

Using DEPTempo Data to Understand the Marine Corps' Deployment Picture

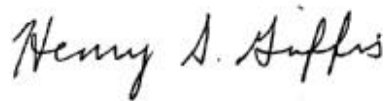
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A handwritten signature in black ink that reads "Henry S. Griffis". The signature is written in a cursive style with a large initial 'H' and 'S'.

Henry S. Griffis, Director
Workforce, Education and Training Team
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Outline



- Definitions
- Accumulation pattern
- Numbers deployed each day
 - Types of deployed time
- Separate histories for
 - Those currently deployed
 - Those currently not deployed
- Battalion and squadron deployment histories

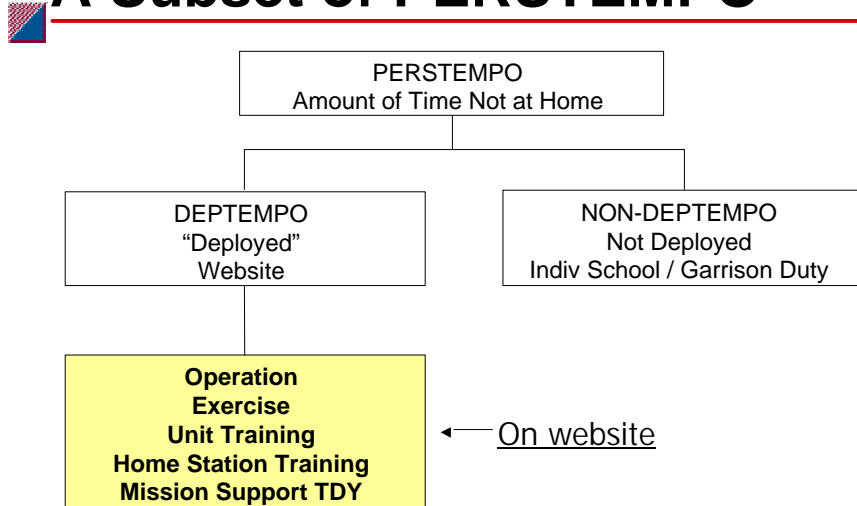
Over the past year, the Management Information (MI) section of Manpower and Reserve Affairs (M&RA) has been developing a DEPTempo section on the M&RA website. The DEPTempo portion of the website has been password protected during its development, with access restricted to developers and a small number of Marines, including the Commandant of the Marine Corps (CMC). Information is presented on the number of Marines with various counts of deployed days over the past 2 years and is available for the entire Marine Corps, specific units, or specific PMOSs. DEPTempo information also is available as ratios (time deployed/time not deployed) for the past 2 years.

The CMC asked CNA to analyze the information currently on the website and to suggest what might be added. Part of the task was to recommend how the information could be displayed to clearly show stress on Marines from current and past deployments, to help determine which squadrons and battalions might be deployed in the future, and to better understand the Marine Corps' overall deployment picture.

This annotated briefing describes our work and is based on two briefings we have given to the CMC. We've worked closely with MI and the web developers throughout this effort. Although our work uses information through 5 August 2004, MI and the web developers are working to implement our suggestions to make the information available in real time.

We cover five topics in this briefing, starting with the definition of *deployed time*.

DEPTEMPO: A Subset of PERSTEMPO



The PERSTEMPO legislation in the 2000 NDAA required the Services to report the number of DEPTEMPO days and required a \$100/day payment if a Servicemember was “deployed” over 400 days in a 2-year period. The payment has been waived, but the reporting requirement stands for DEPTEMPO (deployed time).

Five categories of deployed days are tracked and reported as totals on the website: operational days, exercise days, unit training days, home station training days, and mission support TDY days. Any day that a Servicemember is engaged in one of these five activities and is not at home in his or her bed at night is counted as a deployed day.

Thus, “deployed days” are defined as the sum of these five categories of time spent away from home. Although this definition of deployed days might not be the one that the Marine Corps would have chosen,* it is the one that Congress chose. Moreover, this definition of deployed time provides the only machine-readable reporting of deployment events for all Marines.

*Historically, the Marine Corps collected deployment information in Individual Deployment Records (IDRs) to establish Overseas Control Dates (which determined assignments to Okinawa). In these records, deployment events had to be at least 10 days long to be counted.

Definition of Deployment “Pool”



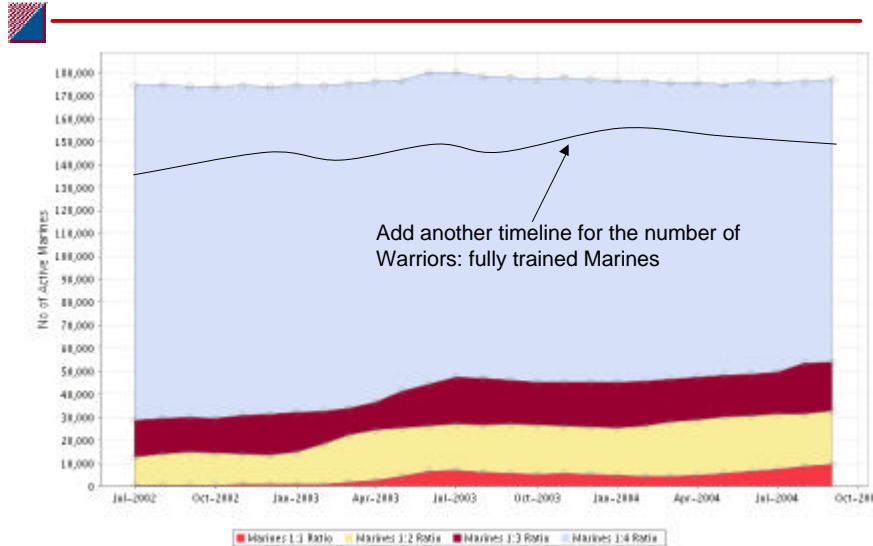
- What is it?
 - Number of Marines (strength)
 - Number of Warriors (fully trained)
 - Web charts should show both numbers
- Seasonal patterns are different
 - Strength highest in Sep/Oct
 - Warriors highest in May/Jun

We now define the deployment pool. The website currently reports strength over time. We think it is important also to report the number of “Warriors”—fully trained and available Marines—over time.*

One reason this is important is that the seasonal patterns for strength and the number of fully trained and deployable Marines are very different. Strength peaks in September and October, but the number of fully trained and deployable Marines peaks in the April to June time frame. Why is this? Strength peaks in September and October because we bring in almost half of our enlisted accessions in the summer months. These summer accessions greatly increase strength but will take, on average, 8.2 months until they are fully trained and deployable. Thus, the number of fully trained and deployable Marines is highest in May and June.

