duty$	position.		

Personal Data-Enlisted Men

1.	(63) Age: <u>27.8</u>
2.	(64) Present Grade:
	<u>3</u> E-2
	10 E-3
	<u>78</u> E-4
	<u>205</u> E-5
	<u>188</u> E-6
	<u>40</u> E-8
3.	(65) How long have you been in the Army?
	8.0 years
4.	What is your present duty assignment?
5.	(66) What was your last duty assignment?
	45_ Member of a squad
	71 Fire Team Leader
	202 Squad Leader
	152 Platoon Sergeant
	32 1st Sergeant
	7 Sergeant Major
	99 Other

6. For each of your combat areas, please check the duty position or equivalent you held at the time.

	(67) Europe WW II	(68) Pacific WW II	(69) Korea	(70) Vietnam	(71) Dominican Republic
Squad Member	0	1	13	89	8
Fire Team Leader	0	1	2	82	3
Squad Leader	2	2	37	172	12
Platoon Sorgeant	5		23	108	11
Other (Specify)	0	1	9	114	12

7.	(72)	Have you	ever	participated	in	civil	disturbance	or	disaster
		relief o	perat:	ions?					

8.	If the answ	er to Qu	estion 7 wa	as affi	rmative,	please	write	in	below	the
	fcllowing:	where,	approximate	e date,	and duty	positi	on.			

II. Combined Officer-Enlisted Man Answers

9. For each of the conflicts listed below, in which you personally experienced combat, please check the percentage of combat actions in which the bayonet was carried by the men in your unit.

		(1) Europe WW II	(2) Pacific WW II	(3) Korea	(4) Vietnam	(5) Dominican Republic	Total
а.	10% or less of all actions	4	2	8	470	10	14914
b.	25%	3	0	6	90	5_	104
c.	50%	1	2	10	84	3_	100
d.	75%	3	3	11	80	5	102
e.	90% or more of all actions	12	7	89	299	41	448
							1,248

10. On the average, what percentage of the men in your unit carried the bayonet in a combat situation?

		(6) Europe WW II	(7) Pacific WW II	(8) Korea	(9) Vietnam	(10) Dominican Republic	Total
a.	10% or less of the men	5	_1_	5_	458		476
b.	25%	3	0	6	107	3_	113
c.	50%	2	1	6	92	7_	108
d.	75%	4	3	14	95	4.	120
e.	90% or more of the men	9	8	94	265	43_	419 1,242

11. In what percentage of the combat actions was the bayonet actually fixed on the weapon?

		(11) Europe WW II	(12) Pacific WW II	(13) Korea	(14) Vietnam	(15) Dominican Republic	Total
a.	10% or less of all actions	18_	9	76	950	<u> 47</u>	1,100
b.	25%	2	_1_	24	36	11	74
c.	50%	2	2	13	16	2	35
d.	75%	1	<u> </u>	8	7	1	18
e.	90% or more of all actions	0		3_	9_	2	16 1,243

12. What percentage of the individuals in your units actually engaged an enemy soldier with the bayonet, with the bayonet fixed to the rifle?

		(16) Europe WW II	(17) Pacific WW II	(18) Korea	(19) Vietnam	(20) Dominican Republic	Total
a.	None or almost none	17	5	72	899	51_	1,044
b.	Less than 5%	<u> </u>	<u> </u>	24	98	7	140
c.	10%	2	1_	15	19	0	37
d.	25%	<u> </u>	2	7	3	1	13
e.	50% or more		0	<u> </u>	2	1	9
							1,243

13. Rank the frequency of use of the bayonet in the following types of combat; give a rank of $\underline{1}$ to the types used most frequently and ranks of $\underline{2}$, $\underline{3}$, and $\underline{4}$ to the other types in order of frequency of use. If for a given type, you cannot remember that an enemy soldier was ever engaged with the bayonet, place an \underline{X} by that type.

-	(21) Europe WW II	(22) Pacific WW II	(23) Korea	(24) Vietnam	(25) Dominican Republic	<u>X</u>
Offense	10	5	43	89	13	686
Defense, Prepared Positions	2	<u> </u>	16_	58	5	709
Defense, Hasty Defense	1_	3	8	55	3	714
Special Operations (patrols, raids, ambushes, tunnel clearing)	5	2	22	304	<u>6</u>	596

14. (26) If you were in a situation which required that you use the bayonet on your rifle against an enemy soldier, would you feel confident in your ability?

