

RAPID SEMIAUTOMATIC FIRE AND THE ASSAULT RIFLE.

FIRING RATE VERSUS ACCURACY

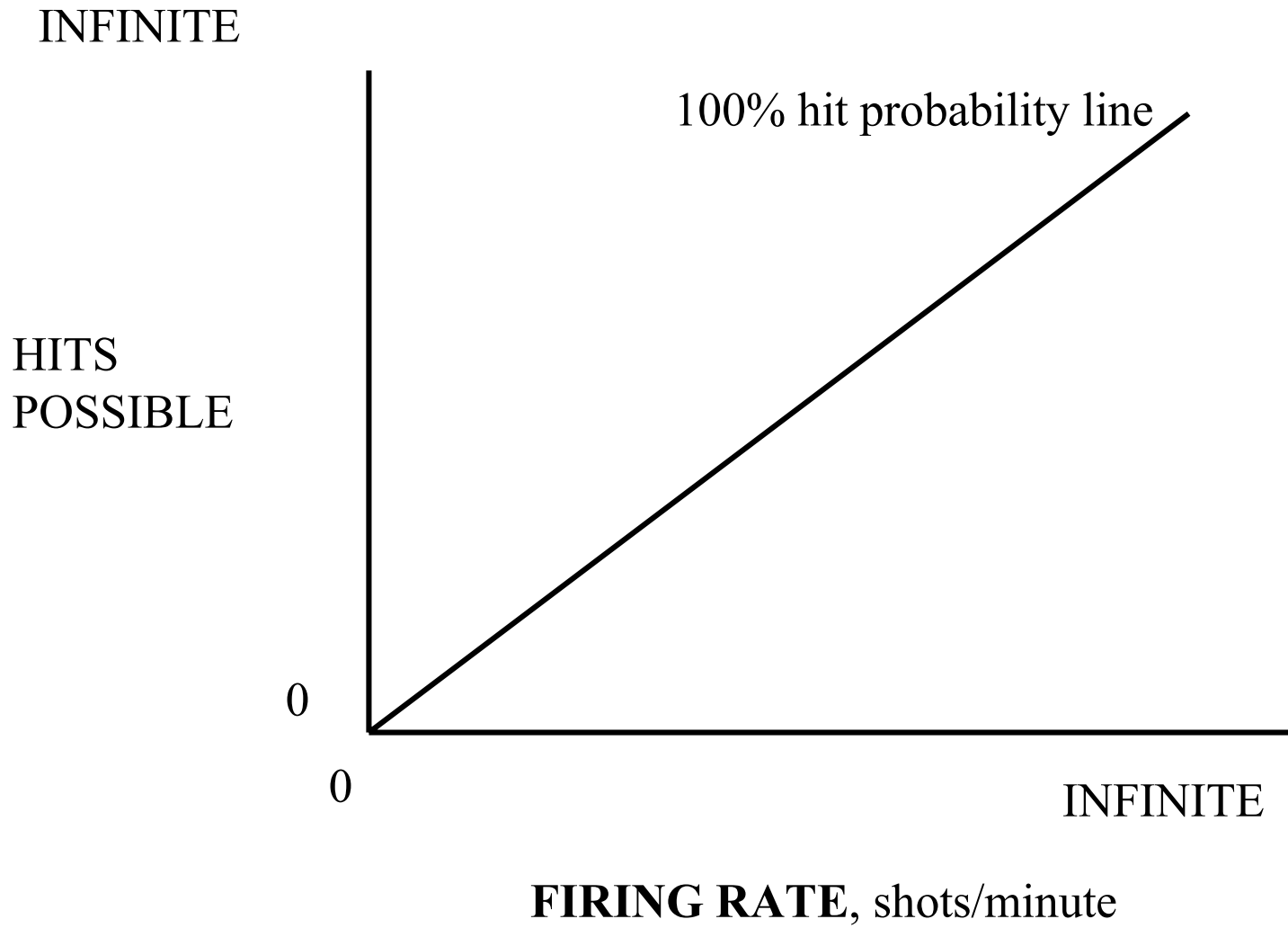
LIEUTENANT COLONEL MARK A. WESTROM USAR (RET)

