AT THE FIGHTING ECHELONS: COMPUTATIONAL POWER IS RAPIDLY OUTPACING COMMUNICATIONS POWER

LOOK AT THE RATIO OF COMPUTING POWER TO COMMUNICATIONS POWER:

COMMERCIAL VS TACTICAL COMMUNICATIONS				
COMPUTER	(MFLOPS)*	COMM SYS.	(Mbps)**	RATIO (MFLOPS/Mbps)
HP9000	(110)	FDDI	(100)	1.1
SUN SPARC−20	(82)	Ethernet	(10)	8.2
PENTIUM−90	(100)	Ethernet	(10)	10
PENTIUM−90	(100)	SINCGARS***	(.0096)	10,400
PC w/ 486−66	(70)	SINCGARS	(.0096)	7,290

* Based on SPECint92 ratings − value is number of times faster than a VAX 780 which is Approx 1 MFLOP.
** Raw Bit Rate
*** For SINCGARS, Value is Fastest Data Rate. (There are 70,000+ SINCGARS Fielded at a Cost of > One Billion Dollars .)

CONCLUSION: FOR BATTLE COMMAND AT THE FIGHTING ECHELONS, WARRIORS NEED TO DEPEND MORE ON COMPUTING POWER AND LESS ON COMMUNICATIONS POWER.