



The Military Impact of Counter-Mobility

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Analysis in the UK

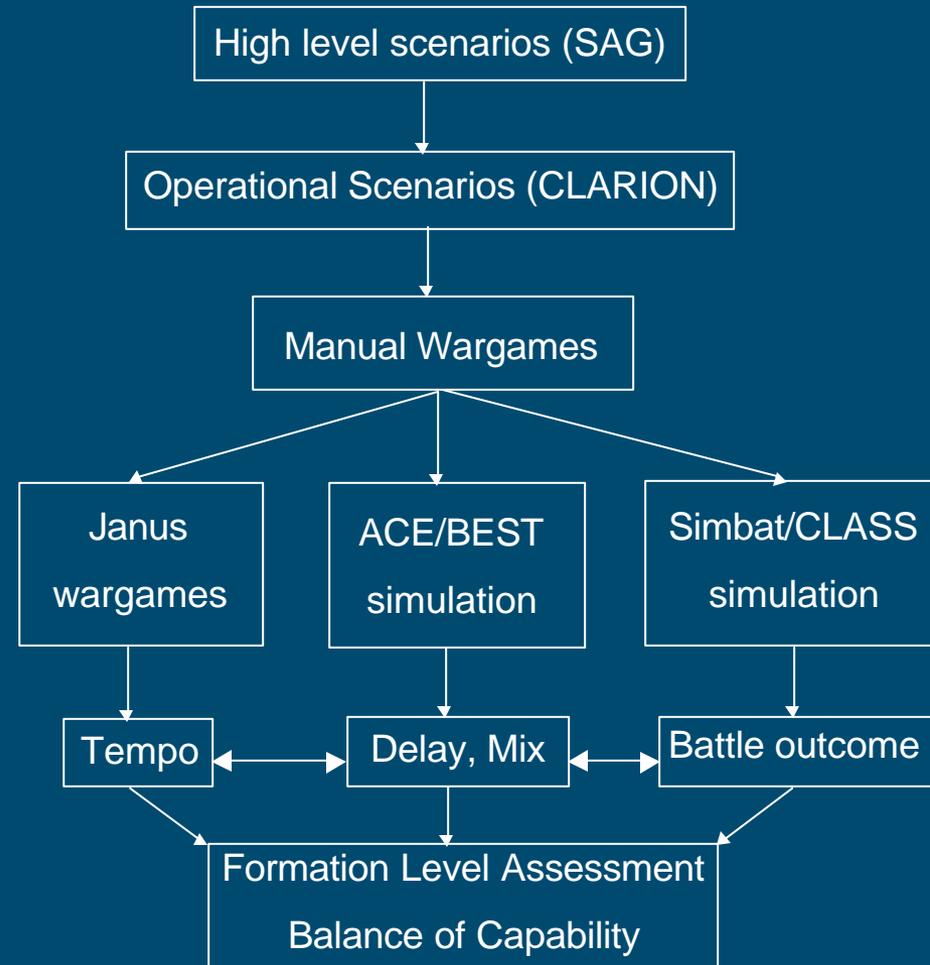
- Balance of Investment
- Need and Mix (also Numbers)
- Requirement Definition Study
- Combined Operational Effectiveness and Investment Appraisal

INTRODUCTION

- Study Aim

- The aim of the study was to examine the need for a counter-mobility capability and to determine the balance of that capability between munition and non-munition based techniques.
- Formation level assessment
Previous phases looked at BG level balance and impact

