FRIENDLY FIRE CASUALTIES: A VIETNAM WAR PERSPECTIVE

by: Charles F. Hawkins

13 August 1991

Personnel casualties resulting from friendly fire by our own troops in Operation Desert Storm seem surprisingly high -- about 23% of all battlefield casualties. New historical research shows this figure may be "about right," and might have been anticipated.

Charles F. Hawkins
1407 Love Point Road
Stevensville, Maryland 21666-2041
USA

Background

The problem of friendly fire, that is, of personnel casualties in combat from the fire of other friendly forces, has not been studied very much. The definitive, and nearly singular, work is a study prepared by Colonel Charles Shrader in 1982 entitled: Amicicide: The Problem of Friendly Fire in Modern War. The case study approach used for the work is more anecdotal than statistical, but does suggest that casualties from friendly fire have been about 2% of all battle casualties.

Presently, as a result of losses due to friendly fire in Operation Desert Storm, the US military services, and the US Army in particular, are deliberating the problem of friendly fire and its causes. Not counting losses from disease and non-battle injuries (DNBI), and not counting rear area losses, including the catastrophic losses from one SCUD missile attack, the US battle-field casualties incurred in Iraq and Kuwait are put at 488, 107 of which are now reported due to friendly fire. Thus, almost 23% of battle casualties in Operation Desert Storm came by our own hand.

Egregious errors in warfighting are not new, but to have one so graphically portrayed and widely reported as the apparently high percentage of casualties caused by our own forces is unusual. And because the 23% figure contrasts so starkly with the 2% figure suggested in Shrader's work, it makes the effects of the cumulative errors of firing on our own troops appear symptomatic of poorly understood ills within the military system when it comes to fighting. Since so little work has been done to study friendly fire or to understand its context or frequency, the 2% figure should be questioned as much as our military is being called upon to explain the 23% figure.

Study Objective

The objective of this brief study was to analyze historical combat data from an infantry battalion (already collected to support a quite different effort) to determine what percent of battlefield casualties friendly fire caused during a four-month period in the Vietnam War. Those figures were then compared to several battlefield variables, such as weather, terrain, and increases in combat activity. The results of this analysis are summarized below.

The battalion for which data was available was the 2d Battalion, 506th Infantry. The 2/506th was part of the 3d Brigade of the 101st Airborne Division, and conducted operations against the North Vietnamese Army in the mountainous jungles near the A Shau Valley in northern I Corp Zone in 1970.

Summary of Study Results

2/506th Casualties for February 1970

Category	Number	Percent
Combat Actions	29	100%
Friendly Fire Incidents	1	4.4%
Total Battle Casualties	39	100%
Total KIA	5	12.8%
Total WIA	34	87.2%
KIA by Friendly Fire	0	
WIA by Friendly Fire	4	10.3%
Casualties/Action	1.34	

Weather: Temperate, 70% Fog and Rain, 30% Clear
Terrain: Gentle Hills, Mixed Vegetation
Combat Intensity: Low (frequent booby traps)

2/506th Casualties for March 1970

Category	Number	Percent
Combat Actions	35	100%
Friendly Fire Incidents	3	8.6%
Total Battle Casualties	28	100%
Total KIA	7	25%
Total WIA	21	75%
KIA by Friendly Fire	0	
WIA by Friendly Fire	3	10.7%
Casualties/Action	0.8	

Weather: Temperate, 50% Fog and Rain, 50% Clear
Terrain: Foothills, Heavy Vegetation
Combat Intensity: Low

2/506th Casualties for April 1970

Category	Number	Percent
Combat Actions	40	100%
Friendly Fire Incidents	3	7.5%
Total Battle Casualties	57	100%
Total KIA	11	19.3%
Total WIA	46	80.7%
KIA by Friendly Fire	0	
WIA by Friendly Fire	9	15.8%
Casualties/Action	1.43	

Weather: Hot, 30% Fog and Rain, 70% Clear
Terrain: Rugged, Heavy Vegetation
Combat Intensity: Low, with some determined resistance

2/506th Casualties for May 1970

Category	Number	Percent
Combat Actions	71	100%
Friendly Fire Incidents	3	4.2%
Total Battle Casualties	34	100%
Total KIA	10	29%
Total WIA	24	71%
KIA by Friendly Fire	0	
WIA by Friendly Fire	5	14.7%
Casualties/Action	0.48	

Weather: Hot, 30% Fog and Rain, 70% Clear
Terrain: Rugged, Heavy Vegetation
Combat Intensity: Low (increased use of air support)

Summary of 2/506th Casualties
February through May 1970

Category	Number	Percent
Combat Actions	175	100%
Friendly Fire Incidents	10	5.7%
Total Battle Casualties	158	100%
Total KIA	33	20.9%
Total WIA	125	79.1%
KIA by Friendly Fire	0	
WIA by Friendly Fire	21	13.3%
Casualties/Action	0.9	

Preliminary Conclusions

Finding 1. The ratio of KIA to WIA in this study averages 1:4, or 20% KIA and 80% WIA. This is consistent with the historical KIA to WIA ratio for other wars.

Finding 2. Casualties due to friendly fire in this study average over 13% of battlefield casualties -- six to seven times greater than the 2% in Shrader's study, and slightly more than half that of Operation Desert Storm.

Judgment 1. The percent of friendly fire casualties seems to increase with the number of combat actions. This may be due to the difficulty in managing combat resources in response to an increased number of actions, or it may be because of the increasingly complex mix of weapons systems used in the later fighting, or both.

Judgment 2. As a percent of battlefield casualties, friendly fire casualties seemed to increase as terrain became more harsh. Terrain may affect command and control and fire coordination so as to increase the probability of frienly fire incidents.

Judgment 3. Friendly fire casualties increased as weather and visibility improved. This may be because the weather permitted more aggressive operations, or because a greater number of airborne weapons could be used, or both.

Summary

This study shows that at least one unit in modern warfare (in addition to those in Operation Desert Storm), for a period of approximately four months, suffered friendly fire casualties at rates six to seven times greater than the accepted historical norm -- much closer to that of US forces in the Persian Gulf.

Each judgment relates increases in friendly fire casualties in some way to increases in combat operational complexity and lethality: through a greater number of combat actions; by having more combat systems (armed aircraft, multiple fire support bases) available; or by increased command and control interactions on the battlefield. If this is correct, what does the curve, or trend-line, of friendly fire casualties as a percent of battlefield casualties look like? Is it leveling, or increasing?

A similar, more detailed analysis of the historical record of combat prior to Operation Desert Storm would have changed expectations for friendly fire casualties. It could also have helped preparations, including modification of tactical procedures used on a complex battlefield.

There are, of course, great differences between the Persian Gulf and Vietnam. But there are similiarities too. Comparisons and contrasts should be made, not only between the Vietnam War and the war against Saddam Hussein, but also with organized historical combat data from other wars.

Charles F. Hawkins is Executive Vice President of the Historical Evaluation and Research Organization, a division of Data Memory Systems, Inc., a Fairfax, Virginia defense research, studies, and analysis firm. He was a platoon leader and rifle company commander with the 2/506th in 1970.

Stewart Powell of Hearst Newspapers, Washington Bureau, contributed to this effort.