*Fully trained and available Marines are Marines *without* entry-level training PMOSs (training PMOSs are those that end in 00 or 01 and 9971, and pilot training PMOSs (7507, 7521, 7524, 7541, 7558, 7560, 7561, 7567, 7568, 7580, 7582, 7598, and 7599)) and those with strength category codes of 0, 1, 2, 4, or 5.

Number of Active Marines by DEPTEMPO Category



The website first displayed deployment information for the legislatively specified categories—namely, counts of the number of days that Marines were deployed in the last 2 years.* Then, the user was given a choice between counts of deployed days or ratios of time deployed to time not deployed during the previous 2 years. This slide, copied from the website in late October 2004, shows the information in ratio format. The top of the figure is Marine Corps strength. We added a line for the number of fully trained Marines. This line is merely notional; it is not drawn from real data.

The CMC agreed that this was an important series to display, and the web developers are now adding this information to the website's graphics.

We also discovered that the area colored in light blue (1:4 on the legend) is really the number of Marines who have a ratio of deployed time to not deployed time that is less than 1:3 (or less than 183 days deployed in the last 730 days). The labeling is being corrected on the website. When these changes are made, there will be an entry for 1:4 (146 to 183 days deployed) and an additional entry for Marines deployed less than 1:4 (or less than 146 days in the last 730 days). The CMC directed these changes.

*The categories were deployed more than 182 days, deployed more than 285 days, deployed more than 400 days, and so on.

Outline

- Definitions
- ➔• Accumulation pattern
 - Numbers deployed each day
 - Types of deployed time
 - Separate histories for
 - Those currently deployed
 - Those currently not deployed
- Battalion and squadron deployment histories

The website reports counts of deployed days (or ratios of days deployed to days not deployed) over the past 730 days. One might think that any time a Marine is deployed, the DEPTempo counter increases. This, however, is not the case. It is important to understand what makes the DEPTempo counter change, particularly if one wishes to project changes in the DEPTempo counter.

A 730-Day Sliding Window: History Matters



- Individual's DEPTTEMPO count depends on:
 - DEPTTEMPO condition today AND 730 days ago
- This is because it's a moving window
 - 730th day will slide off and be replaced by today

	730 Days Ago	Today	<u>Change in DEPTTEMPO Count</u>
Marine #1	Not Deployed	Deployed	Increase
Marine #2	Deployed	Deployed	No Change
Marine #3	Deployed	Not Deployed	Decrease

The key to understanding the DEPTTEMPO counter is that the “preceding 730 days” is a rolling window. On any given day, a Marine’s DEPTTEMPO counter is modified by what that Marine did that day AND what that Marine did 730 days before. For a Marine’s DEPTTEMPO count to go up, the Marine must be deployed today AND must NOT have been deployed 730 days ago. If the Marine is deployed today and also was deployed 730 days ago, the DEPTTEMPO count remains unchanged. This is because today’s deployed day increases the DEPTTEMPO count by one while the 730-day window advances and the deployed day of 2 years ago is no longer in the window, thus decreasing the count by one and rendering a net DEPTTEMPO change of zero.

Therefore, changes in the counter relate directly to how a Marine’s DEPTTEMPO days are distributed. Any predictive DEPTTEMPO indicator must be based on the distribution of the Marine’s DEPTTEMPO “baggage,” not just the count (absolute number of deployed days).

Although the CMC is very interested in DEPTTEMPO projections, such projections are beyond the scope of this effort. However, if one wants to project DEPTTEMPO counts, it is probably important to divide the counters in the preceding 2 years into subgroups. Partitioning the 730-day window into four 6-month windows (two windows each of 182 and 183 days) provides the proper granularity for describing a Marine’s DEPTTEMPO distribution according to some work done by MI in 2001.

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Part of our tasking was to develop useful ways to display deployment information. We now discuss one of these ways—the number of Marines deployed each day.

How Many Marines Are “Deployed” Each Day?



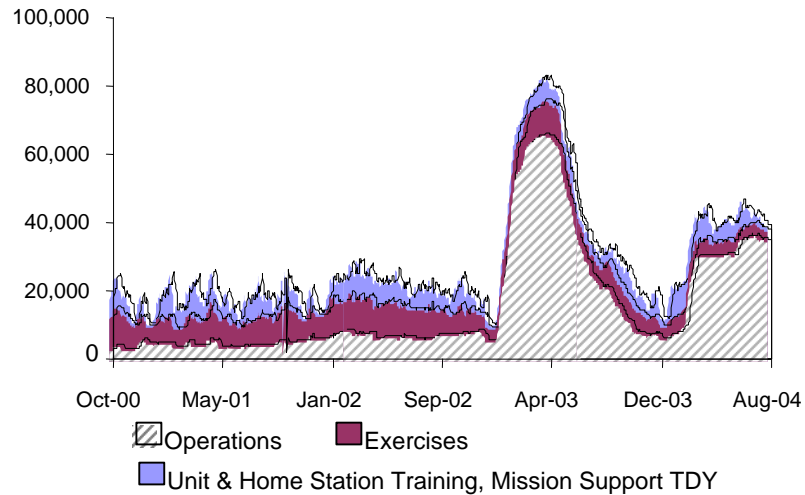
- Provides alternative ways to look at operational deployments
- Tabulated DEPTempo data for all active-duty Marines, Oct '00 through early Aug '04
- Established three categories
 - All Marines deployed in exercises
 - All Marines deployed in operations
 - All Marines deployed in unit training, home station training, or mission-support TDY
- Can examine by unit, PMOS, grade