Report Documentation Page

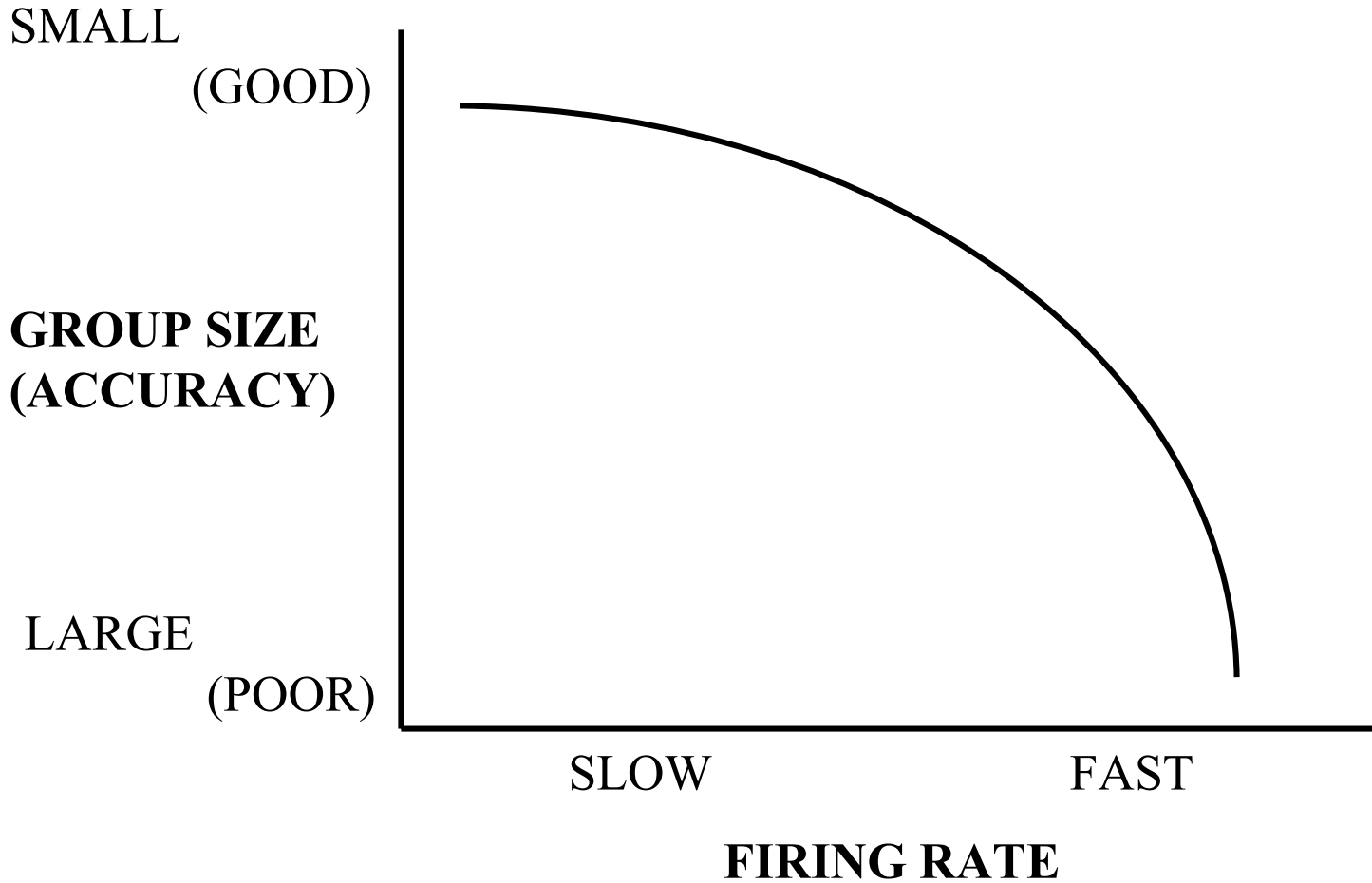
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OVERVIEW

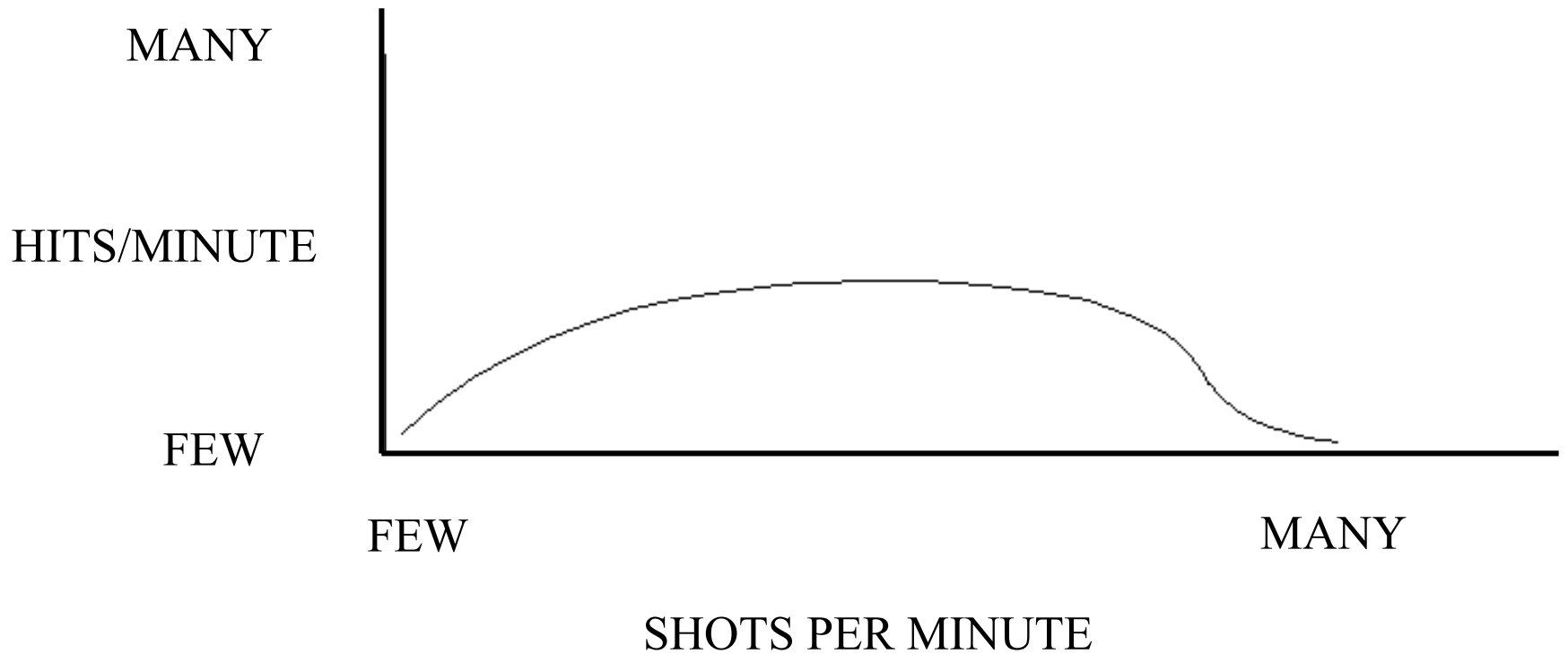
- **THE CLASSIC CONTROVERSY: SPEED VS ACCURACY**
- **MARKSMANSHIP DOCTRINE: FORCES OF CHANGE**
- **A MODEL OF FIRING SPEED**
- **THE IMPLICATIONS OF RAPID SEMIAUTOMATIC FIRE**
- **CONCLUSIONS AND RECOMMENDATIONS**