- Method

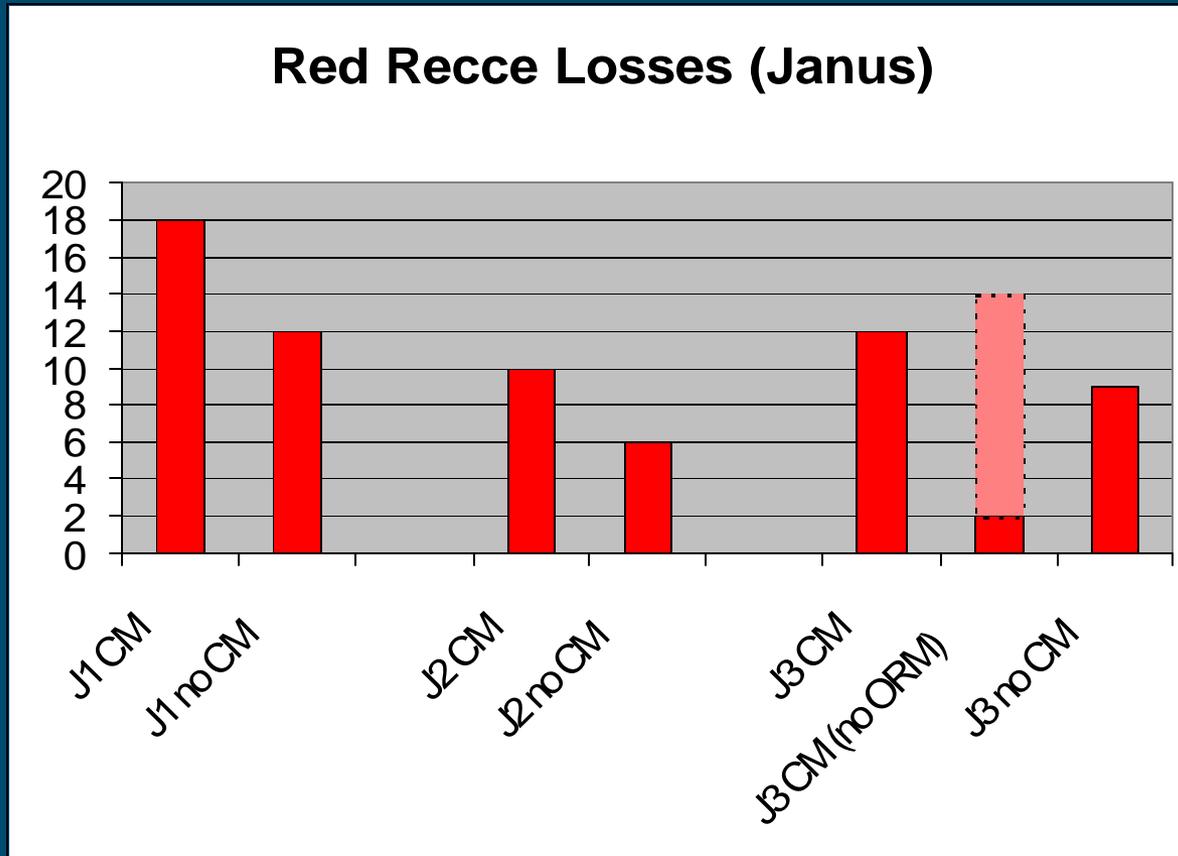


Study design

- The preconceptions
 - Obstacles require a long time to prepare
 - Obstacles are artifacts of positional warfare
- The scenarios
 - Preparation times of 6 hours typical, under 1 hour in one case
 - Battles of manoeuvre as part of strategic offensives

