

EQUIPPING THE WARFIGHTER TO WIN

Brief to Small Business



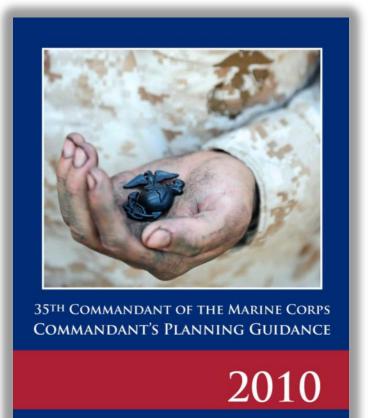
Jim Smerchansky

Deputy Commander Systems Engineering, Interoperability, Architecture & Technology Marine Corps Systems Command

Commandant's Priorities



EQUIPPING THE WARFIGHTER TO WIN



- We will continue to provide the best trained and equipped Marine units to Afghanistan. This will not change. This remains our top priority!
- We will rebalance our Corps, posture it for the future and aggressively experiment with and implement new capabilities and organizations.
- We will better educate and train our Marines to succeed in distributed operations and increasingly complex environments.
- We will keep faith with our Marines, our Sailors and our families.

The objective is to allow Marines to travel lighter, with less, and move faster through the reduction in size and amount of equipment and the dependence on bulk supplies. - Gen Amos, 35th Commandant's Planning Guidance



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OPPORTUNITIES

Reduce Weight

Reduce Energy

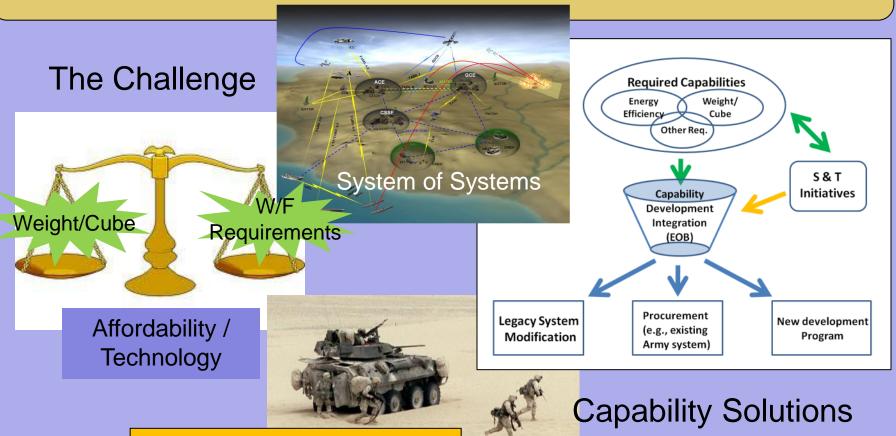
Reduce Cost

Lighten the MAGTF



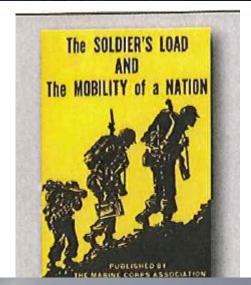
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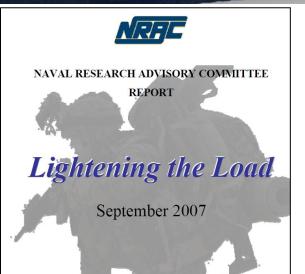
"We will rebalance our Corps, posture it for the future and aggressively experiment with and implement new capabilities and organizations."