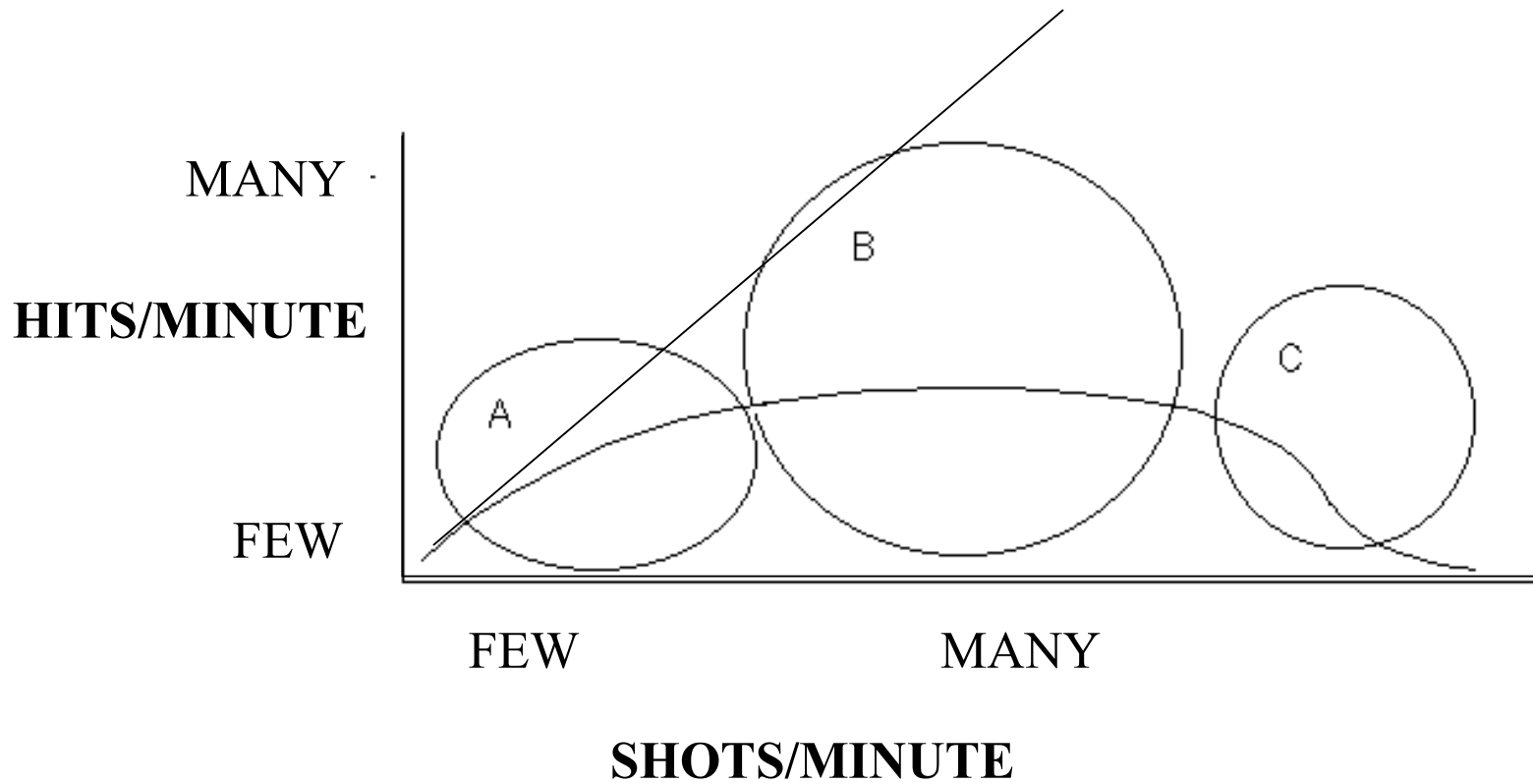
HITS POSSIBLE VERSUS SHOTS FIRED



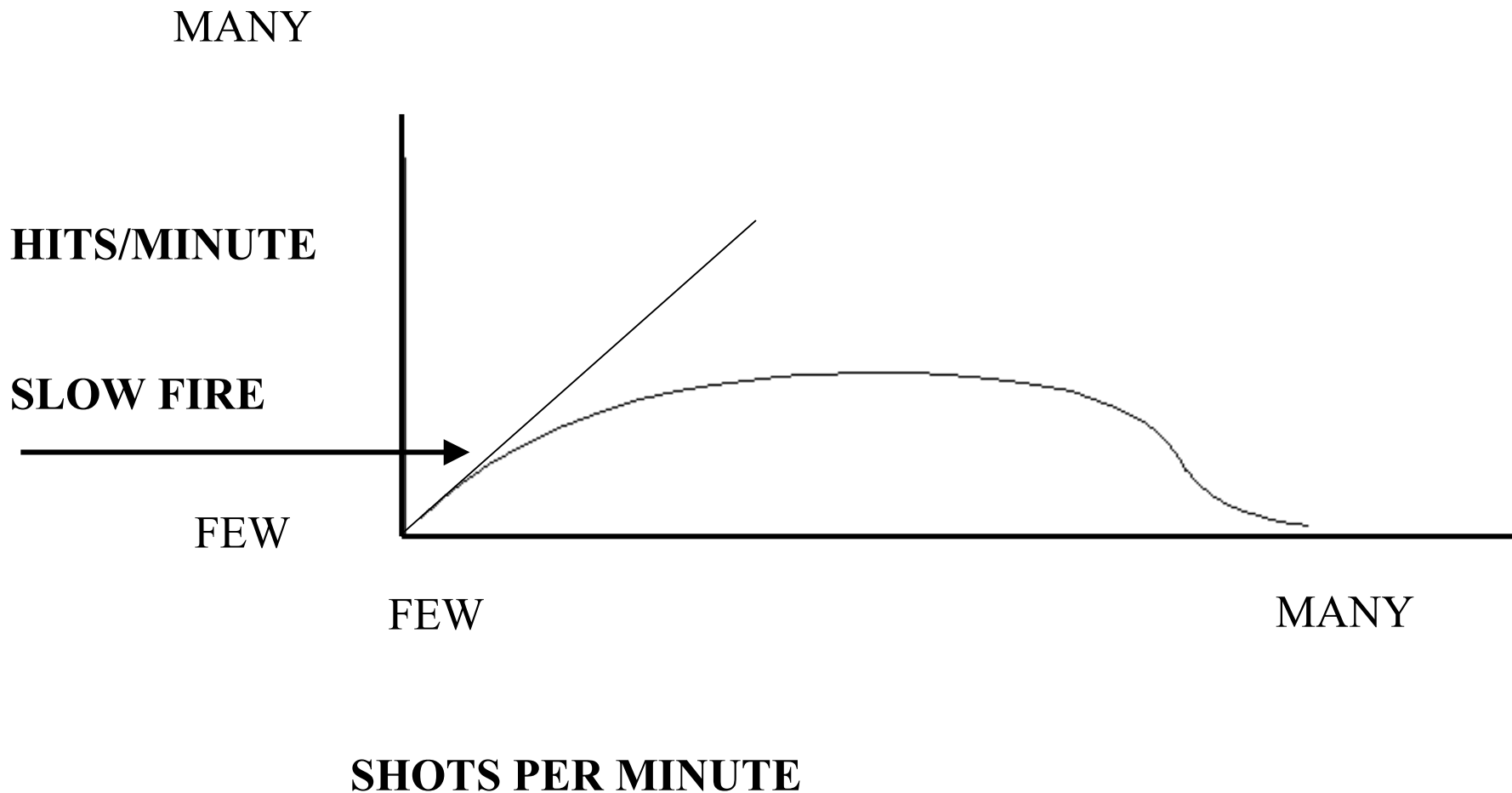
