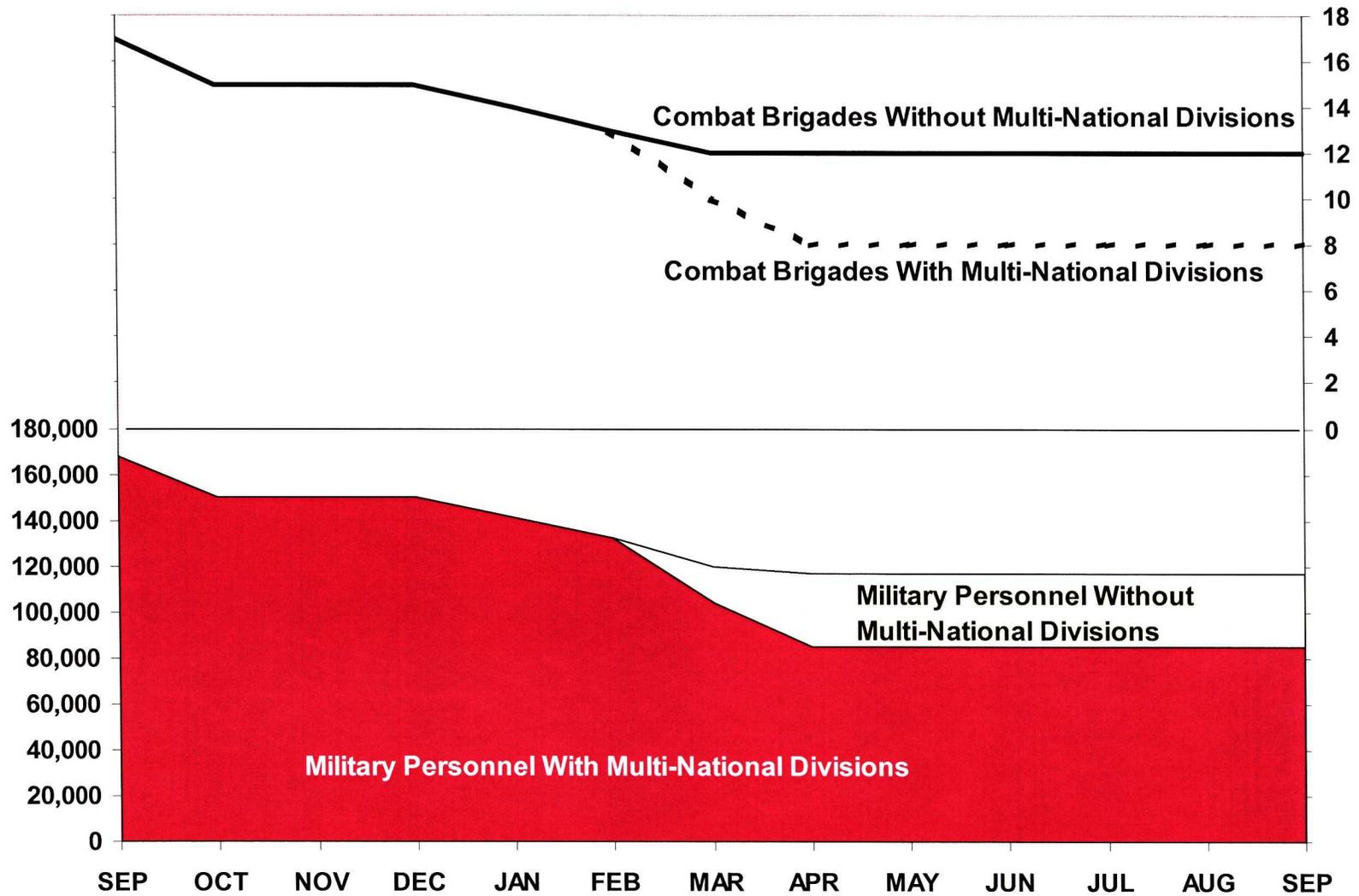


The Army's July 2003 Plan for Using Unit Rotation to Occupy Iraq

Unit Now in Iraq	Planned Replacement Unit	Projected Transition Date	
3 rd Infantry Division(-)	82 nd Airborne Division(-)	September 2003	} Completed
1 st Marine Division	Polish Multinational Division	September/October 2003	
2 nd Brigade, 82 nd Airborne Division	None	January 2004	
101 st Air Assault Division	Multinational Division	February/March 2004	
1 st Armored Division	1 st Cavalry Division and National Guard Brigade	February/April 2004	
2 nd Cavalry Regiment	Brigade from 1 st Cavalry Division	March/April 2004	
3 rd Armored Cavalry Regiment	Stryker Brigade	March/April 2004	
4 th Infantry Division	1 st Infantry Division(-) and National Guard Brigade	March/April 2004	
173 rd Airborne Brigade	None	April 2004	