The deployment data that the Marine Corps keeps and uses to populate the website contain considerably more information than is currently being used on the website. For example, each deployment event has a start date and a stop date. We decided it would be useful to determine the number of Marines deployed each day. Thus, we took individual deployment records and counted up the number of Marines who were deployed each day since the beginning of FY01. We also thought it would be useful to examine the different types of deployed time, so we divided deployed Marines into three categories—those deployed in:

- Operations
- Exercises
- Unit training, home station training, and mission support TDY.*

*Although the last category could be further subdivided, the number of Marines in each subcategory would be very small.

Active-Duty Marines



This figure shows the number of active-duty Marines deployed from the beginning of FY01 to early August 2004.

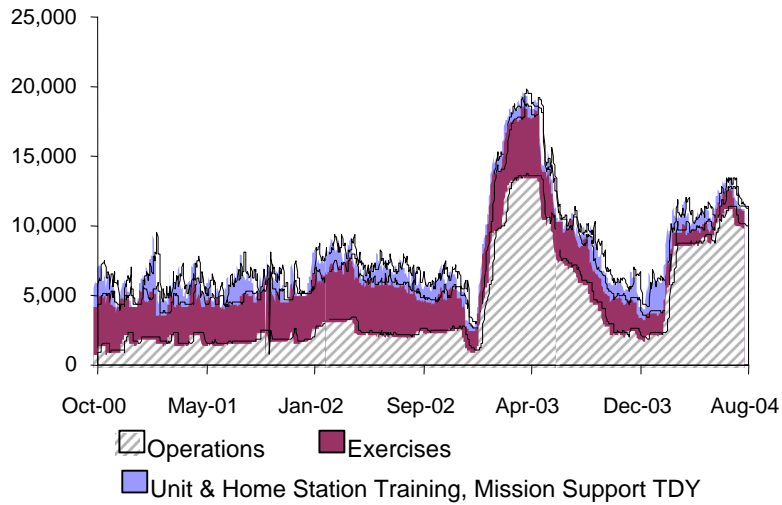
Those deployed in operations are shown in a gray-striped pattern, those deployed in exercises are shown in maroon, and those deployed in unit and home station training or mission-support TDY are shown in blue.

In total, over 80,000 active-duty Marines were “deployed” in Operation Iraqi Freedom (OIF).* About 68,000 were in operations. Even at the height of the war, about 10,000 Marines were engaged in exercises.

The figure also shows the buildup for OIF2. Although not on this chart, the website graphs would show strength numbers over time and the number of fully trained and available Marines over time.

*We use the term OIF loosely, to refer to all Marines deployed during the time of the conflict.

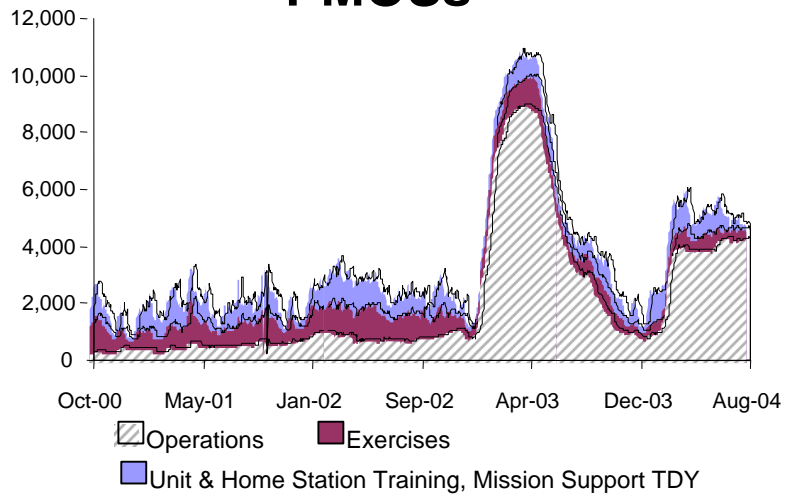
Infantry Marines



This figure shows the number of deployed infantry Marines. One interesting—and logical—pattern observed is that the number of Infantry Marines in operations (the gray-striped area) is at virtually the same level in both OIF and OIF2.

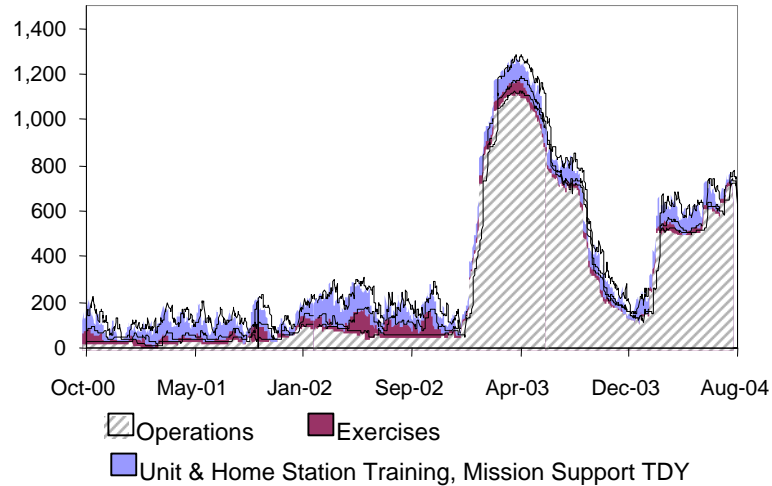
On the website, this graphic also would show the number of fully trained and available Infantry Marines.

High-Demand and Low-Density PMOSs



This graph shows high-operational-demand PMOSs that also have small populations. Displaying the information this way shows that these PMOSs were in much higher demand in OIF than they are now. On the website, this graphic also would show the number of fully trained and available Marines in high-demand/low-density PMOSs.