ACCURACY VERSUS FIRING RATE



HITS VERSUS SHOTS FIRED IN A GIVEN TIME PERIOD
A DEGRADING SYSTEM

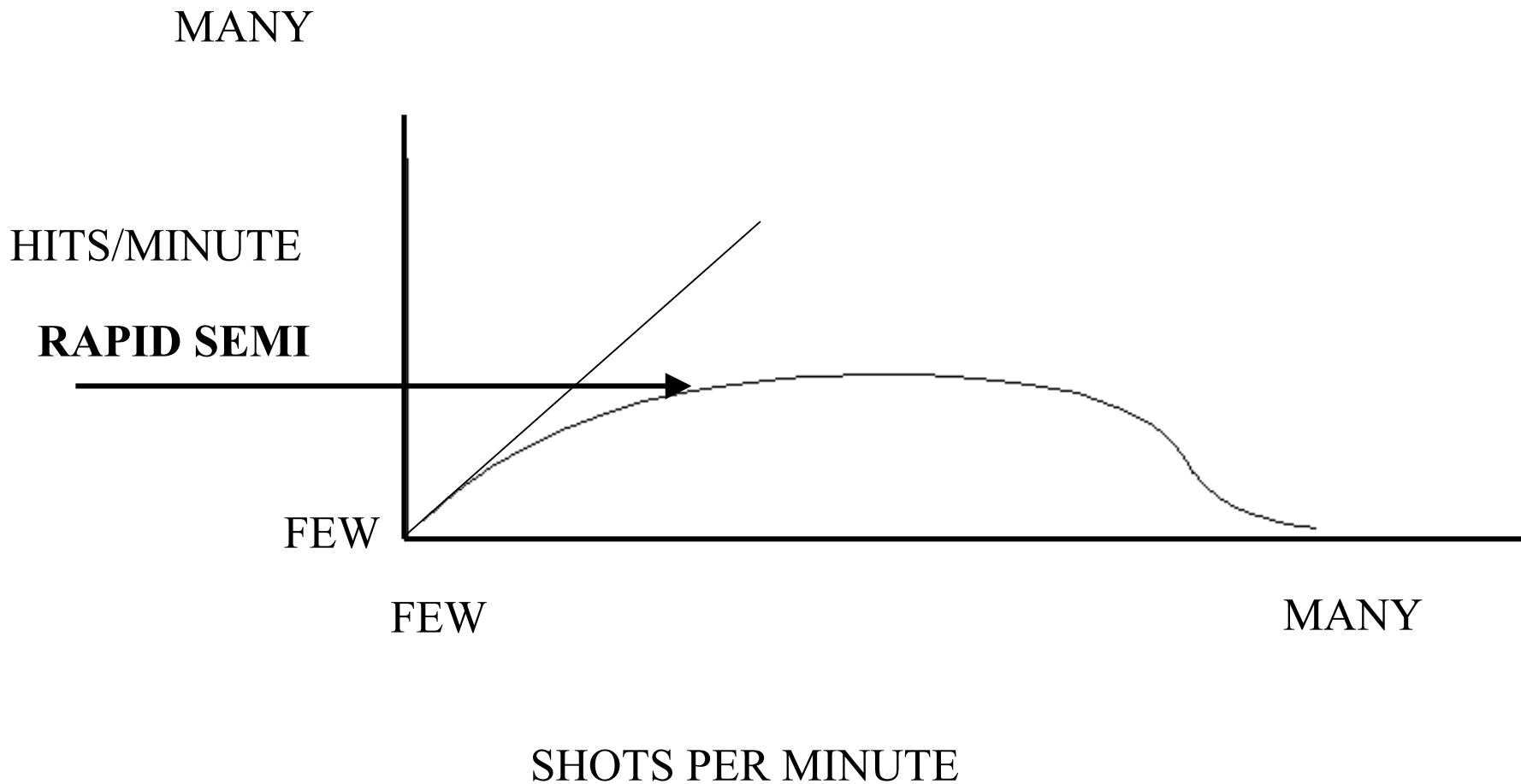