CBO Projection of U.S. Ground Force Levels in Iraq Theater During Fiscal Year 2004: With and Without 3rd and 4th Multi-National Divisions



Unit Rotation

Unit rotation used to establish a deploy-recover-prepare cycle
Preserves training and readiness
Limits family separation and involuntary mobilization

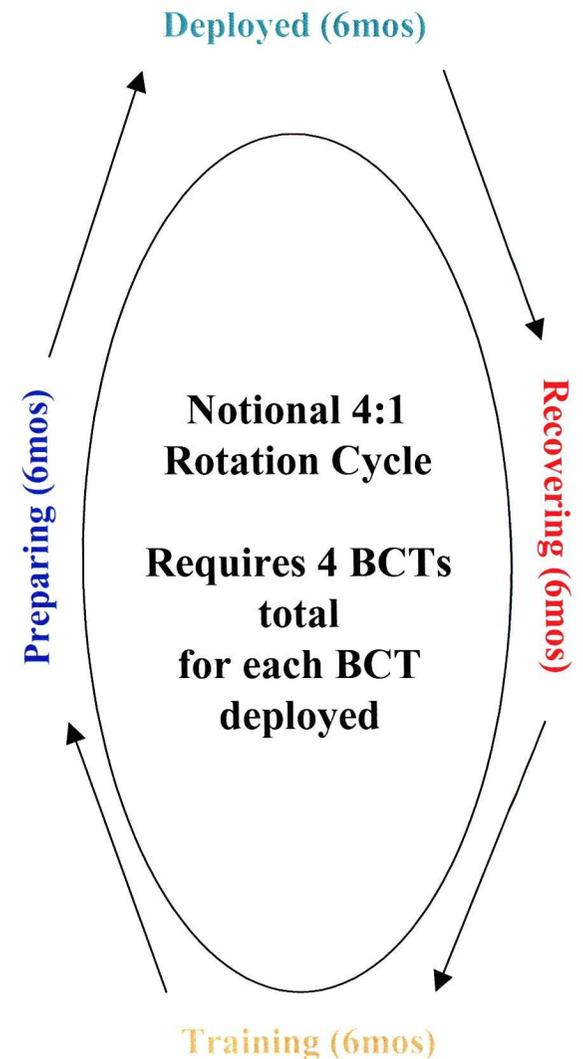
Often expressed as a ratio, i.e. 3:1, or 4:1

Example, using notional 4:1 “rotation ratio”:

- To keep one BCT deployed, four BCTs are needed in the “pool”
- The U.S. Army with 33 BCTs could keep 8+ deployed

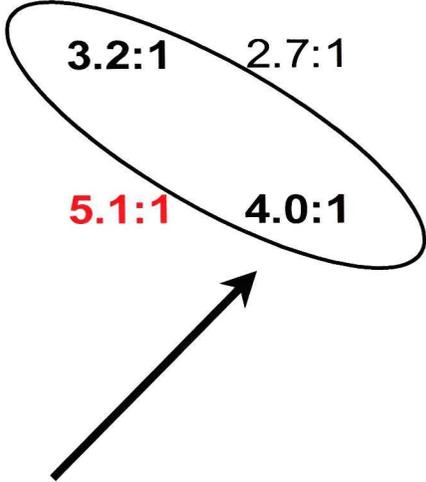
New DoD notation expresses days not deployed : days deployed

- Recent change
- Same analytical concept
- DoD’s new ratios always 1 less than CBO’s
CBO’s 4:1 is the same as DoD’s 3:1



Deployment Tempo (DEPTEMPO) and Rotation Ratios

	Limitations on Time Deployed	Efficiency	
		80%*	100%**
Maximum With Training and Leave →	Max deployed = 335 days Allows for 30 days leave Includes 63 days training	1.7:1	1.3:1
2001 NDAA Threshold →	Max deployed = 200 days Includes 63 days training	3.2:1	2.7:1
RAND Conservative Estimate →	Max operationally deployed = 91 days Allows 270 days for training, leave, etc per RAND*** report	5.1:1	4.0:1



CBO used mid-range rotation ratios for analysis. Red values were used for excursions to examine effects of very aggressive, and very conservative DEPTEMPO levels

*80% Efficiency derived from RAND work, represents “actual” efficiency of Army deployments

**100% Efficiency is maximum theoretical, represents “best case scenario” for Army deployment

***See W. Michael Hix et al., *Personnel Turbulence: The Policy Determinants of Permanent Change of Station Moves* (Santa Monica, Calif: RAND, 1998).

