

SAFETY and RISK MANAGEMENT

HHC 2X Safety Day 3 May 1999

COMMAND SAFETY OFFICE

732-7032/7061

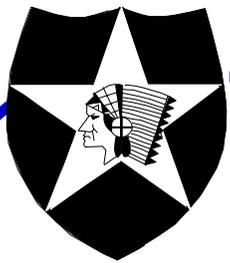
2nd to None!



COMMAND SAFETY OFFICE

ARMY DIVISION ACCIDENT COMPARISON

2d to None



ACCIDENT COMPARISON

NUMBER OF CLASS A GROUND ACCIDENTS

<u>FY/DIV</u>	<u>2ID</u>	<u>10MT</u>	<u>1AD</u>	<u>1CAV</u>	<u>1ID</u>	<u>25ID</u>	<u>3ID</u>	<u>4ID</u>	<u>82AB</u>	<u>101AB</u>
FY96	3	4	4	9	5	0	9	5	11	8
FY97	2	3	4	6	4	2	3	7	6	6
FY98	2	1	3	7	3	7	8	5	8	5
TOTAL	7	8	11	22	12	9	20	17	25	19

NUMBER OF CLASS A-C GROUND ACCIDENTS

<u>FY/DIV</u>	<u>2ID</u>	<u>10MT</u>	<u>1AD</u>	<u>1CAV</u>	<u>1ID</u>	<u>25ID</u>	<u>3ID</u>	<u>4ID</u>	<u>82AB</u>	<u>101AB</u>
FY96	83	55	50	69	10	40	109	60	180	87
FY97	78	23	31	37	9	38	132	57	100	90
FY98	83	21	25	43	28	31	139	39	148	81
TOTAL	244	99	106	149	47	109	380	156	428	258

RATIO **34.9** **12.4** **9.6** **6.8** **3.9** **12.1** **19.0** **9.2** **17.1** **13.6**

2d to None



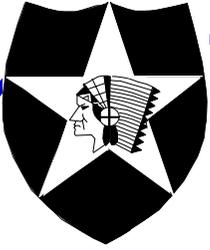
RISK MANAGEMENT

CONCEPTS, APPLICATIONS AND BENEFITS

COMMAND SAFETY OFFICE

732-7032/7061

2nd to None!

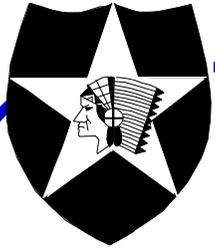


RISK MANAGEMENT

INTRODUCTION

- **Risk Management is an application of the 5-step decision making process designed to assist commanders reduce accidental losses and incidents of fratricide during METL training and operations.**
- **Detailed procedures are integrated into:**
 - **FM 100-5, Operations**
 - **FM 101-5, Command and Control for Commands and Staff**
 - **FM 100-14, Risk Management**
 - **FM 25-101, Battle Focused Training**

2nd to None!



RISK MANAGEMENT

CONCEPT

- **Historically the US Army has suffered more losses to accidents than through enemy action while deployed to combat theaters.**
- **Accidents occur when performance of the 7 BOS functions is below standard due to human error, material failure, or inadequate precautions for environmental factors.**

2nd to None!



RISK MANAGEMENT

HISTORICAL PERSPECTIVE

<u>LOSS/ACTION</u>	<u>WWII</u>	<u>KOREA</u>	<u>VIETNAM</u>	<u>DS/DS</u>	<u>NTC</u>
ACCIDENT	56%	44%	54%	75%	3%
FRATRICIDE	1%	1%	1%	5%	3%
ENEMY	43%	55%	45%	20%	94%

2nd to None!



RISK MANAGEMENT

SAFETY ON THE BATTLEFIELD

- **Protect the force; there are 10 times more accidents in combat than in peacetime.**
- **Apply risk management to the planning, execution, and review phases of operations.**
- **A strong peacetime program will carry over into battlefield operations.**

2nd to None!



RISK MANAGEMENT

4 RULES OF RISK MANAGEMENT

- **Integrate into planning.**
- **Accept no unnecessary risks.**
- **Make decisions at the proper level.**
- **Accept risk if expected benefits outweigh the cost.**

2nd to None!

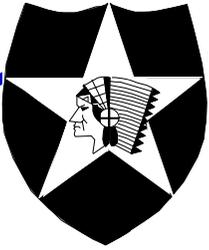


RISK MANAGEMENT



- **Accept no unnecessary risks.**
 - **Accept no risk? No. Risk is inherent in any operation where energy is present. Unnecessary risk is risk which can be eliminated or reduced without adverse impact on the mission. Example: Do I wear safety belts in a HMMWV?**
- **Accept risk if expected benefits outweigh the cost.**
 - **After all unnecessary risk has been eliminated, analyze the residual risk. Does it still make sense to perform the task? If the answer is yes, perform the task; if no, don't do it. Example: Do I dispatch a HMMWV in the snow to take a soldier to a routine dental appointment when I can reschedule for tomorrow?**

2nd to None!