Create the Middleweight MAGTF within Affordability Constraints

Combat Weight of Marines







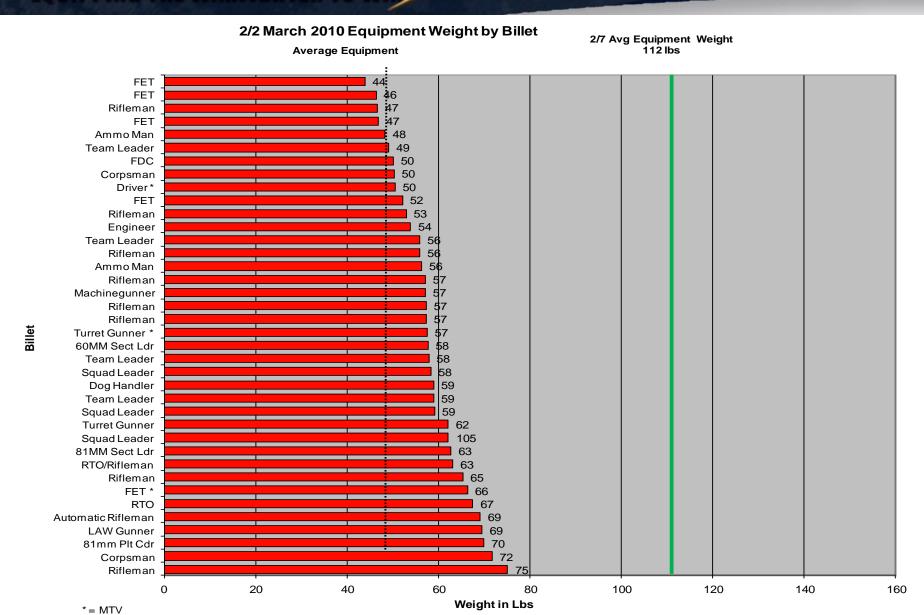




2nd Bn 7th Marines

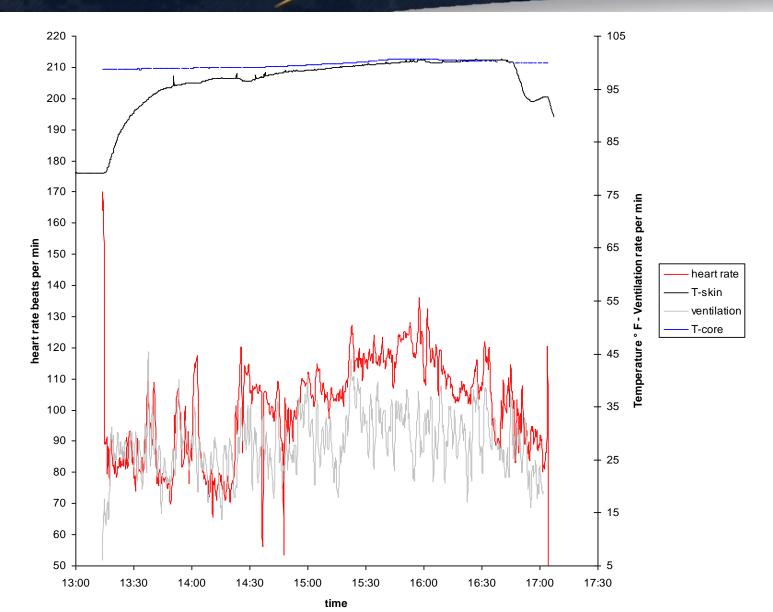






Heat Strain 1st Bn 9th Marines





Thermal Heat Strain









Energy Efficiency











Systems Approach



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CURRENT

Fuel Used	Generator	ECU	Shelter
1.22 gal/hr	15 kW	96,000 BTU/hr	R-2 Insulation
14 kW load	MEP-804A TQG	B0010 model	Base X 305

FUTURE

Fuel Used	Generator	ECU	Shelter
0.52 gal/hr	10 kW	60,000 BTU/hr	R-4 Insulation
9.3 kW load	MEP-1030 AMMPS	ECU 2014 model	Base X 305 w/ Liner

57% Reduction in Fuel Demand



25% Efficiency gain in Power Generation



15% Reduction in Power Demand



33% Reduction in Cooling Demand

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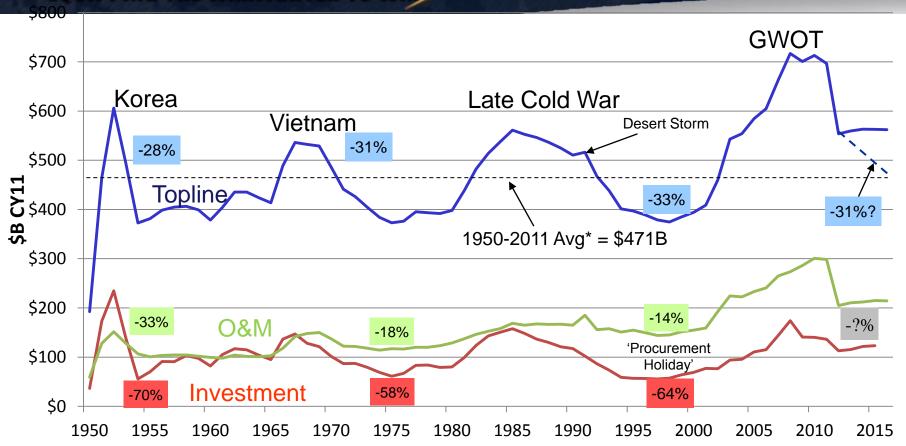
Energy and Small Business





