## Analysis of Unrestricted Line Billet Structure: 1000/1050 Billet Management

Albert B. Monroe IV



4825 Mark Center Drive • Alexandria, Virginia 22311-1850

Approved for distribution:

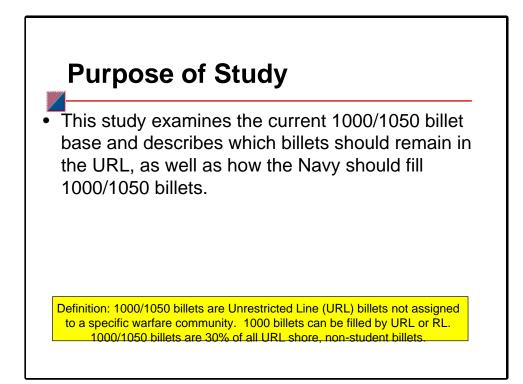
October 2005

Henry S. Siffis

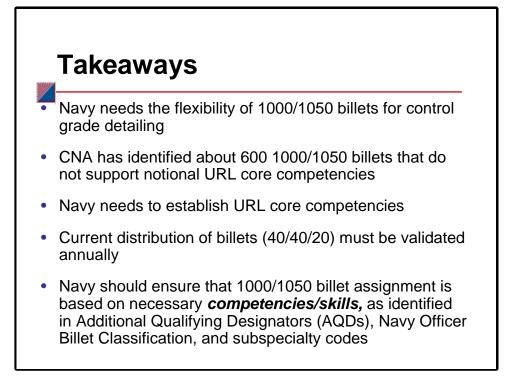
Henry S. Griffis, Director Workforce, Education and Training Team Resource Analysis Division

CNA's annotated briefings are either condensed presentations of the results of formal CNA studies that have been further documented elsewhere or stand-alone presentations of research reviewed and endorsed by CNA. These briefings represent the best opinion of CNA at the time of issue. They do not necessarily represent the opinion of the Department of the Navy.

Approved for Public Release; Distribution Unlimited. Specific authority: N00014-05-D-0500. For copies of this document call: CNA Document Control and Distribution Section (703)824-2123.



This slide shows the purpose of the study and defines 1000/1050 billets.



This slide gives CNA's conclusions to this study. We summarize the five main points here and provide more details on pages 19 and 20.

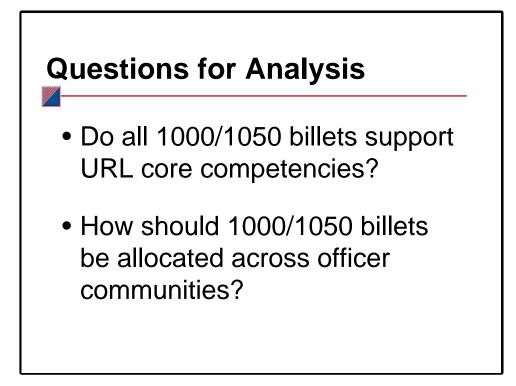
First, the Navy needs 1000/1050 coded billets for control grade detailing—to get the right officer in the right billet.

Second, the Navy should remove about 600 billets from the URL billet base that do not support notional URL core competencies. Also, to be more cost-effective, URL billets should not require specialized advanced education that would be more appropriate for RL billets.

Third, the Navy needs to establish URL core competencies. If they very from the notional URL core competencies used here, the definition of URL core billets will change accordingly.

Fourth, it is unrealistic to expect that the Surface Warfare, Aviation, and Submarine communities will fill 1000/1050 billets according to a 40/40/20 split. The current distribution should be updated annually.

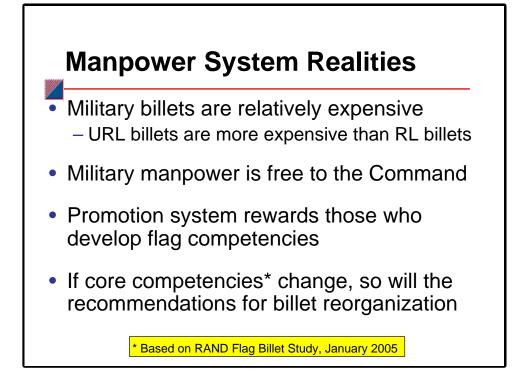
Fifth, the Navy should focus more on finding the best officers to fill billets and less on how 1000/1050 billets are allocated among communities.



Two questions stand out in the study of 1000/1050 billets in relation to the rest of the Unrestricted Line.

First, do all 1000/1050 billets support URL core competencies (i.e., the roles that the URL is supposed to perform within the Navy)? This question comes from the Navy's Human Capital Strategy. 1000/1050 billets that do not support URL core competencies should be moved into other communities or given to civilians or contractors. In this study, we will not address where non-URL core billets would go after being removed from the 1000/1050 billet base. Instead, we will generate business rules to determine which 1000/1050 billets do not fit into the URL's core competencies and show the effects on the URL of removing these billets.