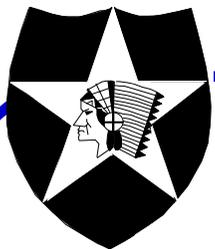


RISK MANAGEMENT

5 STEPS OF RISK MANAGEMENT

- **Identify Hazards**
- **Assess the Hazards**
- **Develop Risk Control Options and Make Risk Decisions**
- **Implement Risk Control Decisions**
- **Supervise, Assess Effectiveness, Fine Tune and Codify**

2nd to None!

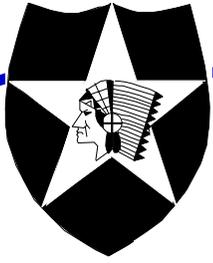


RISK MANAGEMENT

1. Identify Hazards

- **Perform an Operational Analysis**
- **Perform a Hazard Analysis**
- **Identify Hazards**

2d to None!



RISK MANAGEMENT

2. Assess the Hazards

- **Assess Identified Hazards**
- **Determine Expected Severity and Probability of Occurrence**
- **Compute Degree of Risk**

2d to None!



RISK MANAGEMENT

Hazard Severity/Accident Probability

Hazard Severity

I Catastrophic

II Critical

III Moderate

IV Negligible

Accident Probability

A Frequent

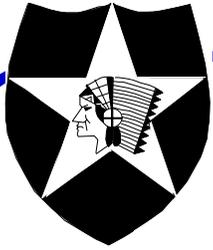
B Likely

C Occasional

D Seldom

E Unlikely

2d to None!



RISK MANAGEMENT

Risk Levels

E - Extremely High Risk; loss of ability to accomplish mission

H - High Risk; significantly degrades mission capabilities below required mission standard

M - Medium Risk; degrades mission capabilities

L - Low Risk; little or no impact on mission capabilities

2d to None!

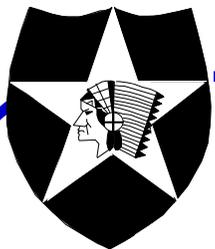


RISK MANAGEMENT

Risk Assessment Matrix

HAZARD SEVERITY	ACCIDENT PROBABILITY				
	A	B	C	D	E
I	E	E	H	H	M
II	E	H	H	M	L
III	H	M	M	L	L
IV	M	L	L	L	L

2d to None!

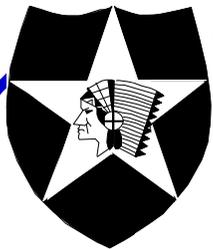


RISK MANAGEMENT

3. Risk Controls and Decisions

- **Develop options on “Worst First” basis**
- **Determine suitability of options**
- **Select risk control options**
- **Make risk decisions at appropriate level of leadership**
- **Assess impact of decision on mission**

2d to None!



RISK MANAGEMENT

2ID DECISION LEVELS

- **EXTREMELY HIGH RISK -- Division**
- **HIGH RISK -- Brigade**
- **MEDIUM RISK -- Battalion**
- **LOW RISK -- Company/Platoon**

NOTES:

1. Risk before mitigation.
2. Risk management approval 2 levels up (ie., Bde Cdr approves company live fire).

2d to None!

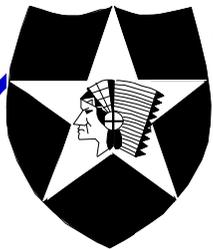


RISK MANAGEMENT

2ID OVERSIGHT OF MISSIONS

- **Missions that must be approved by the Commanding General or designated ADC.**
 - All helicopter missions over water
 - All flight missions out of corridor (beyond the “No Fly” Line)
 - River Crossing Operations
 - Battalion/Brigade Air Assault
 - SPIES or Tactical Rappel Operations
 - Non-standard live fire operations (SOF, etc.)

2d to None!



RISK MANAGEMENT

2ID OVERSIGHT OF MISSIONS (Con't)

- **Missions that must be approved by the Commanding General or designated ADC**
(* Classified EH Risk due to unique Korea METT-T)
 - * All parachute operations
 - * Battalion Deep Attack
 - * Hellfire Gunnery
 - * Stinger Gunnery
 - * Artillery operations requiring a SDZ waiver
 - * CALFEX
 - * Company+ Force on Force
 - * Battalion+ Motor March

2d to None!