**Options and Costs for Sustaining a U.S. Military Occupation of Iraq:
Occupation Using Active Army Only**

Option	Combat Brigades in Iraq	Combat Brigades Immediately Available for Other Missions	Total Military Personnel in Iraq	Reserve- Component Personnel Mobilized for Iraq	Annual Cost (Billions of 2004 Dollars)
Use Only Active Army Combat Units	3 to 5½	23½ to 18	38,000 to 64,000	26,000 to 37,000	8.0 to 11.6

Options and Costs for Sustaining a U.S. Military Occupation of Iraq:

Options to Use Other Existing Forces

Option	Combat Brigades in Iraq	Combat Brigades Immediately Available for Other Missions	Total Military Personnel in Iraq	Reserve- Component Personnel Mobilized for Iraq	Annual Cost (Billions of 2004 Dollars)
Use Only					
Active Army Combat Units	3 to 5 $\frac{2}{3}$	23 $\frac{1}{3}$ to 18	38,000 to 64,000	26,000 to 37,000	8.0 to 11.6
Maintain No Rapid Reaction Forces	+1 to 1 $\frac{1}{3}$	- 2 $\frac{1}{3}$ to 2 $\frac{2}{3}$	+10,000 to 12,000	+6,000 to 7,000	+1.7 to 2.0
Employ Army National Guard Combat Units	+1 $\frac{2}{3}$ to 2 $\frac{1}{3}$	No change	+8,000 to 11,000	+11,000 to 13,000	+1.9 to 2.2
Employ Army Special-Forces	No change	No change	+2,000 to 3,000	+1,000	+0.3 to 0.4
Employ Active Marine Corps	+ $\frac{1}{3}$ to 1	- 1 to 1 $\frac{2}{3}$	+6,000 to 12,000	+3,000 to 5,000	+1.0 to 1.9
Employ Marine Corps Reserve	+ $\frac{1}{3}$	No change	+4,000 to 5,000	+5,000	+0.9
Subtotal	6$\frac{2}{3}$ to 10$\frac{2}{3}$	20$\frac{1}{3}$ to 13$\frac{2}{3}$	67,000 to 106,000	53,000 to 69,000	13.9 to 19.0

Options and Costs for Sustaining a U.S. Military Occupation of Iraq:

Options to Expand the Size of the Active Army (Using All Existing Forces)