AREAS OF INTEREST



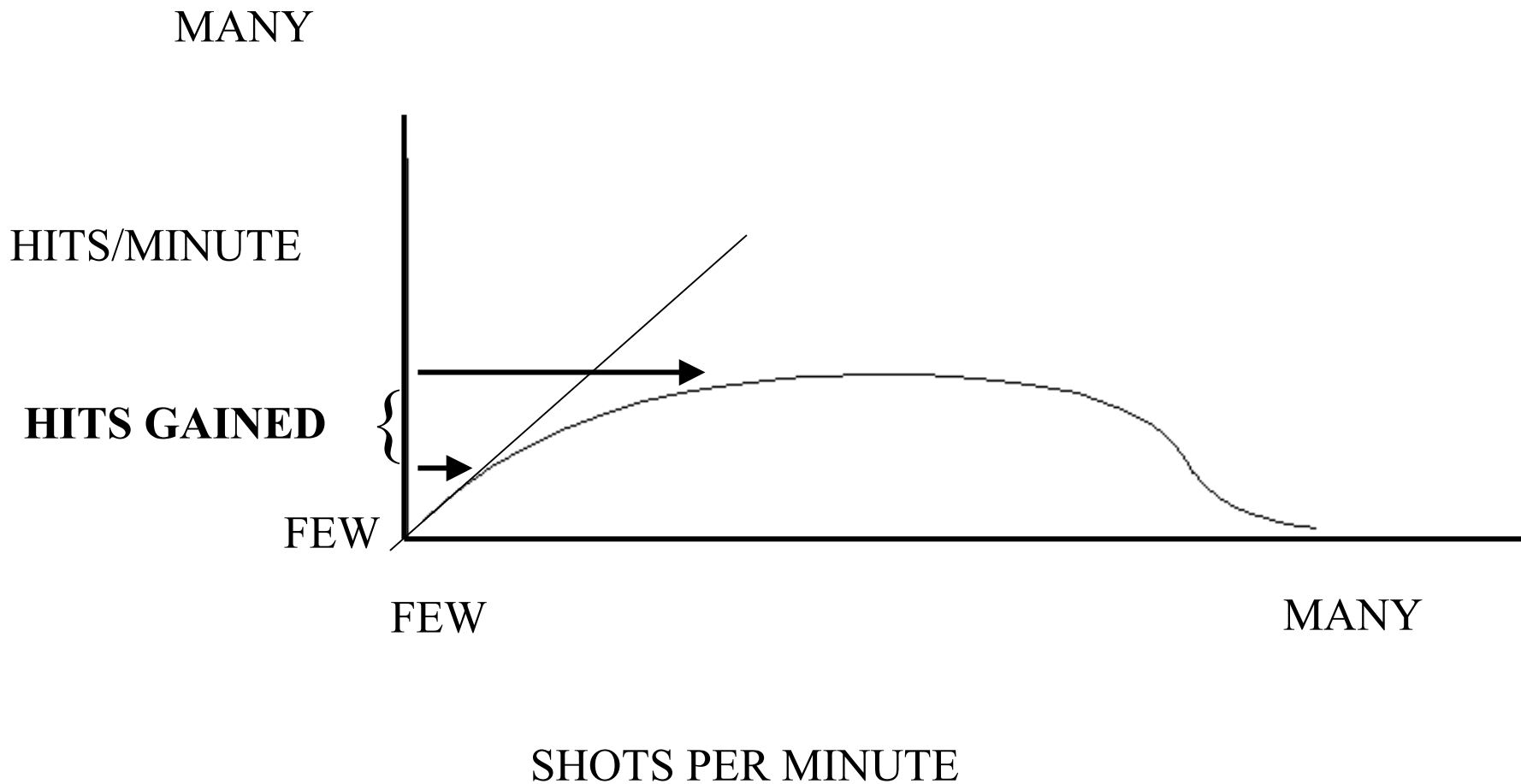
THE SNIPER OR TARGET SHOOTER'S SHOT RATE CURVE

“ONE SHOT, ONE HIT”