RISK MANAGEMENT

4. Implement Risk Control Decisions

- **Incorporate risk control decisions into:**
 - **Orders**
 - **Briefings**
 - **SOP's, TACSOP, Regulations, Etc.**
 - **Training**

2d to None!



RISK MANAGEMENT

5. Check, Assess, Fine Tune, & Codify

- **Monitor implementation and modify to meet changing conditions**
- **Evaluate effectiveness during AAR**
- **Analyze failure and implement change**
- **Analyze and reinforce success**

2d to None!

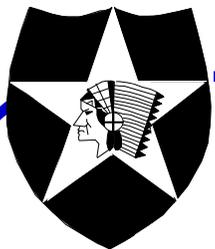


RISK MANAGEMENT

THOUGHT PROCESS REVIEW

- **What's not to standard?**
- **What's the risk?**
- **What can I do to reduce the risk?**
- **What risk remains?**
- **Is it worth it to accept the risk?**
- **Do I have the authority to accept the risk?**

2d to None!

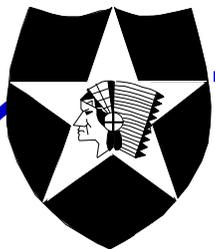


RISK MANAGEMENT

BENEFITS

- **Supports training by reducing unnecessary risk allowing for more realistic and challenging training.**
- **Protects the force and allows for the more effective application of firepower.**
- **Enhances morale and *esprit de corps*.**
- **Conserves resources and enhances capabilities.**

2d to None!



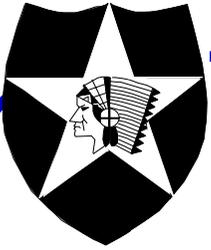
RISK MANAGEMENT

QUICK AND DIRTY!!!

“What if?”

“So what?”

“What next?”



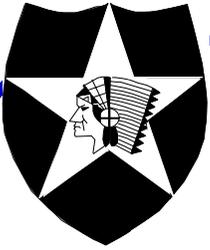
RISK MANAGEMENT

APPLICATION

AIRBORNE OPERATION

Night-Tactical

2d to None!

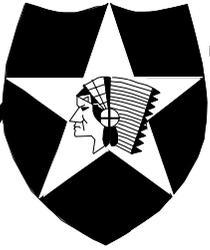


RISK MANAGEMENT

SITUATION

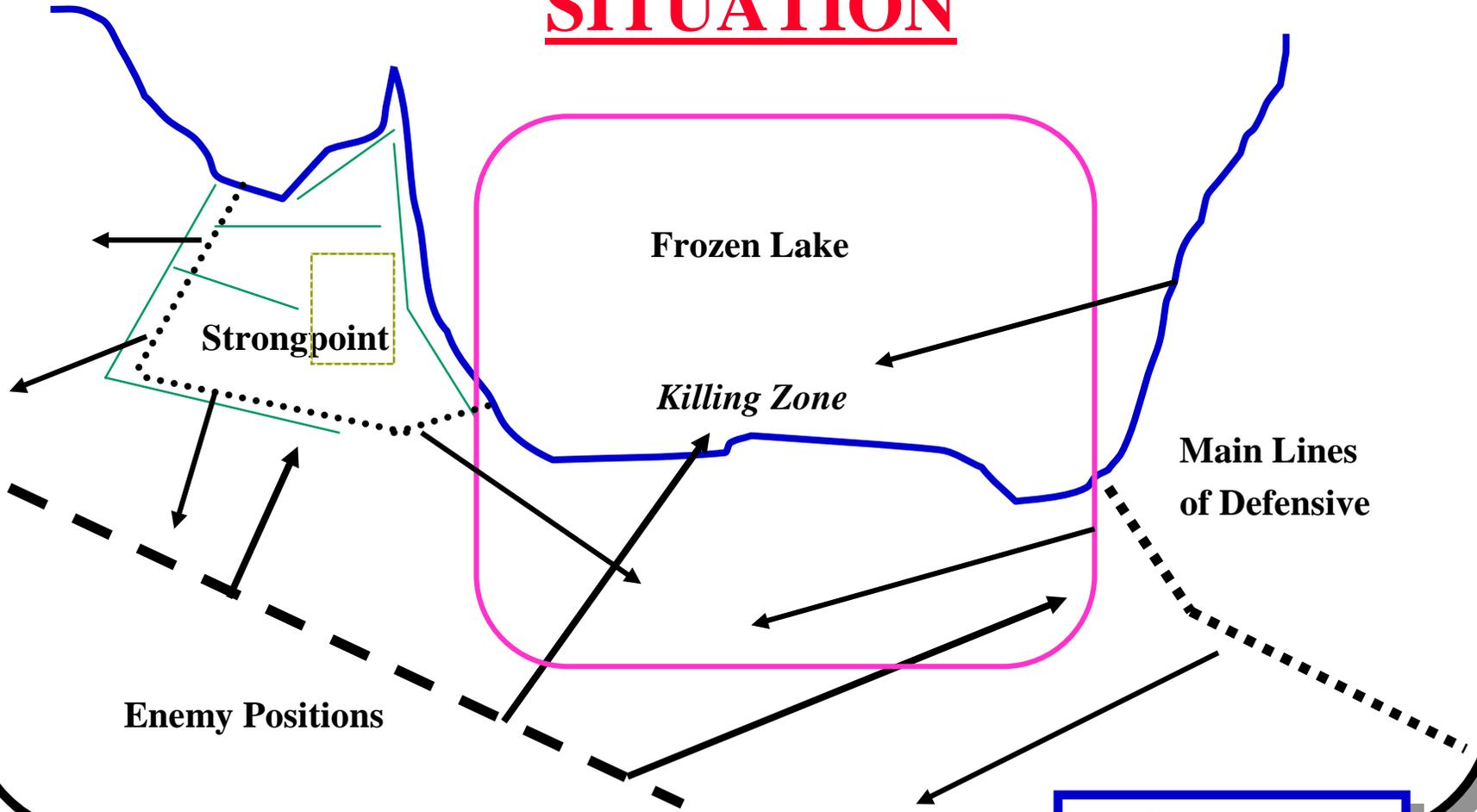
- **Enemy is threatening strategic position**
- **Reinforcements needed to prevent breakthrough and flanking of lines**
- **Breakthrough will result in encirclement of force and capitulation in theater**
- **3300 man airborne force trained and available**
- **Aircraft available**
- **No parachutes**