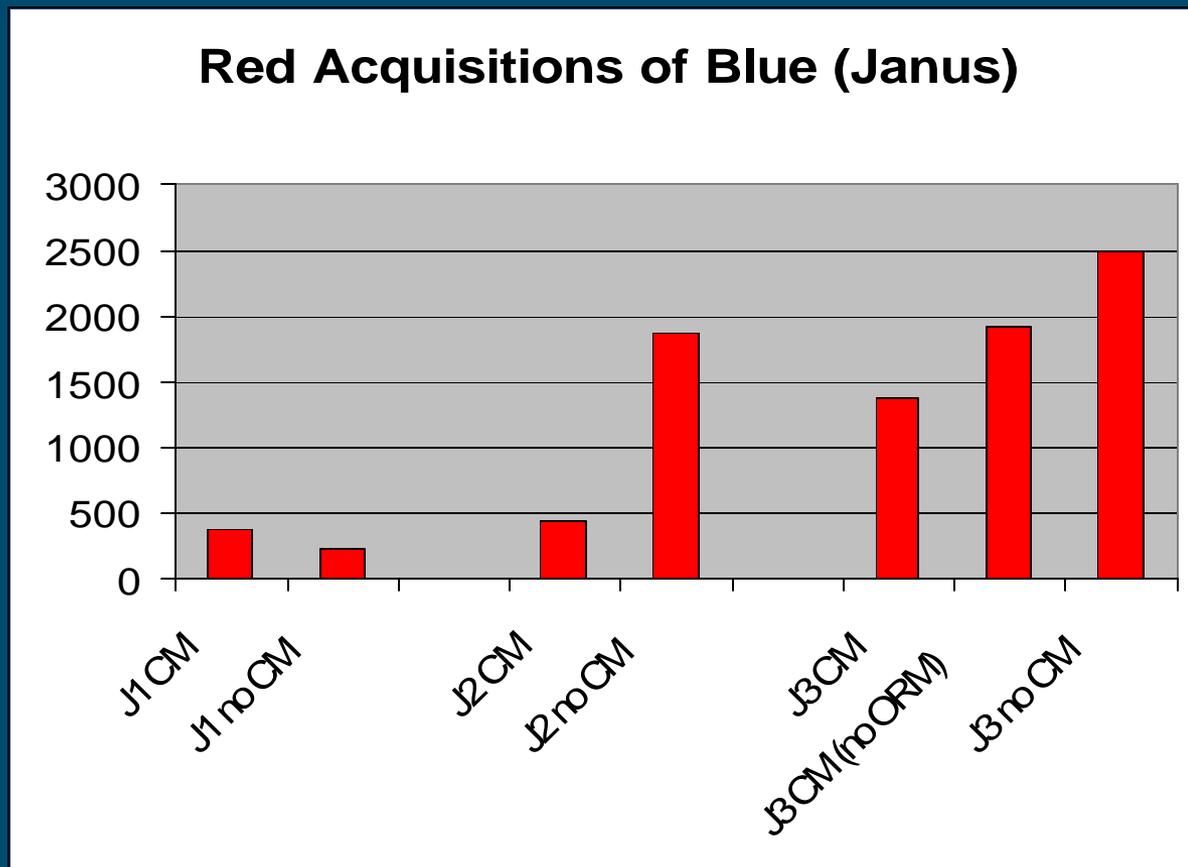
INFORMATION AND INTELLIGENCE

- Mines aided identification of routes (MWG; Janus)
- Mines directly or indirectly increased Red recce losses (MWG, Janus)



INFORMATION AND INTELLIGENCE

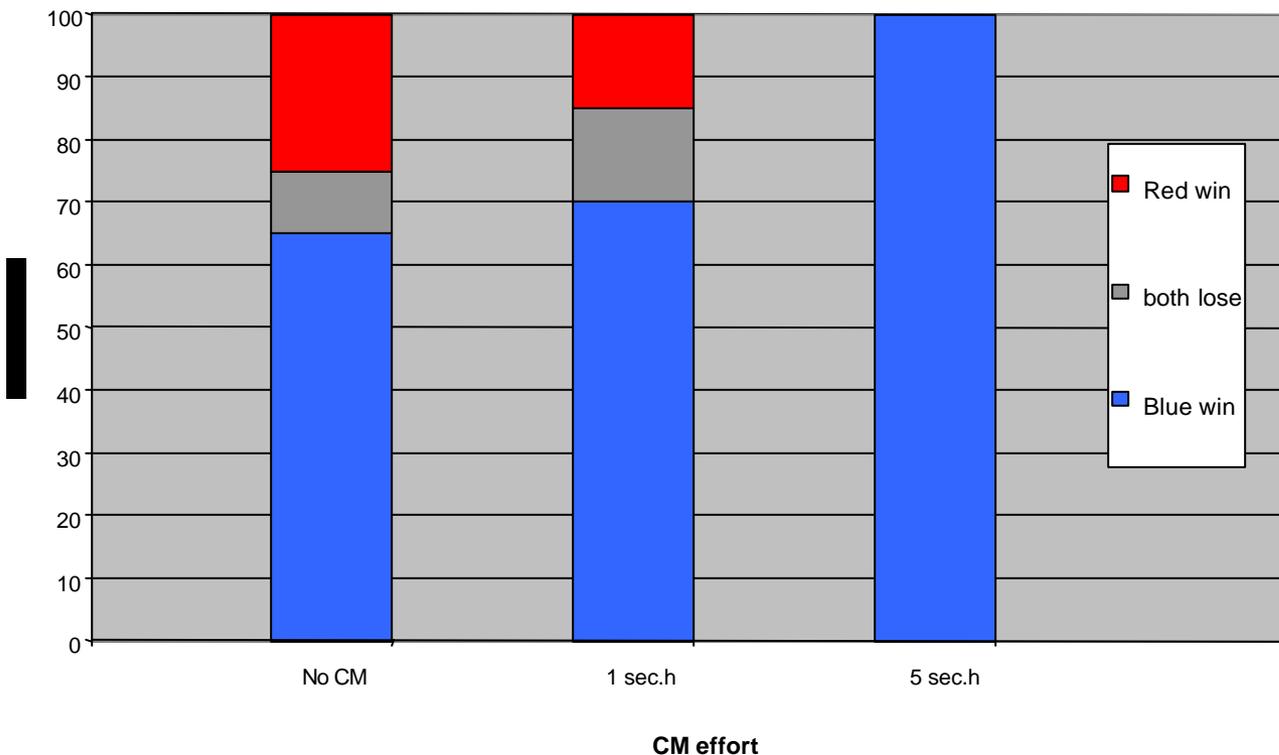
- Reduced freedom of manoeuvre also reduced Red information on Blue (MWG, Janus)