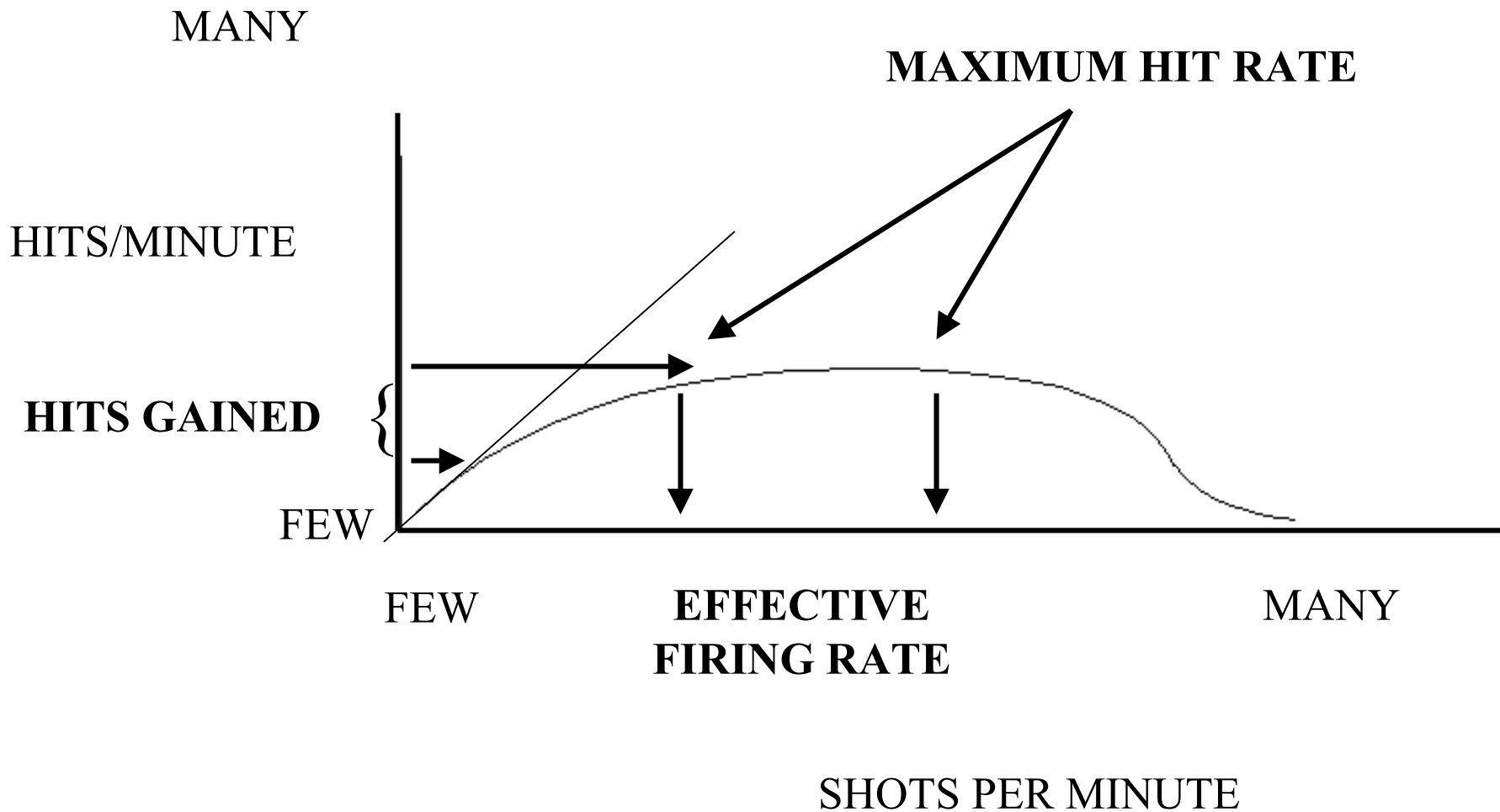


THE RAPID SAMIAUTOMATIC SHOT RATE CURVE

“SEVERAL SHOTS, MORE HITS”