Military Police (5811s)



This figure is an example of one of the high-demand/low-density PMOSs, Military Police, and the number deployed over time. Military Police seem to spend relatively less time in exercises (the maroon area) than do other PMOSs. If this graph were on the website, it also would show the pool—the number of fully trained and available Military Police over time.

Overview

- Definitions
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We now discuss another way to display the deployment data.

Consider Separating Marines by Current Deployment Status



- Those deployed in *operations* today
 - Can gain insight on stress by focusing on those currently deployed
- Those NOT deployed in *operations* today
 - Can gain insight into pool

We believe that much insight can be gained by separating those currently deployed—that is, those deployed today—and those not currently deployed and then examining the deployment histories for each group. The two histories could be examined for all Marines, for Marines in particular PMOSs, and so on.

We focused on those currently deployed in operations but, alternatively, could focus on all those currently deployed. In either case, we look at those deployed today to gain insight into the stress on those currently involved in operations. The question we ask is:

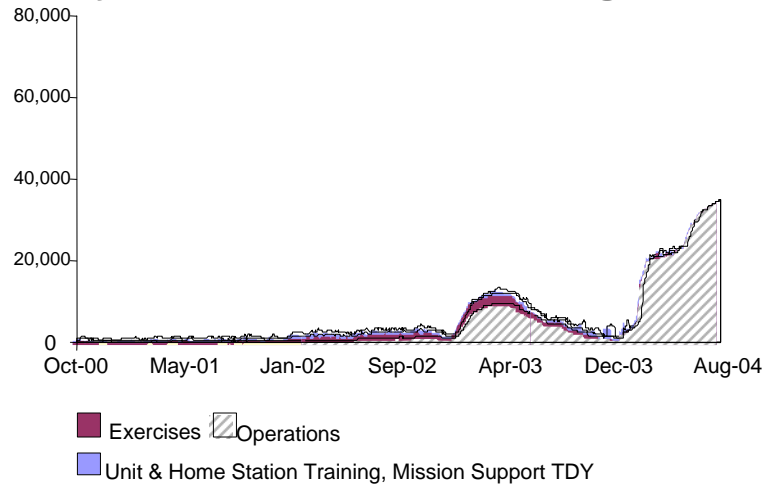
- What are the deployment histories for those who are currently deployed in operations?
- Have Marines deployed today also been heavily deployed in the past?

Then, we look at those *not* currently deployed in operations. Those currently not deployed in operations form a pool for future deployments. Here, the questions we ask are:

- What are the deployment histories for Marines who are not currently deployed in operations?
- How stressed have these Marines been in the past?

Thus, we split our data on August 4 into those deployed in operations and all other Marines and separately examined their deployment histories.

Deployment History of Those Marines Deployed in Operations (August 04)

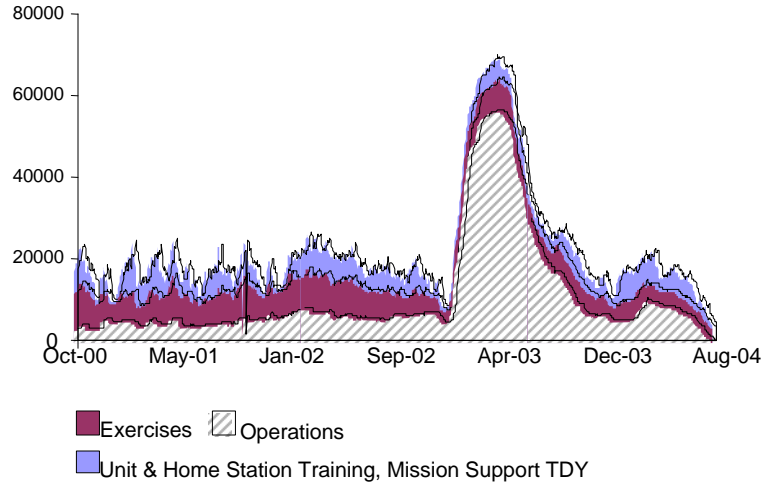


This slide shows the deployment histories for those deployed in operations on 4 August 2004. Virtually all Marines deployed 4 August had been part of an operational buildup that began in February 2004. Since the only Marines in this graphic are those deployed in operations on 4 August 2004, only operations show on the right-hand side of the chart (operations are indicated by the gray stripes).

The data show about 36,000 Marines deployed in operations on August 2004—about 10,000 of them also had been deployed in OIF (see the gray-striped area in the spring of 2003)—but their deployment histories show little activity before OIF. Probably many of the Marines deployed in August 2004 had not even been in the Marine Corps in the early years of our data.

If these data were available on the website, it would be possible to look at Marines in specific PMOSs and to compare the deployment history of those deployed today with those not deployed today. We think this would be a good way to examine stress, especially for the high-demand/low-density PMOSs.

Deployment History of Those Marines Not Deployed in Operations (August 04)



Now we examine the deployment histories of those who were NOT deployed in operations on 4 August. (Note that the gray-striped area representing operational deployments is zero at the end of the data series.)

At the far right of the chart (gray-striped area for operational deployments), one can see that many of the Marines returned from operational deployments this year (April through August). One also can see the large numbers of Marines who were deployed in OIF but were not operationally deployed on 4 August.

Taken together, this chart and the previous one show that the Marine Corps is doing a reasonable job of spreading around operational deployments. The last chart showed that only a small proportion of those deployed in operations today were also deployed in OIF; this chart shows that a large number of Marines deployed in OIF were *not* deployed in operations in August 2004.