MANOEUVRE

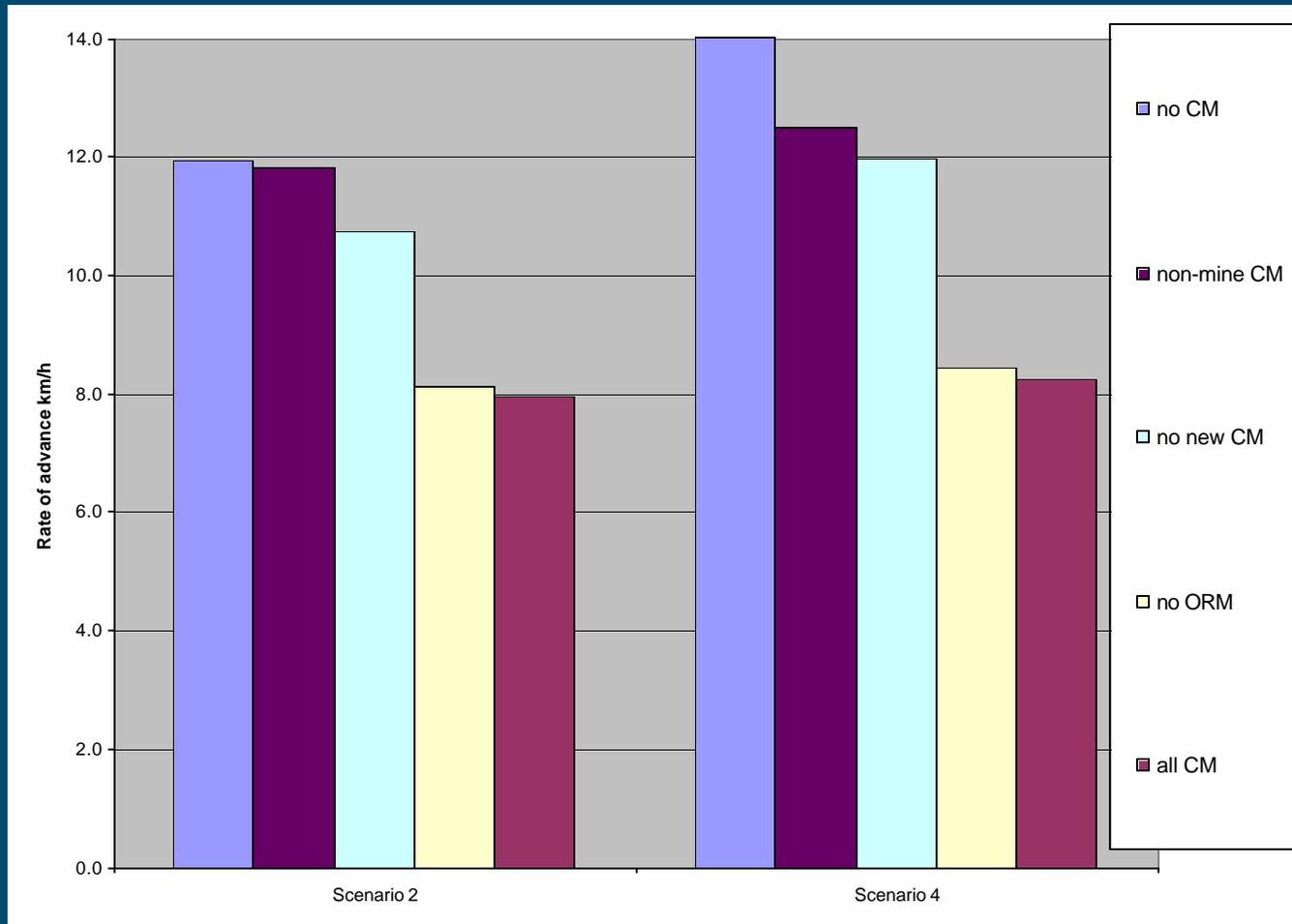
- Fixing by RDM to buy deployment time (Janus)
- Fixing to allow time critical events, AH strike (only 50% kills if 5 minutes late, Simbat)

Victory and Defeat in Simbat (scenario 3)



MANOEUVRE

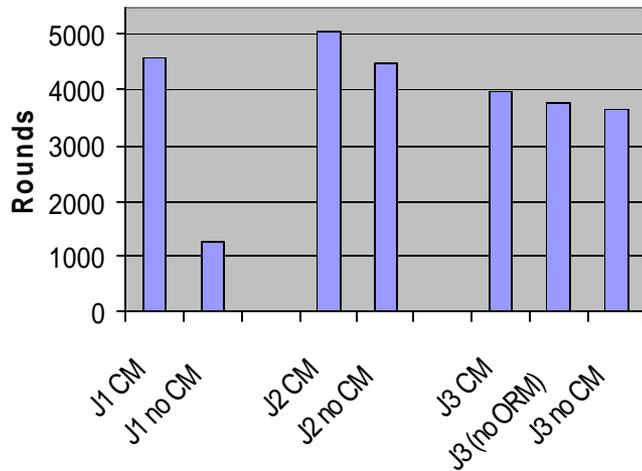
- Reduction in Red divisional rates of advance (ACE/BEST)