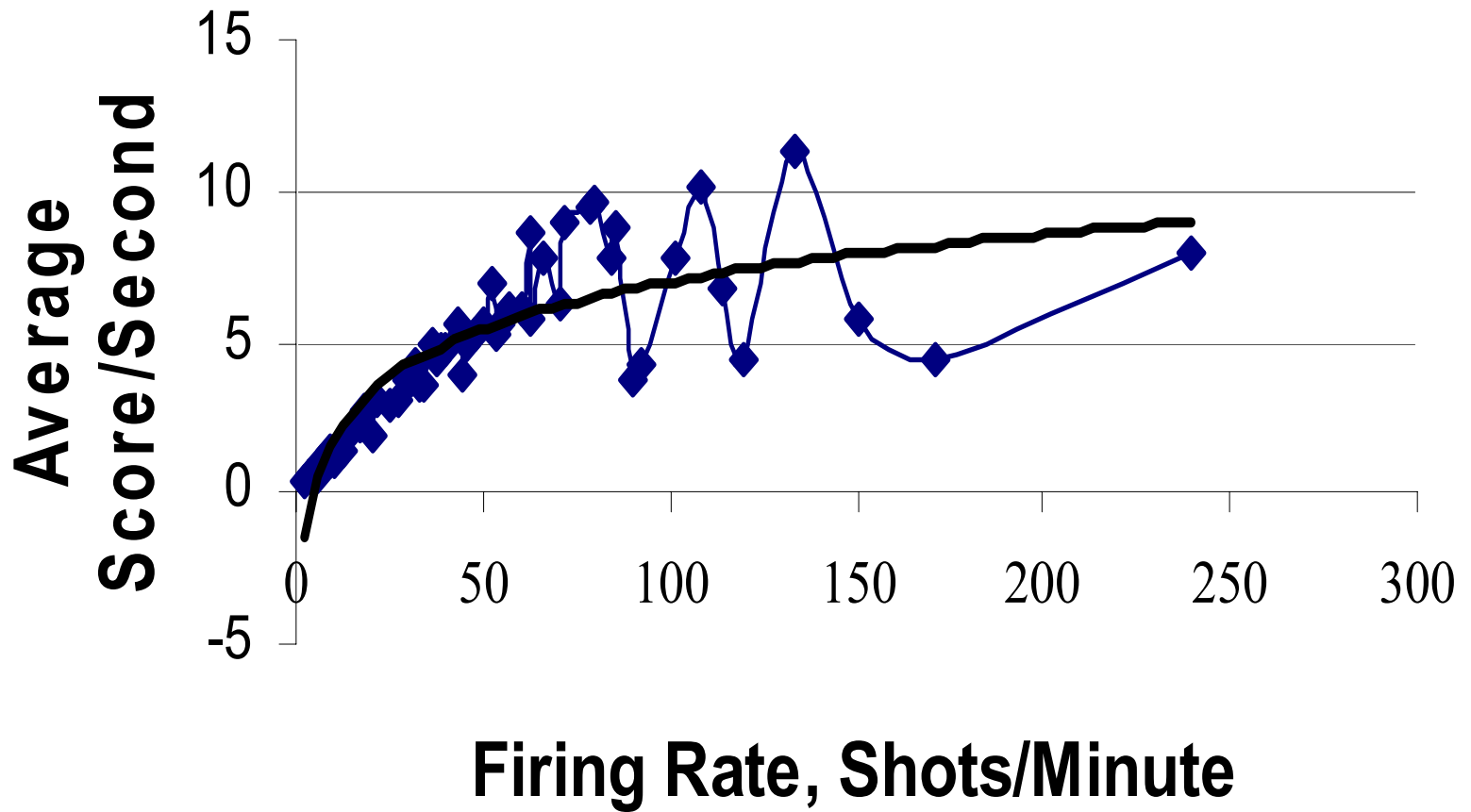


HITS GAINED BY INCREASING RATE OF FIRE

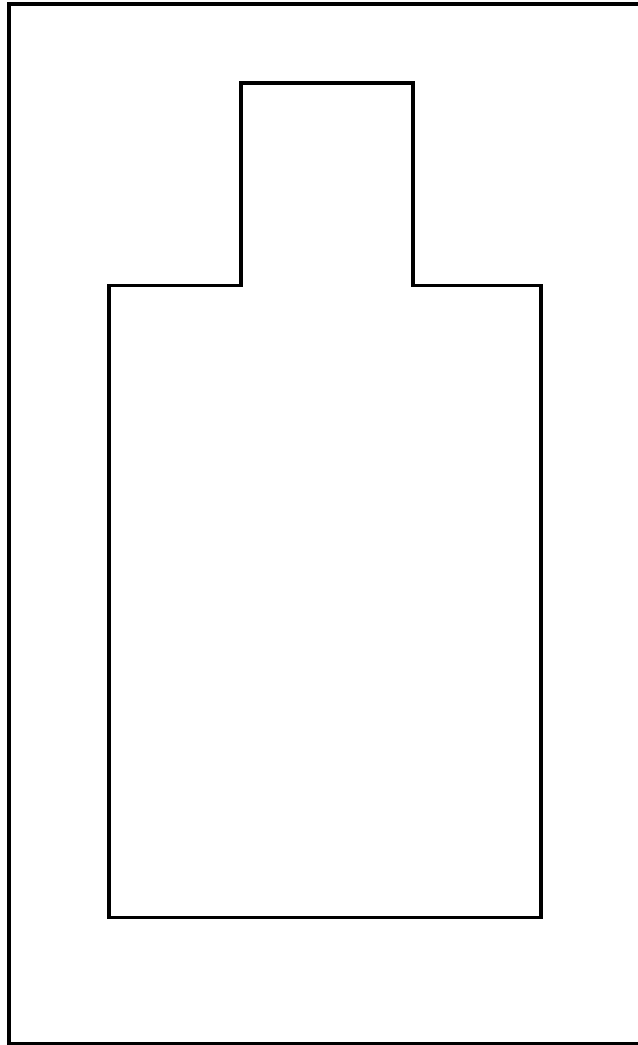


EXPERIMENTAL DATA

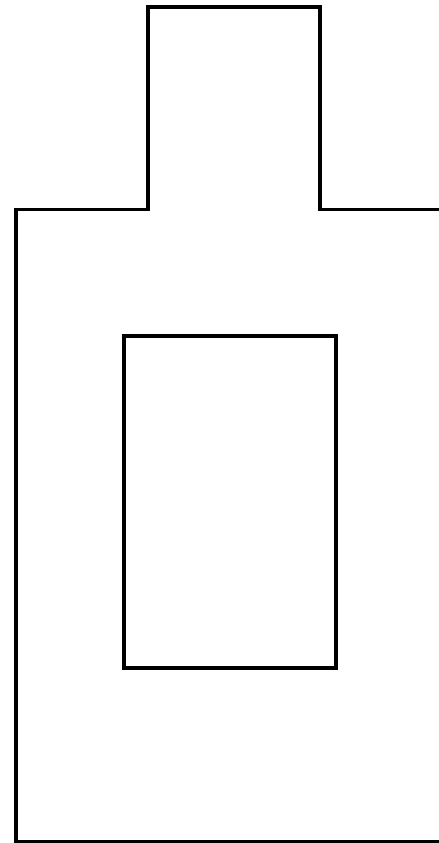
Intended Firing Rate	Average points/sec	Average points/shot	Actual firing rate shots/min
Unlimited (slow fire)	1.37	7.38	11.59
30 shots per minute	4.56	6.89	39.65
40 shots per minute	5.55	6.46	51.71
60 Shots per minute	6.26	5.77	66.60
120 Shots per minute	7.29	3.56	125.30