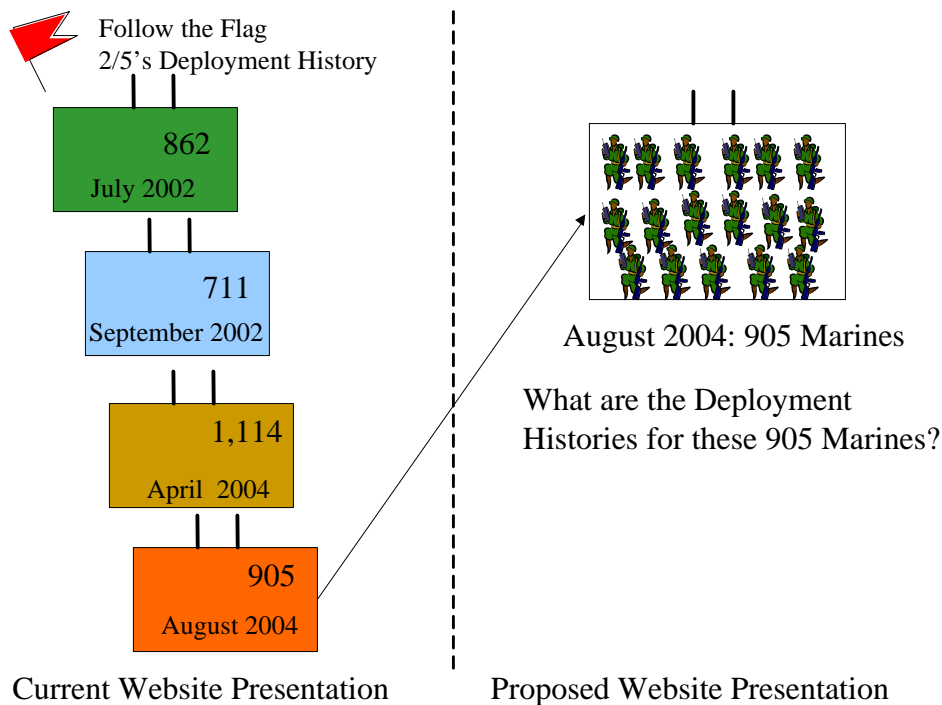
Overview



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- ➔ • **Battalion & squadron deployment histories**
 - Which deployment histories best support unit deployment decisions?

The CMC was particularly interested in CNA exploring the idea of using battalion and squadron deployment histories as part of the input into decisions about future battalion and squadron deployments. His question was: “If there are two battalions on the same coast that are being considered for the next deployment, would deployment histories be a useful input to the decision of which battalion to deploy?”

As we thought about this question, we realized there are two ways to categorize unit deployment histories. One can look at the deployment history for the unit, categorizing the various deployments that the unit made. We call this type of deployment history “following the flag.” A second way to characterize the deployment history, however, is to look at the *current* members of the unit and consider the deployment histories of those Marines.

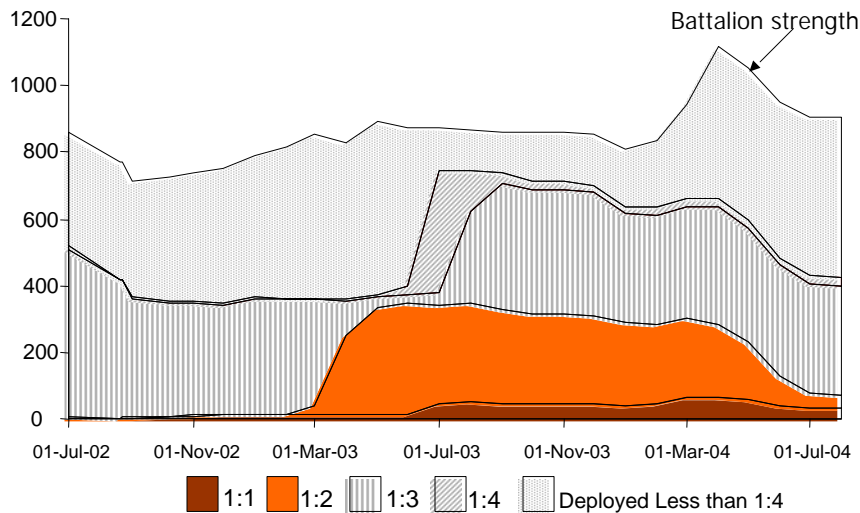


This slide illustrates the two ways of looking at deployment histories. The left panel looks at 2/5's deployment history by following the flag. This 2/5 deployment history is the history of Marines who have been in 2/5 over the last few years. For example, in July 2002 there were 862 Marines in 2/5, whereas in April 2004 there were 1,114 Marines in 2/5. The website shows this deployment history, detailing the number of Marines in 2/5 in each month who had various categories of deployed days or different ratios of deployed to non-deployed time.

Although the website presentation reveals the battalion's deployment history, it is not very relevant (and may even be misleading) for a discussion of whether a particular battalion should be considered for a near-time deployment. If one is trying to evaluate which battalions have Marines who are relatively more—or relatively less—stressed, one wants to look at the deployment histories of the Marines who are *currently* in the battalion. Thus, the right panel of the slide asks, “What are the deployment histories for the 905 Marines currently in 2/5?”

An important outcome of CNA's examination of the website was the development of these two different ways to portray deployment histories. Apparently, some people thought the website was portraying the deployment histories of the Marines currently in the battalion (right panel of slide), while it was, in fact, showing the flag's deployment history (left panel of slide).