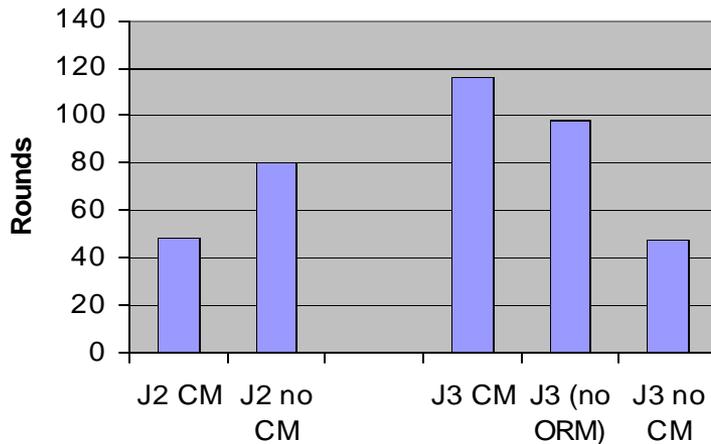
FIREPOWER

- ORM forced Red out of close country, so assisting AH and IF (MWG; Janus)
- Fixing effect of all mines assists AH and IF and reduces DF (Janus)

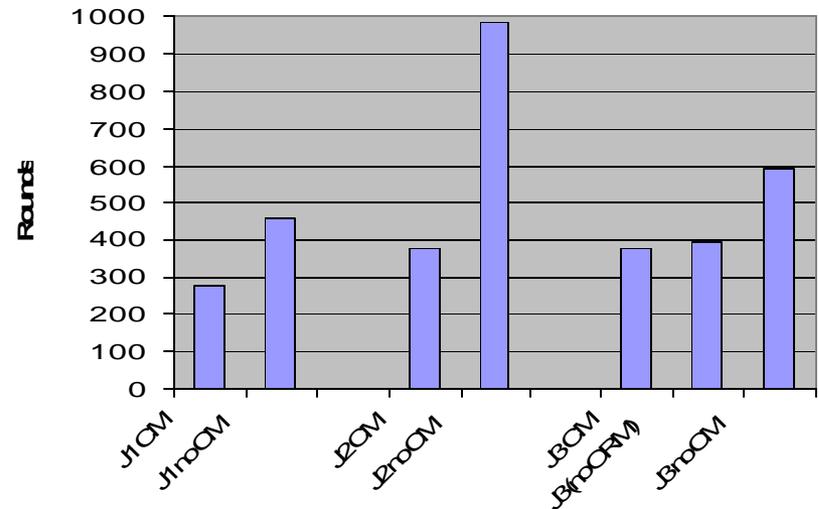