POINTS PER SECOND VS. FIRING RATE

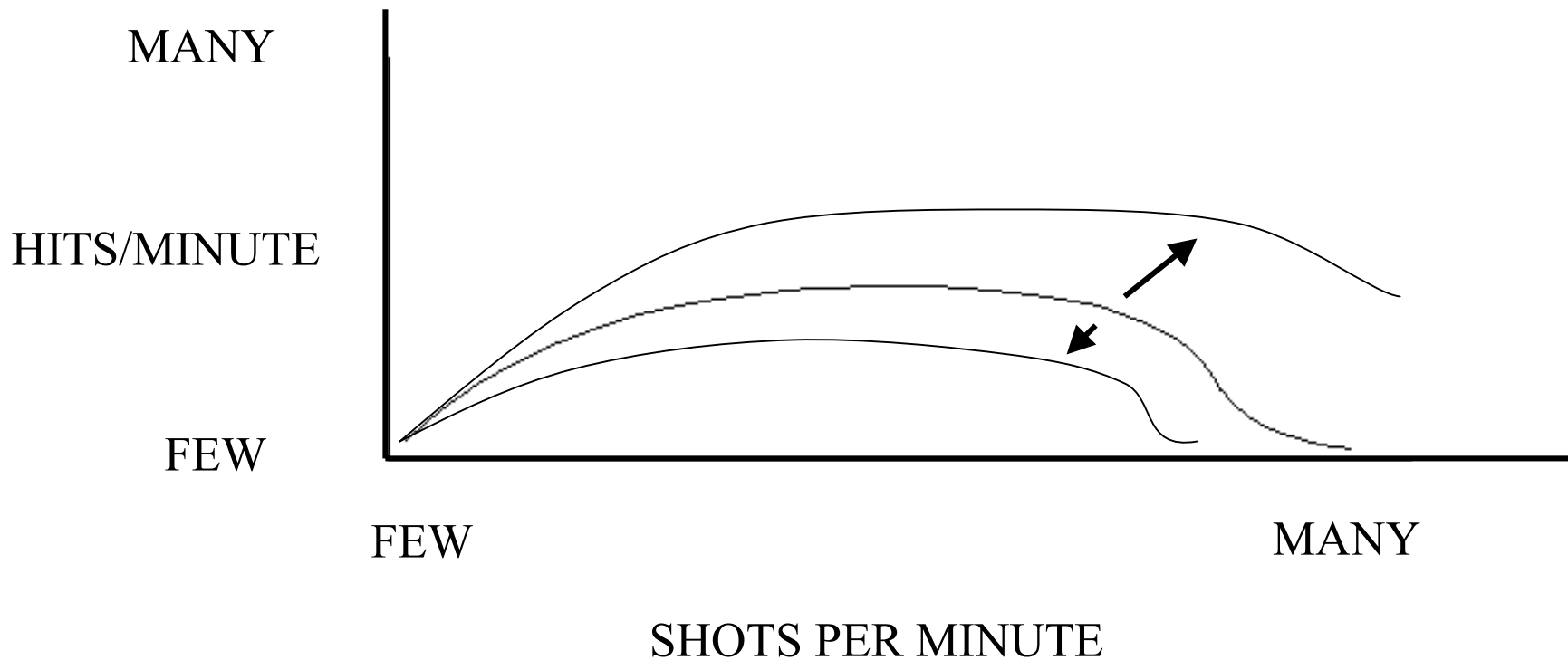


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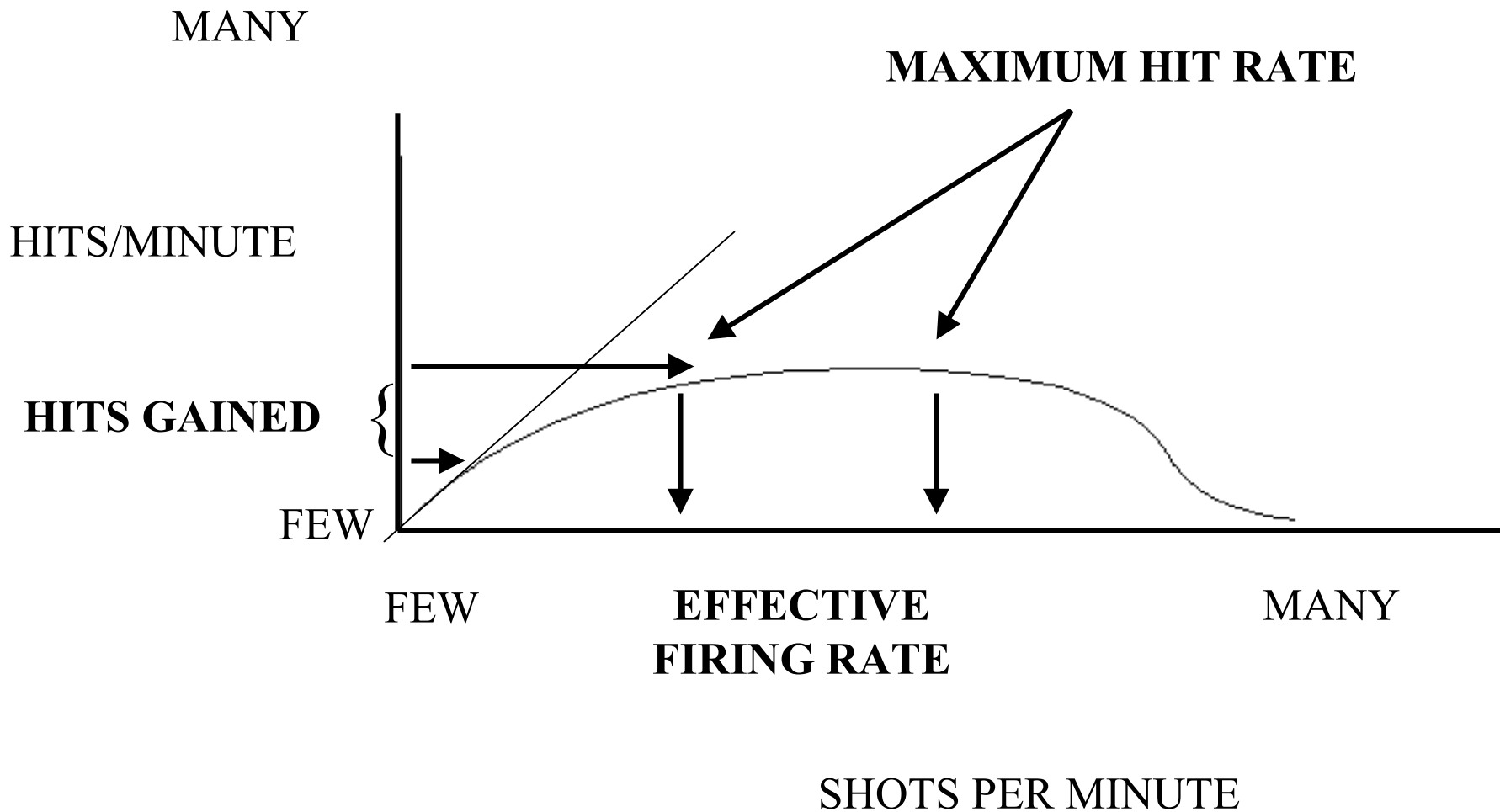


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THE TARGET AND THE WINDOW



EFFECT OF CHANGE



1. Make Disciplined, *Rapid Semiautomatic fire the close-combat norm.*

2. Raise the Curve