Deployment History 2/5 Marines: Follow the Flag (Ratio)



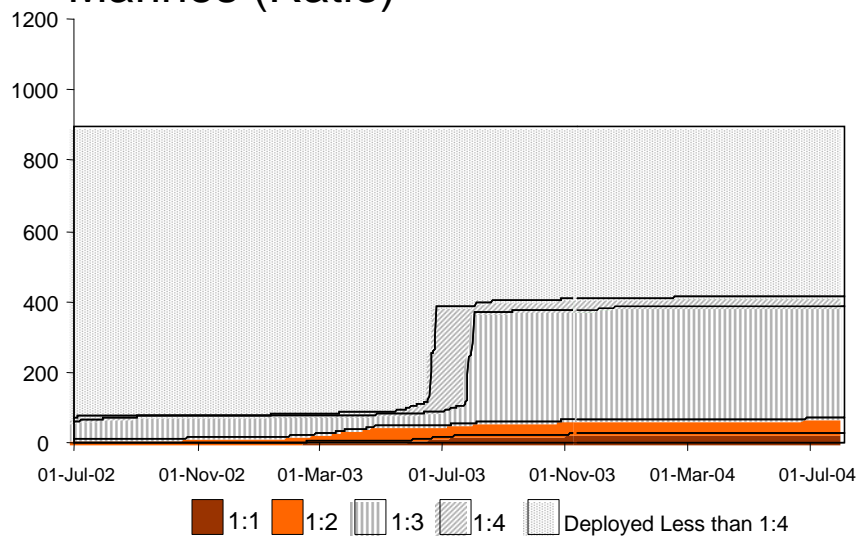
This slide shows the “follow the flag” deployment history of 2/5.* For each point in time, the number of Marines with each of the different deployment ratios is displayed. All ratios are calculated over the previous 2 years. For example, there were 1,114 Marines in 2/5 in April 2004. Of these Marines:

- 61 had been deployed at least 365 days in the last 730 days (1:1)
- 222 had been deployed 243 to 364 days in the last 730 days (1:2)
- 350 had been deployed 183 to 242 days in the last 730 days (1:3)
- 25 had been deployed 146 to 182 days in the last 730 days (1:4)
- 456 had been deployed less than 146 days in the last 730 days (deployed less than 1:4).

As is clear from the slide, the strength of the battalion has varied over time, from a little over 800 Marines at the beginning of July 2002, to over 1,100 Marines in April 2004, to about 900 Marines in August 2004. Many of the Marines whose deployment histories are represented at various points on the figure have left the battalion. Some may have even left the Corps.

*This representation differs somewhat from the website representation at the time this briefing is being written. This representation, however, is the one that we recommend and the one that the CMC has directed.

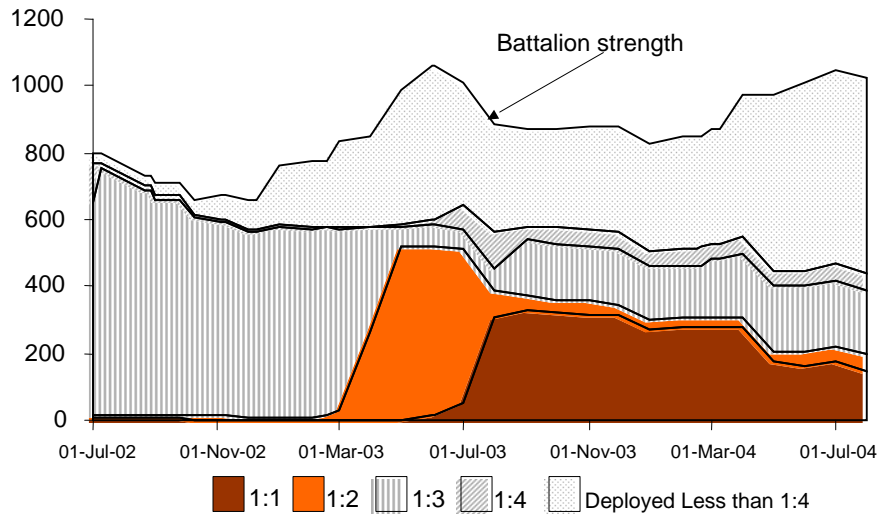
Deployment History for Current 2/5 Marines (Ratio)



In contrast to the previous picture of the battalion's deployment history, this slide shows the deployment history of the Marines who were in the battalion as of 4 August 2004. The deployment history of Marines currently in the battalion is the relevant history if one is trying to evaluate the deployment stress that Marines in the different battalions have experienced in the past.

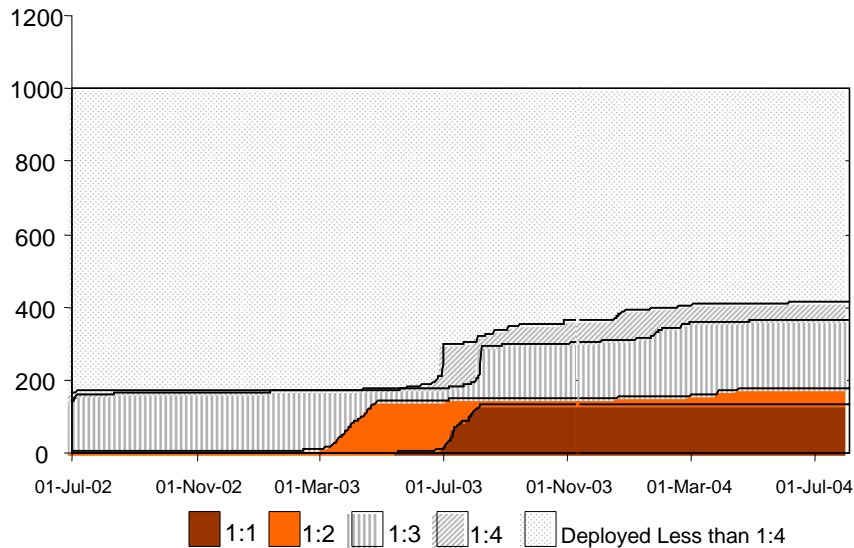
Note that the last data point on this slide (4 August 2004) is identical to the last data point on the previous slide (4 August 2004) because both data points show the deployment histories over the last 2 years for the 905 Marines in 2/5 as of 4 August 2004. Although the last data point is the same, the two pictures look very different. The Marines in 2/5 on 4 August 2004 have had much less deployed time over the past 2 years than did the 2/5 battalion (see previous slides). In this figure, some of the Marines who have been deployed less than 1:4 (less than 146 days in the last 730) have been in the Marine Corps less than 2 years.