785	Yes	
130	No	
Why?		

15. In what percentage of the combat actions in the combat areas below was a sheath knife (or a bayonet used as a knife) used in hand-to-hand combat by the men in your unit?

		(27) Europe WW II	(28) Pacific WW II	(29) Korea	(30) Vietnam	(31) Dominican Republic	Total
a.	None or almost						
	none	<u>17</u>	8	83	769	57_	934
b.	Less than 5%	3	6_	28	165	5	207
c.	10%	<u> </u>	0	_12_	45	0	58
d.	25%	1	1	2	16	0	20
e.	50% or more	0	_1_	1_	25_	0	27
							1,246

16. (32) Which would you prefer in hand-to-hand combat? (Check one. If "Other" is checked, please write in your preference.)

665	Sheath Knife
280	Bayonet used as a Knife
152	Other

17. What percentage of the men in your unit carried a sheath knife instead of the bayonet?

		(33) Europe WW II	(34) Pacific WW II	(35) Korea	(36) Vietnam	(37) Dominican Republic	Tota1
a.	Almost no one	12	5	76	212	30	335
b.	10%	4	3	29	193	8	237
c.	25%	<u> </u>	4	7	174	7	193
d.	50%	2	0	9	181	2	194
e.	75% or more	3	0_	2	239	7	251
							1,210

18. Of those men who carried a bayonet, how many carried a sheath knife in addition?

		(38) Europe WW II	(39) Pacific WW II	(40) Korea	(41) Vietnam	(42) Dominican Republic	Total
a.	Almost no one	13	5	59_	397	16	490
b.	10%	4	2	40	<u> 177</u>	13	236
c.	25%	2	2	10	137	12	163
d.	50%	2	2	8	146	7	165
e.	75% or more	2	2	7	156	9	176
							1,230

19. Please rank the following noncombat uses of a bayonet or sheath knife according to their relative frequency. (For each of the areas in which you had combat experience, please assign a rank of 1 to the most frequent use and a rank of 2, 3, 4 and 5 to the next most frequent uses.)

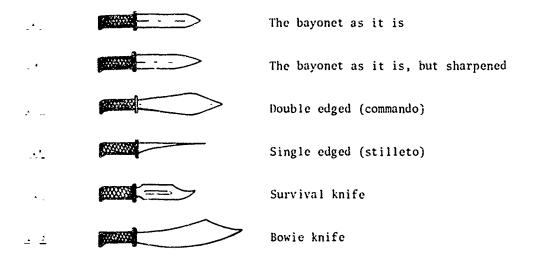
	-	(43) Europe WW II	(44) Pacific WW II	(45) Korea	(46) Vietnam	(47) Dominican Republic	Total
a.	Cutting brush	1	5	17	371	12	406
b.	Cutting open containers	6_	7	39	194		270
c.	Prying open containers	8	3	35	162	21	229
d.	Probing	6	_1_	41	239	2	289
e.	Digging		<u> </u>	11	39		57
							1,251

, d,	b, c,	(a,	statements	the ranked	which of	nd indicat	en included a	have beer
						ede.	should prece	or e) it
							. chicana proc	,
		_						

21. (48) If a bayonet-knife combination were adopted, which of the following blade styles would you prefer? (Please rank the styles listed below, with a $\underline{1}$ for most preferred, $\underline{2}$ for next most preferred, and so on.)

<u>49</u>		The bayonet as it is
338	>	The bayonet as it is, but sharpened
167		Double edged (commando)
_33		Single edged (stilleto)
401		Survival knife
109		Bowie knife

22. (49) If a sheath knife were issued, which blade would you prefer? (Please vx^2 the styles listed below, with a <u>1</u> for most preferred, <u>2</u> for next most preferred, and so on.)



23. (50) Which of the following i $p_{i}il_{i}s$ would you prefer? (Please pank the styles listed below, with a $\underline{1}$ for most preferred, $\underline{2}$ for next most preferred, and so on.)