2d to None!

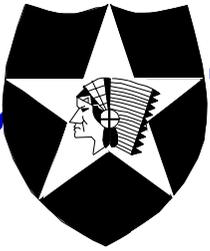


RISK MANAGEMENT

SITUATION



2d to None!

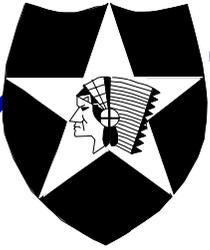


RISK MANAGEMENT

1. Identify Hazards

- **Broken ice on lake -- Crash on ice w/damage to aircraft and injury to personnel.**
- **Tree lines around small fields -- Crash into trees w/damage to aircraft and injury to personnel.**
- **Exposed fields of fire across land and lake -- Kill zone for personnel and equipment.**
- **Frozen ground with snow -- Hard landings without parachutes w/injury to personnel.**

2d to None!

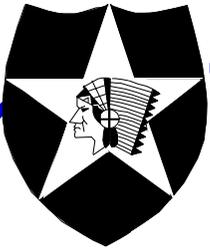


RISK MANAGEMENT

2. Assess the Hazards

- **AC crash on ice. Severity: catastrophic (80+% loss) and probability: frequent (90+/-%) = EH Risk**
- **AC crash into trees. Severity: catastrophic (70+% loss) and probability: frequent (90+/-%) = EH Risk**
- **Personnel enter enemy fields of fire. Severity: catastrophic (60+% loss) and probability is frequent (80+/-%) = EH Risk**
- **Personnel make hard landing. Severity: catastrophic (90+% loss) and probability: frequent (90+/-%) = EH Risk**

2d to None!



RISK MANAGEMENT

3. Risk Controls and Decisions

- **Land aircraft on lake -- No viable options**
- **Land aircraft in fields -- No viable options**
- **Assault across land or lake -- No viable options**
- **Jump from aircraft without parachutes --**
 - **50 feet AGL, 20 knots relative, night, glide in**
 - **Uncut hay and 2-4 feet snow in fields**
 - **Arctic (quilted) uniform and soft packs**
 - **Trained in proper PLF**

2d to None!

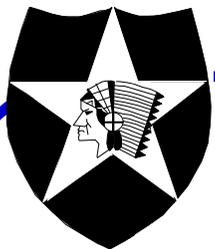


RISK MANAGEMENT

4. Implement Risk Control Decisions

- **Incorporate risk control decisions:**
 - *Orders* issued for slow/low aircraft
 - All personnel were *briefed* on the operation
 - New *procedures* were developed and published
 - Airborne personnel given *training* on new procedures

2d to None!