Deployment History 3/5 Marines: Follow the Flag (Ratio)



Here we show the deployment history of 3/5. Again, the top of the figure is the battalion's strength, which has changed over time. The number of Marines in 3/5 with deployment ratios of 1:1 to 1:4 (and less than 1:4) are shown at each point in time. Virtually no one in the battalion before March 2003 had been deployed more than a ratio of 1:3 (more than 183 days in the past 730 days). After March 2003, however, over 500 Marines in the battalion have ratios of 1:2 (243 to 364 days deployed in the last 730 days). By July 2003, many Marines in the battalion have been deployed at a ratio of 1:1 (365 or more days out of the past 730 days).

Deployment History for Current 3/5 Marines: (Ratio)



Here we show the deployment histories of the 1,001 Marines who were in 3/5 on 4 August 2004. Although these Marines were in 3/5 on 4 August 2004, we don't know where they were at other points in time. We do know, however, what their deployment histories are. And, if we are thinking about deploying 3/5, it is these deployment histories that are relevant.

There are about 180 Marines in 3/5 on 4 August 2004 who had been deployed at least 365 out of the past 730 days. In fact, the picture shows that about the same number of these Marines had 1:1 deployment histories since August 2003. These 180 Marines probably have been in the battalion for a fairly long time.*

If one were considering deploying either 2/5 or 3/5, the deployment histories for the Marines currently in the two battalions suggest that 2/5 is the less-stressed unit.

*It is possible, of course, that some Marines transferred into 3/5 in the August 2003 through July 2004 period with 1:1 deployment histories and that an approximately equal number of Marines in the same time period transferred out of 3/5 with 1:1 deployment histories.

Using Deployment Histories as Part of Deployment Decision



- Use deployment histories of Marines currently in squadron or battalion
- Time between identification of unit and actual deployment date
 - There will still be some turnover
 - How much?

Although we are confident that the deployment histories of Marines currently in the battalion or squadron are the appropriate ones to use for decisions that relate to which battalion to deploy, we know that there is a period of time between when the battalion is notified that it will deploy and the time it actually deploys. And, in that time period, there will be some turnover. The question is: How much turnover?

How much turnover can we expect before deployment?



Pre-deployment turnover: Sample of deploying units in the OIF period

	3-month	6-month	9-month	12-month
Battalions	17%	39%	50%	61%
Squadrons	17%	28%	37%	45%

This slide shows pre-deployment turnover rates that we calculated for a sample of deploying units from OIF to the present. From our samples, we found 3 month turnover before deployment to be 17 percent and 6-month turnover before deployment to be 39 percent for battalions and 28 percent for squadrons.* These pre-deployment turnover rates are *considerably higher* than historical rates and reflect the stress the Marine Corps is experiencing in filling out battalions and squadrons for deployment.**

*These turnover rates may slightly overstate turnover if the deploying Marines were FAPed, on TAD, or on a temporary assignment 3, 6, 9, or 12 months before the deployment. After we identified recent deployment dates for squadrons and battalions, we needed to identify the Marines in the deploying units. To identify the units to which Marines were attached, we used an algorithm that MI gave us. We select the first MCC that was filled in from the following list: FAP MCC, TAD MCC, Temp MCC, and present MCC. If everything is correctly coded, this ordering should ensure that Marines' MCCs will reflect the unit to which they are currently attached. After we identified Marines who deployed, we went back 3, 6, 9, or 12 months before deployment, again checking the four different MCCs, to see if the Marine was in the unit in those periods. Each turnover rate falls about 2 percentage points if we count Marines who deployed (but were FAPed or TAD or on temporary assignments before the deployment) as being in the unit the entire period.

* *For a study that CNA did in 1996, turnover rates for the 3-month lock-on period for UDPs were usually less than 5 percent. Turnover rates for the 6-month lock-on period for MEU-SOCs averaged 24 percent, but most of that turnover came from Marines in TAD RUCs who joined after lock-on. For Marines in the permanent RUCs, the turnover was only about 8 percent over the 6-month lock-on period.

Historically, the Marine Corps locked-on Marines 6 months before MEU-SOC deployments and 3 months before UDP deployments. Although there was some turnover during the lock-on, such turnover was minimal. Right now, however, pre-deployment turnover is very high.

If the Marine Corps were to use Marines' deployment histories as part of the decision to determine which units to deploy, the appropriate deployment histories would be those for Marines in the battalion at the time of the decision. (Using the battalion's history (follow the flag) makes no sense because many of the Marines represented in these histories are no longer in the battalion.) Still, even if one uses the deployment histories of Marines currently in the battalion, if there is a 6-month lag between the decision and the actual deployment, current turnover rates suggest that the deployment histories of the Marines at the start of the battalion's deployment will be quite different from those for Marines in the battalion 6 months before the deployment. This is because 39 percent of a battalion's personnel and 28 percent of a squadron's personnel will be new to the unit. In short, until the currently high levels of battalion and squadron pre-deployment turnover are reduced, great care should be taken in using Marines' deployment histories as an input in the unit deployment decision.

If turnover returns to historical levels, using deployment histories of Marines currently in the different battalions and squadrons as an input to decisions about which units to deploy will be much more meaningful.

Summary: Proposed Enhancements to DEPTTEMPO Website



- Show number of fully trained Marines
 - In addition to MC strength
- Add information on the number of Marines deployed daily
 - Particularly useful for PMOSs (number deployed vice number fully trained)
- Show deployment histories for Marines currently deployed/currently not deployed
 - Measures how well MC is managing its assets

This slide summarizes our proposed website enhancements. First, we think that adding a line showing the number of fully trained and available Marines (rather than the total number of Marines) would be a useful addition to the graphics. This is because the strength of the Corps and the number of fully trained and available Marines peak at very different times and because only fully trained Marines are deployable.

Second, we think that data showing the number of Marines deployed daily would be a useful addition to the website. These figures offer one way of measuring deployment stress. For example, showing the number of deployed Infantry Marines (0311s) against the total number of fully trained 0311s will provide a very good picture of the stress on 0311s over time.