DoD Post-War Spending Patterns





- Recent top line drawdowns average~30%
- Procurement (Investment) accounts take disproportionate hits, e.g., 14%
 (O&M) vs. 64% (Investment) in post Cold War era

MARINE GORPS SYSTEMS COMMAND Additional Pressures

Costs are rising



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Cost to Equip Individual Marine

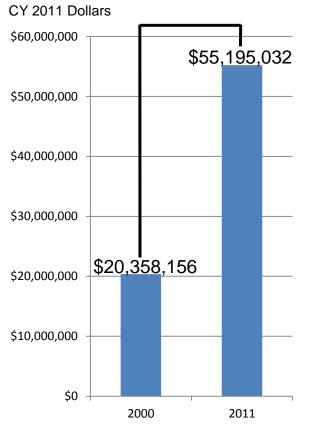
After accounting for inflation the cost today is 6.4 times the cost of equipping an individual Marine in 2000.

CY 2011 Dollars



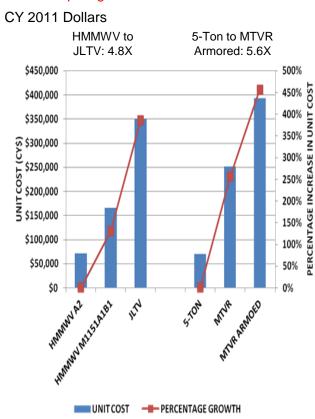
Cost to Equip Inf. Bn

After accounting for inflation the cost today is 2.7 times the cost of equipping an Inf. Bn. in 2000.



Cost of Combat and Tactical Vehicles

After accounting for inflation the cost today is 5.2 times the cost of acquiring combat/tact vehicles in 2000.



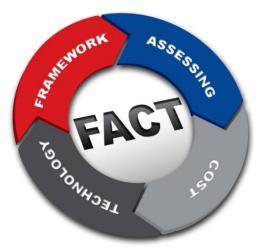
MARINE GORPS SYSTEMS COMMAND Cost & Performance Tool/Process

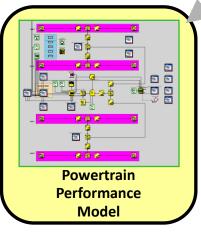
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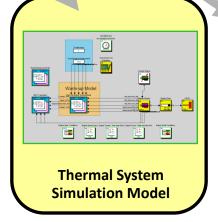


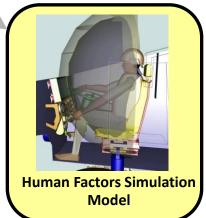










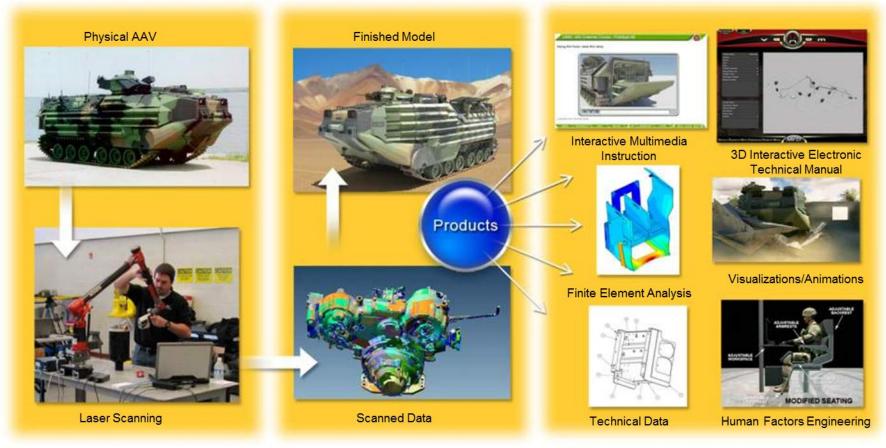


Understand How Requirements Effect Cost - Optimize Design



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Legacy Platform /Service Life Extension Program (SLEP) Capability



Modeling and Simulation based Systems Engineering



MARINE CORPS SYSTEMS COMMAND PROGRAM EXECUTIVE OFFICER LAND SYSTEMS





"Give these guys a mission, some leadership, a little chow, lots of ammunition, and then stand back..."