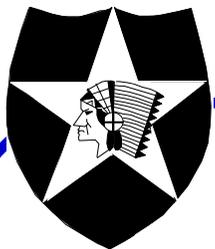
RISK MANAGEMENT

5. Supervise, Assess, Fine Tune, & Codify

- Chief of Air Group supervised preparations
- Airborne regimental commander in lead aircraft
- 2850 of 3300 effectives on the ground (86+%)
- Parameters set for future (small scale) use

Bottom Line -- Position held, no breakthrough, enemy retreated in two weeks, and theater secured in three months.

2d to None!



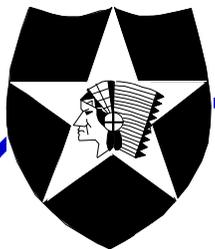
SAFETY

That's nice, but I'm in Korea.

What's unique about being here?

What should I look for?

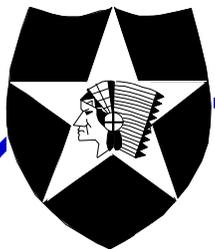
Can I make a difference?



SAFETY

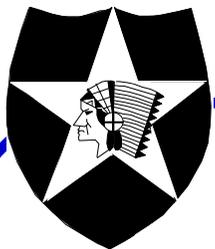
You bet it's unique.

- **A bunch of privates and not many sergeants.**
- **How come all the training areas are “off-post”.**
- ***“I ain’t got no family ... and I ain’t got no car”.***
- ***“Short, 364 and a wake up ... 183 till mid-tour”.***
- ***“Hooah!” “Fit to Fight!” “Second to None!”***



SAFETY

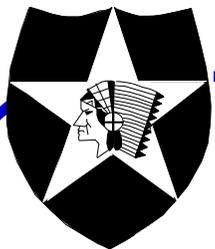
- **Those damn terminators!**
- **Those damn buses!**
- **They do it, so why don't we?**
- **It's cold, let's burn MOGAS in the stove.**
- **It's a pain in the butt to turn in this extra ammo, let's just bury it over there.**
- **Let me show you a trick I learned in Germany.**
- **I'm not surprised that he got hurt, what I am surprised about is that it took this long.**



SAFETY

What should I look for?

- **Do we do it to standard? (There shouldn't be a Korea standard versus an Army standard)**
- **Is the mission valid? Do we stay in the right-hand lane? Are senior occupants alert and active? Did we do PMCS? Is the vehicle FMC? Etc.?**
- **Every task is part of a mission ... are we properly trained, equipped, and supervised?**
- **Would I accept this in the States?**



RISK MANAGEMENT

NEXT ACCIDENT ASSESSMENT

5-W Approach

“Who?”

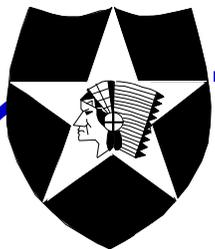
“What?”

“Where?”

“When?”

“Why?”

2d to None



RISK MANAGEMENT

Background Information

- **Know your units, leaders, and personnel -- what are their strong and weak points?**
- **What is their training and maintenance status, personnel fill percentage, continuity level, etc.**
- **How long since they've done this before and how well did they do it?**
- **What is their indiscipline rate and how do you rate their command climate?**

2d to None

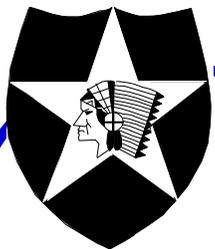


RISK MANAGEMENT

High Risk Company

- **New commander and first sergeant (- 60 days)**
- **30+ percent new personnel within past 90 days.**
- **90+ days since last major training event.**
- **2 or more acts of indiscipline within past 90 days.**
- **Bottom third in equipment readiness.**
- **Bottom third in PT scores, medical/dental records, and weapons qualification.**

2d to None

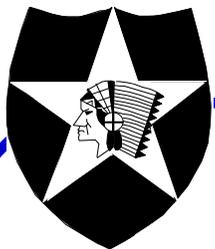


RISK MANAGEMENT

High Risk Driver

- **First tour in Korea.**
- **Been in unit for 60 to 180 days or last 30 days.**
- **Failed to perform vehicle PMCS at least twice during past 60 days.**
- **Drives a little too fast, sometimes forgets to wear safety belts, and stays in the left lane too often.**
- **Bottom third in appearance, PT and MOS test scores, and spends off duty time in the “ville”.**

2d to None



SAFETY

Can I make a difference?

**Yes! You better believe it ...
or you're in the wrong job!**

2d to None



SAFETY

In the 2ID, everyone is a safety officer!

Do the Mission!

Protect the Force!

2d to None