155mm ammunition expenditure



Hellfire expenditure

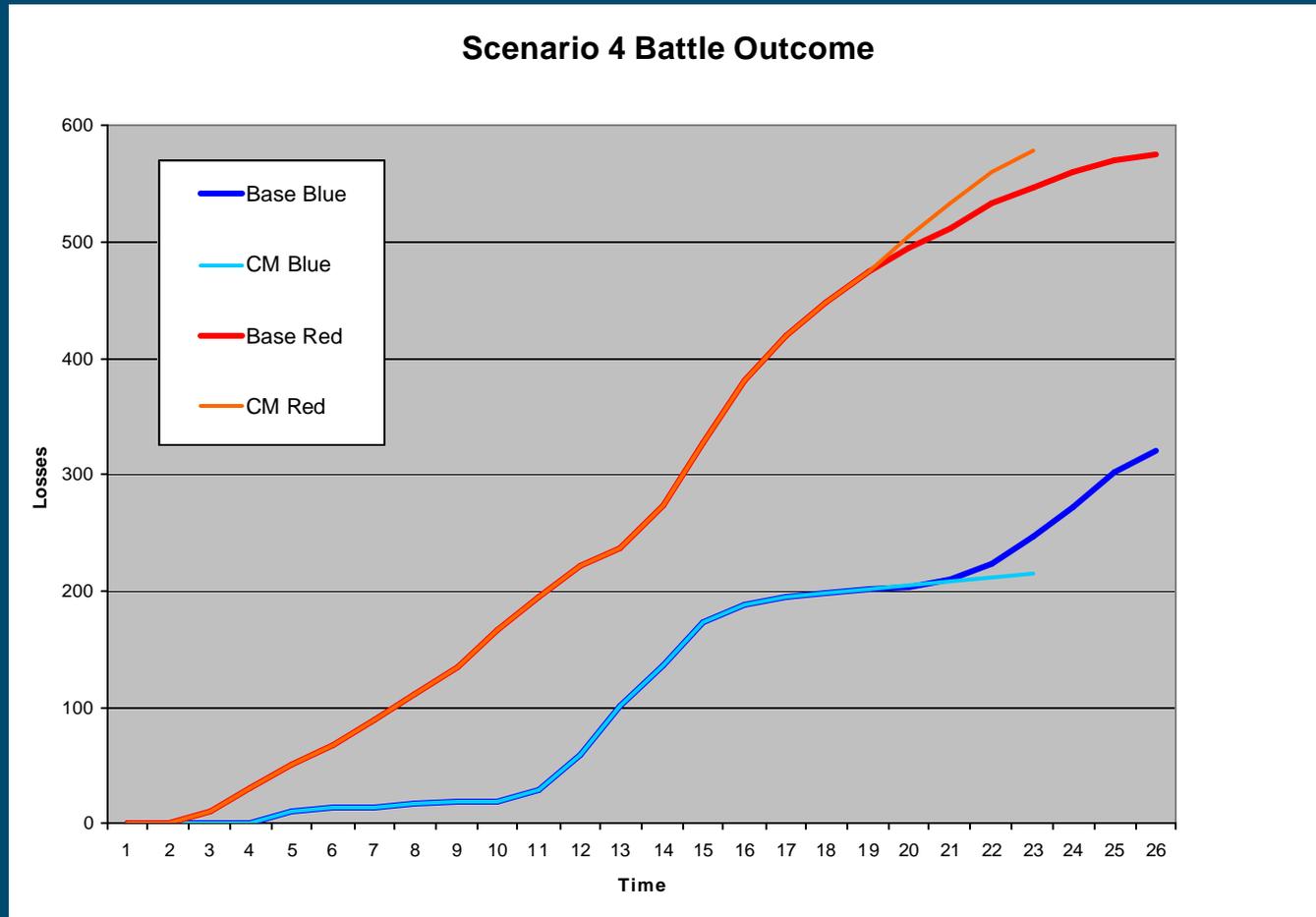


120mm ammunition expenditure



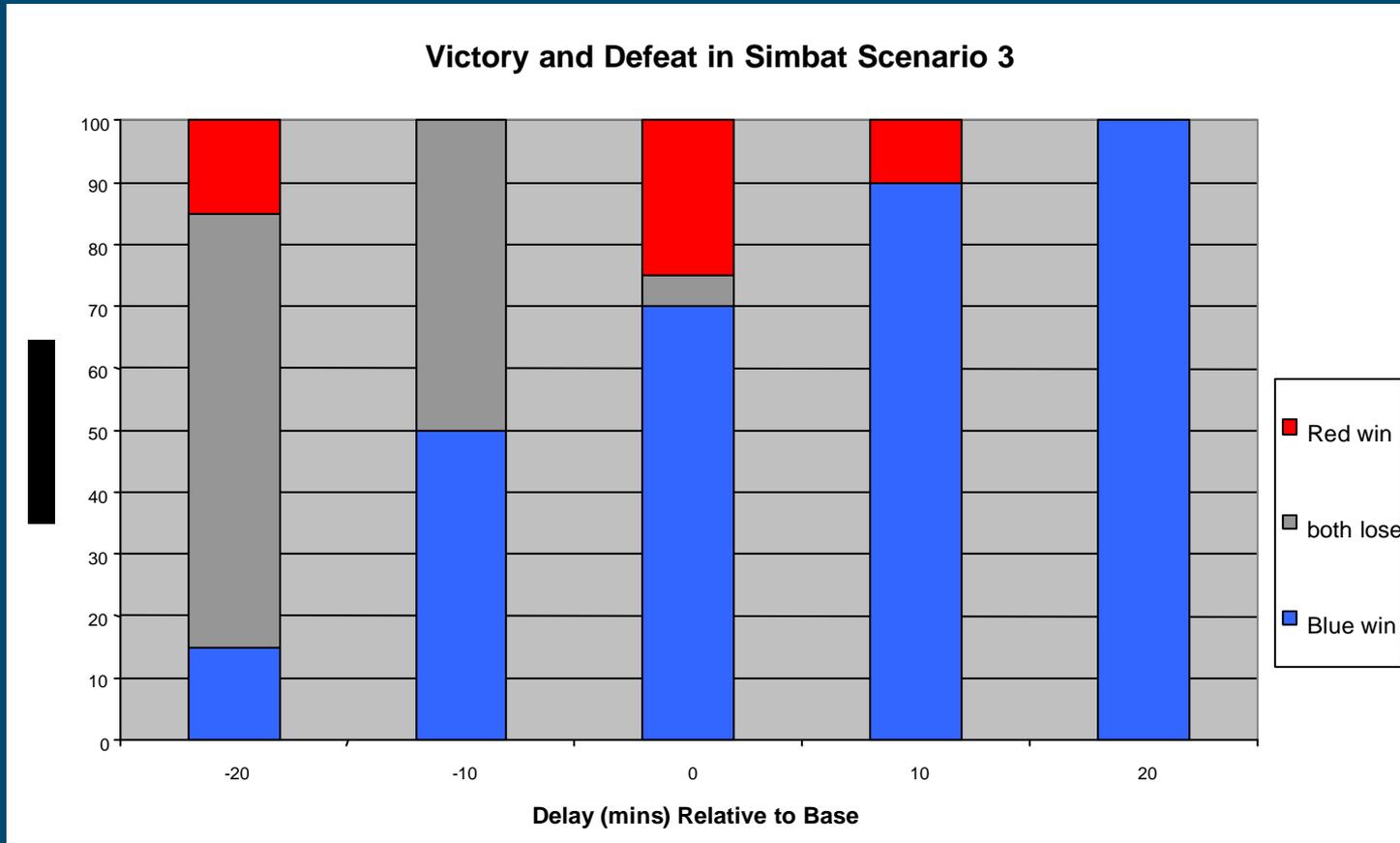
PROTECTION

- ADW protected AMA from interference by enemy recce (MWG)