<u></u>	Standard bayonet
<u>. "</u>	Contoured bayonet
	Standard with knuckle guard
u b	Contour with knuckle guard
<u>. · · ›</u>	Commando knife handle
<u>:</u>	Commando knife handle with guard

21. (51) Did the possession of the bayonet as a weapon give added confidence and aggressiveness to the men in your unit?

-	Yes				
	No				
why'_		-	 	-	 4

25.	(52)	confidence and aggressiveness?
	429	Yes
	682	No
	Why?	
26.	(53)	Rate the importance of carrying the bayonet in combat. (Check one.)
	120	An indispensable weapon
	238	A very useful weapon
	382	A useful weapon
	336	Little value
	36	No value
27.	(54)	Rate the value of the bayonet in civil disturbance (riot control) and disaster relief operations. (Check one.)
	530	An indispensable weapon
	368	A very useful weapon
	141	A useful weapon
	52	Little value
	_23	No value
28.	(55)	Rank order the following reasons for using the bayonet in civil disturbance (riot control) and disaster relief operations. Give a rank of $\underline{1}$ to the most important reason; and ranks $\underline{2}$, $\underline{3}$, and $\underline{4}$ to the other reasons in the order of their importance.
		876 a. It has a psychological effect upon rioters and looters.
		153 b. It enables control without the use of gunfire.
		27 c. It permits inflicting a wound that is less serious than a gunshot wound.
		60 d. The soldier is better armed with the bayonet than without it.
29.	inclu	e in any alternatives to Question 28 which you feel should have been ded and indicate which of the ranked statements (a, b, c, or d above) nould precede.
	_	

30.	(56)	Rate the value of bayonet training for physical conditioning. (Check one.)
	260	Extremely valuable
	330	Valuable
	285	Worthwhile
	192	Of little value
	47	Of no value
31.	(57)	Do you feel that other combative training could be substituted for bayonet training and achieve the same or higher level of physical conditioning in a comparable time period?
	665	Yes
	446	No
32.	(58)	Rate the value of bayonet training as a method of instilling motivation and discipline. (Check one.)
	258	Extremely valuable
	387	Valuable
	255	Worthwhile
	179	Of little value
	33	Of no value
33.	(59)	Do you feel that other combative training could be substituted for bayonet training and achieve the same or a higher degree of motivation and discipline in a comparable time period?
	653	Yes
	458	No
34.	(60)	Considering the limited training time available, give a rank of $\underline{1}$ to the combat skill in which more training time would be most valuable. Give ranks of $\underline{2}$, $\underline{3}$, $\underline{4}$, and $\underline{5}$ to the rest in order of the value of additional time.
	117	Bayonet training
	98	Knife fighting
	96	Judo
	99	Karate
	703	Marksmanship
35.	(61)	Should the bayonet be carried on ceremonial occasions?
	694	Yes
	415	No

.00	(62) which of the following steps would you recommend: (cheek one.)
	<u>46</u> Retain the bayonet as it is
	160 Retain and modify the bayonet to provide for a sharpened cutting edg.
	676 Retain and modify the bayonet to make it a more suitable multipurpos knife-bayonet
	192 Eliminate the bayonet and furnish a sheath knife
	33 Eliminate the bayonet
37.	Please use the space below for any additional comments you wish to make.

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This report presents the results of a sur of a sample of U.S. Army personnel regard survey indicated that the present weapon bayonet but an unsatisfactory knife; bayonet theaters of World War II, Korea, the Domi in Vietnam; more and better bayonet train training is adequate, and at least one of to be much more worthy of additional train to physical conditioning, and to the instant other combative training could achieve the	rvey conducted to determine the opinions ding the present bayonet/knife. The was considered to be a satisfactory onet combat was infrequent in both inican Republic, and is infrequent now ring would be an improvement, but present ther skill (marksmanship) is considered ining time; bayonet training contributes cilling of motivation and discipline, but									

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	KET MONDS	901 E	w7	*ort	**	*2.5	H.7
Bayonet							
Combat Weapon							
Knife							
Riot-Control Weapon							
Survival Knife							

Unclassified

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