Third, we think that separating Marines into two categories—those currently deployed and those not currently deployed—is valuable. Graphing the deployment histories of the two groups provides an up-to-date look on how the Marine Corps is managing its Marines. The Marine Corps is doing a poor job of managing its assets if currently deployed Marines also have been heavily deployed in the past and if Marines not currently deployed also have been little used in the past. However, if Marines deployed today have not been deployed heavily in the past (and if those not deployed were deployed heavily in the past), then the Marine Corps is doing a good job of managing its assets. As of August 2004, this type of DEPTTEMPO analysis indicates that the Marine Corps was doing a very good job of managing the force.

Summary: Squadron and Battalion DEPTempo



- Can DEPTempo data support unit deployment decisions?
 - Use histories for unit's current Marines
 - Use caution since current turnover rates are very high.
- Will DEPTempo data be useful to unit Commanders?
 - Yes, deployment histories of current Marines for evaluating stress
 - Yes, battalion histories for perspective on unit's activities

Our work focused on answering the CMC's questions:

- Can DEPTempo data support unit deployment decisions?
- Will DEPTempo histories be useful to unit commanders?

We answer the first question—"Can DEPTempo data support unit deployment decisions"—yes, but with an important caveat. There will be turnover between the decision to deploy a particular unit and its actual deployment. This means that some Marines in the unit at the time the deployment decision is made will not make the deployment. Other Marines who were not in the unit at the time the deployment decision was made will later join the unit and deploy with it. Current turnover rates are very high, reflecting the stress on the Marine Corps. We leave to the deployment planners whether current turnover rates are too high to make deployment histories useful. Deployment history information for those in the unit at the time of the decision provides the most meaningful input when turnover is low between when the decision is made and the actual deployment.

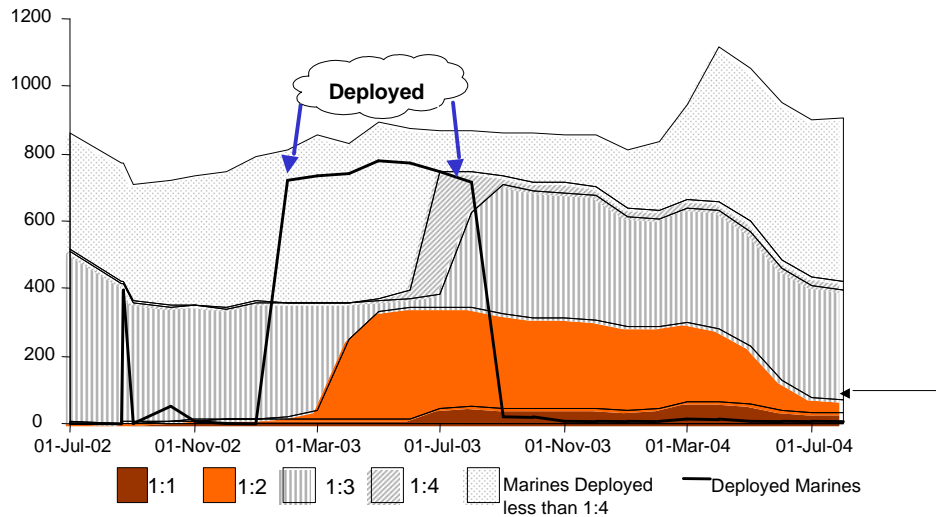
Will DEPTempo histories be useful to unit commanders? We believe that these deployment histories will be very useful to them. Giving Commanders and the G-1s the ability to see past deployment patterns of Marines currently in their units will help them evaluate the stress on their units, as well as the training that might be required to bring the units up to full effectiveness.

Backups



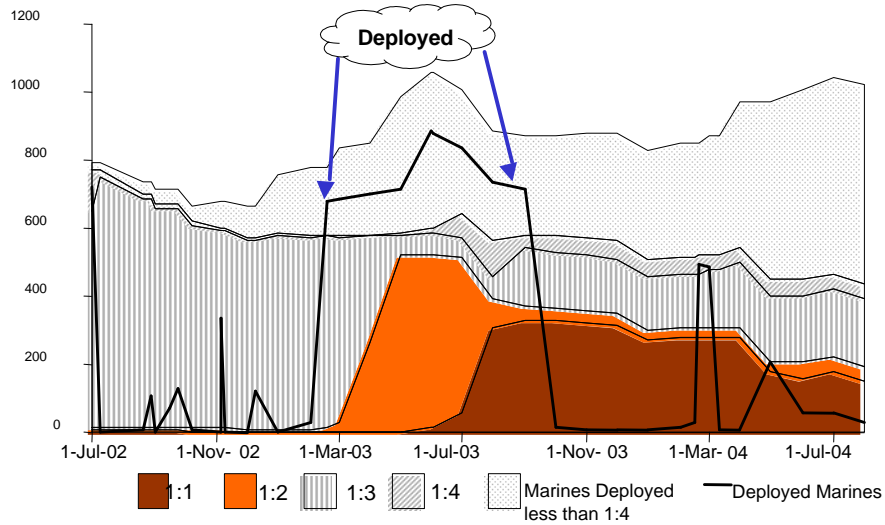
The next few slides expand on points made in the main part of this annotated briefing.

Deployment History 2/5 Marines: Follow the Flag (Ratio)



This backup slide is the same as slide 20—except that we have added a line showing the number of deployed Marines in the unit over time. As the figure shows, 2/5 was deployed between February and August. Toward the end of the deployment (which was close to 186 days), the number of deployed Marines in the 1:1 and 1:2 categories increased because those in the lesser categories accrued more deployed days.

Deployment History 3/5 Marines: Follow the Flag (Ratio)



This backup slide is the same as slide 22—with the addition of a line showing the number of deployed Marines in the unit over time. As the figure shows, 3/5 was deployed between February and September. Toward the end of the deployment, the number for Marines in the 1:1 category increased because those in lesser categories accrued more deployed days.