- Mines protect MSR or landings (MWG; CLASS)



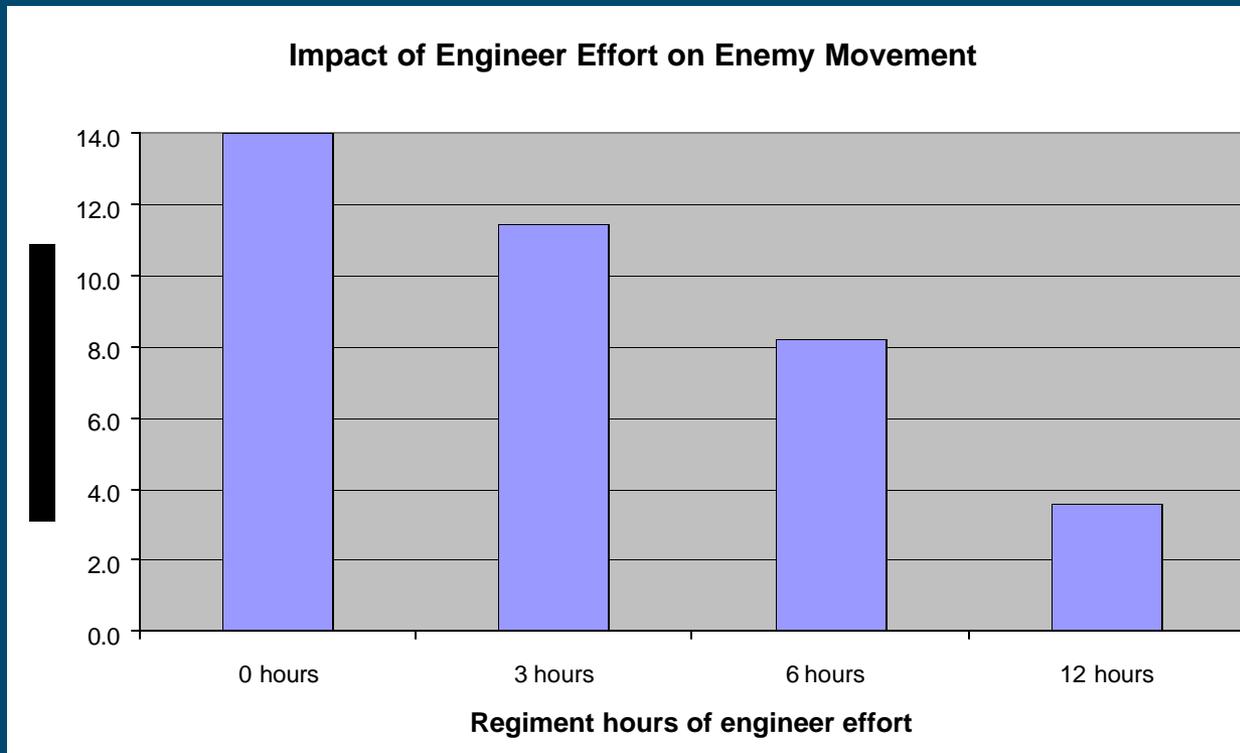
COMMAND

- CM improves relative tempo (MWG, 50-150%; Janus)
- Timing can be critical, especially in more mobile operations