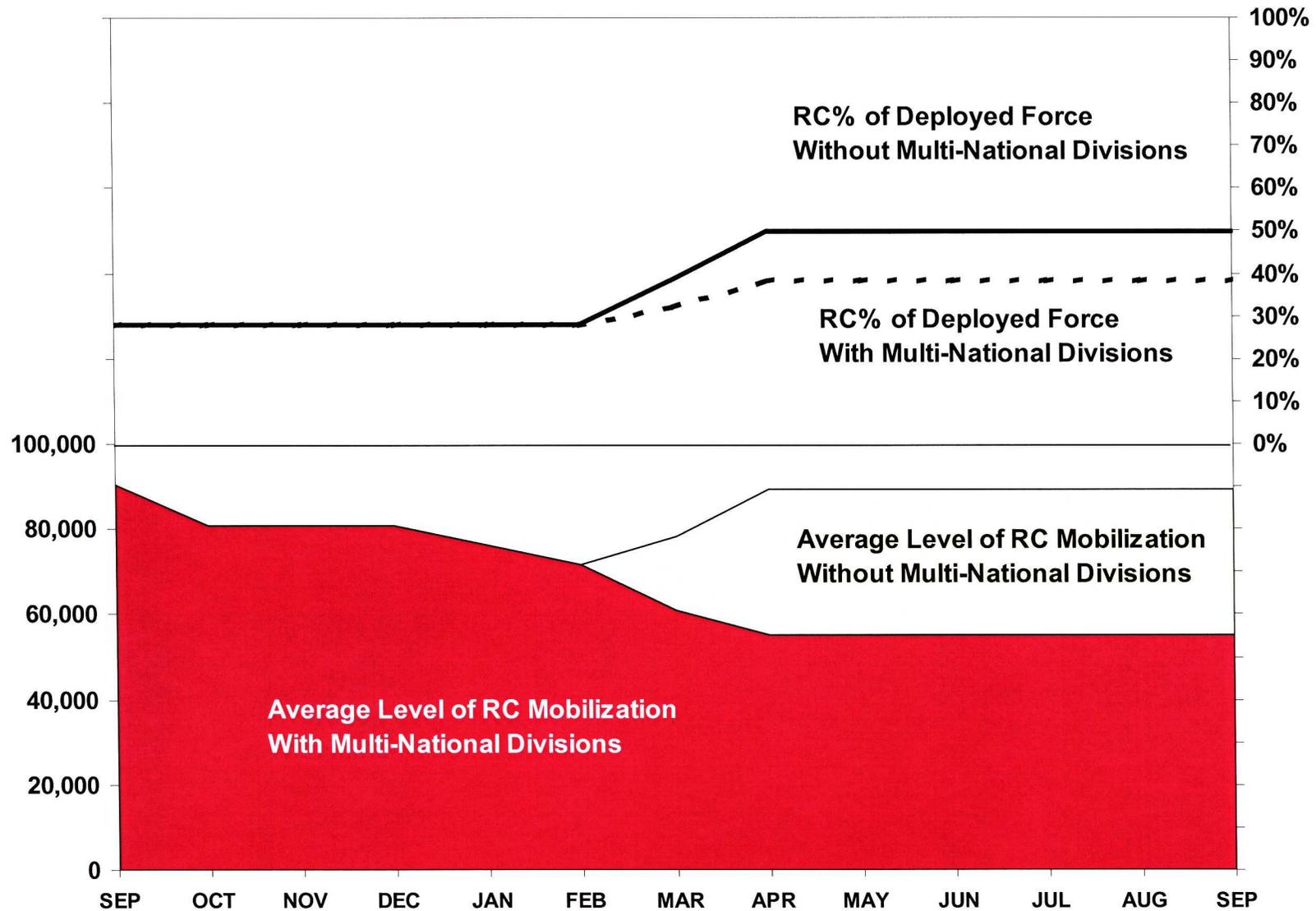
Option	Combat Brigades in Iraq	Combat Brigades Immediately Available for Other Missions	Total Military Personnel in Iraq	Reserve- Component Personnel Mobilized for Iraq	Cost (Billions of 2004 Dollars)	
					Annual	Up Front
All Existing Forces	6 $\frac{2}{3}$ to 10 $\frac{2}{3}$	20 $\frac{1}{3}$ to 13 $\frac{2}{3}$	67,000 to 106,000	53,000 to 69,000	13.9 to 19.0	n.a.
Two New Divisions (After 5 Years)	+1 $\frac{2}{3}$ to 2	+3 to 2 $\frac{1}{3}$	+18,000 to 23,000	+10,000 to 11,000	9.5 to 10.1	+18.0 to 19.4
Total Occupation -- All Options (After 5 Years)	8 to 12$\frac{2}{3}$	23$\frac{1}{3}$ to 15$\frac{2}{3}$	85,000 to 129,000	62,000 to 80,000	23.4 to 29.0	18.0 to 19.4

Options and Costs for Sustaining a U.S. Military Occupation of Iraq:

Reduce Other U.S. Commitments (Using All Existing Forces)

Option	Combat Brigades in Iraq	Combat Brigades Immediately Available for Other Missions	Total Military Personnel in Iraq	Reserve-Component Personnel Mobilized for Iraq
Using All Existing Forces	6 $\frac{2}{3}$ to 10 $\frac{2}{3}$	20 $\frac{1}{3}$ to 13 $\frac{2}{3}$	67,000 to 106,000	53,000 to 69,000
Sinai	+ $\frac{1}{3}$	No change	+500	+1,000
Bosnia	+1	No change	+3,500	+5,500 to 4,500
Kosovo	+1	No change	+3,500	+5,500 to 4,500
Okinawa	+ $\frac{1}{3}$	+ $\frac{1}{3}$	+3,500 to 4,500	+2,000 to 1,500
Subtotal	9 $\frac{1}{3}$ to 13 $\frac{1}{3}$	20 $\frac{2}{3}$ to 14	79,000 to 118,000	67,000 to 81,000

Reserve Component (RC) Personnel Participation in OIF in Fiscal Year 2004: With and Without 3rd and 4th Multi-National Divisions



**Options and Costs for Sustaining a U.S. Military Occupation of Iraq:
Increasing and Decreasing Deployment Tempo**

Option	Combat Brigades in Iraq	Combat Brigades Immediately Available for Other Missions	Total Military Personnel in Iraq	Reserve- Component Personnel Mobilized for Iraq
Increase Deployment Tempo to 1.3:1	27 $\frac{2}{3}$	0	283,000	158,000
Reduce Deployment Tempo to 5.1:1	5	23 $\frac{2}{3}$	49,000	43,000

Deployment Tempo and Rotation Ratios