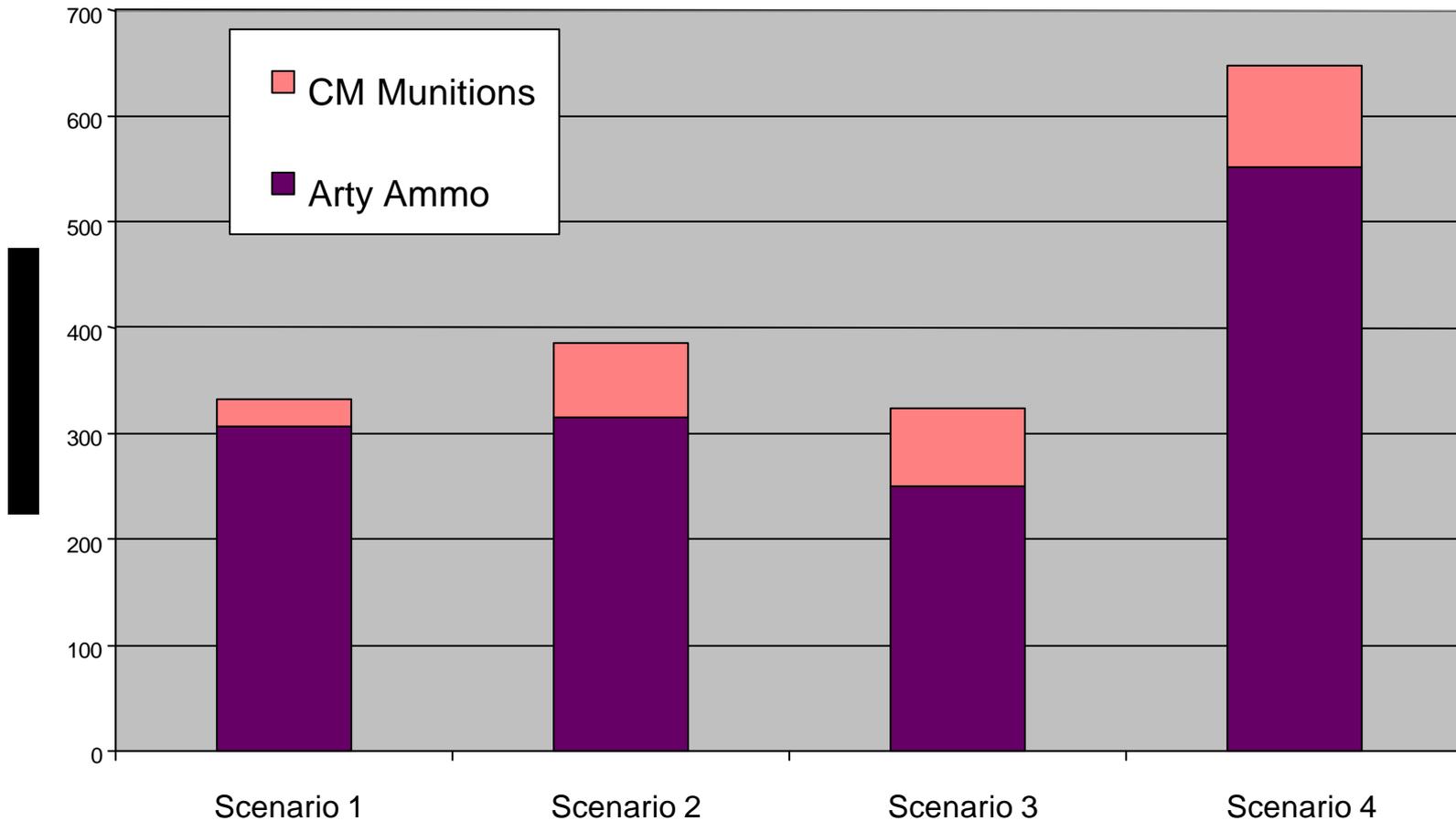
COMMAND

- CM is an investment of effort to provide later battle impact
 - Example 1: 4.6 h by squadron(+) delays division by 3 h
 - Example 2: 6 h by a regiment delays division by 2.3 h
 - Example 3: 1 h by a regiment delays brigade(+) by 45 mins



COMBAT SERVICE SUPPORT

Comparison of Logistic Lift



OVERVIEW OF COUNTERMOBILITY IMPACT

- In depth CM affect the rate of enemy movement, this:
 - buys decision making time
 - fixes targets and improves firing opportunities
- In close battle CM:
 - blocks or severely delays
 - protects rear
 - reduces enemy intelligence
 - reduces Blue casualties