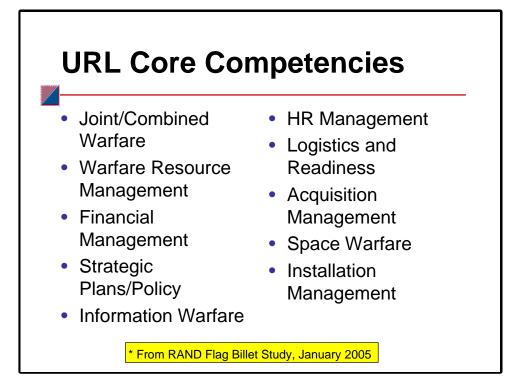
Second, how should 1000/1050 billets be allocated across officer communities? The current allocation for Officer Programmed Authorizations (OPA) is 40/40/20—40 percent to be filled by Surface Warfare, 40 percent by Aviation, and 20 percent by Submarine. However, the actual distribution of officers to fill 1000/1050 billets is nowhere near 40/40/20 because there is not enough inventory in each community to support such a distribution. Also, many officers from other URL communities and from RL and Staff communities fill 1000/1050 billets. In this study, we will offer the Navy recommendations on how to fill and distribute 1000/1050 billets.



We note the realities of the Navy's current manpower system. First, military billets are relatively expensive, and filling URL billets is more expensive to the Navy than filling RL billets.

Military manpower, however, is free to the command, which means that the Command wants the best person to fill the billet, regardless of cost. The Navy as a whole may want to trade off between cost and ideal quality in a particular billet, but the Commands have no incentive to make such tradeoffs. Therefore, the Navy's manpower system is suboptimal and may result in more expensive officers filling billets when a less expensive officer may be ideal.

The Navy's promotion system rewards people who develop flag competencies, which may not be the same as overall URL core competencies. The Navy has not developed core competencies for the URL. If core competencies change, the recommendations for billet realignment will change because they are based on a set of URL core competencies.



The Navy has not agreed on what should be URL core competencies. Therefore, we used the core competencies from the RAND Flag Billet Study. These are the core competencies currently filled by URL flag officers, not the core competencies that **should** be filled by flag officers—an important difference. We added core competencies that seemed to fit into the URL but were not represented in the URL flag core competencies, such as URL training (NROTC, USNA general training, Naval War College general training, etc.) and anti-terrorism/force protection.

## Our Business Rules for Determining URL Essentiality

- Divide 1000/1050 billets by:
  - Navy Officer Billet Classification (NOBC)
  - Additional Qualifying Designator (AQD)
  - Subspecialty code (Master's degree requirements)
- Core competencies were mapped to NOBC/AQD
- · Keep only billets that fit into URL core competencies
- Move billets requiring special training into RL if URL could still perform core competency without those billets

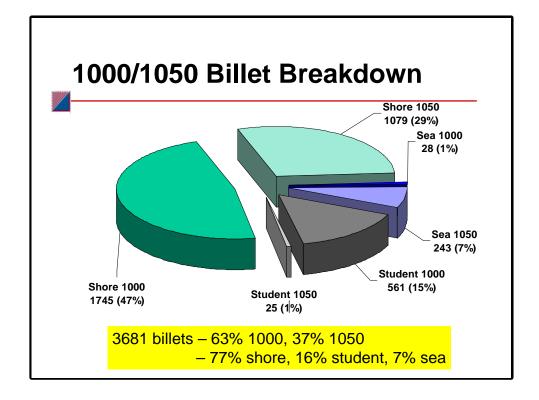
In the course of this study, we developed business rules for determining whether 1000/1050 billets should remain in the URL. First, we divided billets by Navy Officer Billet Classification (NOBC), Additional Qualifying Designator (AQD), and Master's degree requirements (in the subspecialty code). We then used a list of URL flag officer core competencies compiled by RAND in its 2005 Flag Billet Study to compile a list of URL core competencies. This was necessary because the Navy has not yet decided what the core competencies are. For the purposes of this study, we added what we thought were URL core competencies not reflected in URL flag billets (such as NROTC training).

Because of the limited information we have about billets, it may not be clear whether a billet fits into a URL core competency. The problem is that the information on the billet may not be what an officer actually does. Furthermore, the descriptions of the billets themselves are vague enough that people doing very different jobs may be in similarly coded billets.

Keeping only billets that fit into URL core competencies is consistent with the Navy's Human Capital Strategy. The Navy is supposed to be competency based and mission based, and this can only be done if billets that don't belong in the URL are given to other communities, are civilianized, or are eliminated.

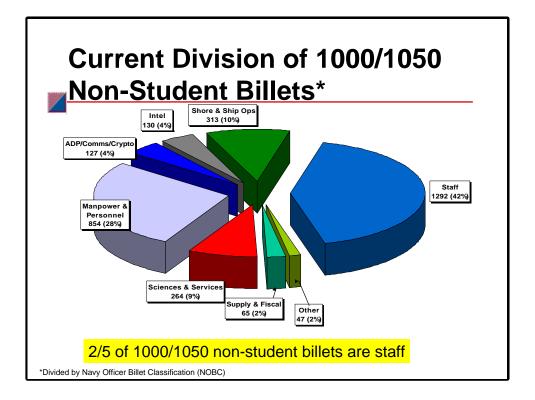
Specialized advanced education for officers is expensive. The Navy pays for officers to attend school for 18 to 27 months. Because of other URL requirements, these officers may use their education for only one tour. To get a better return on its investment, the Navy needs to make billets requiring extensive specialized advanced education RL billets if possible. That way, the Navy can get multiple tours and a return on its training investment.

An official list of 1000/1050 billets was taken from the community manager, and we applied our business rules to each billet to determine whether the billet belonged in the URL. For billets requiring Master's degrees, we cut additional 1000/1050 student billets that support those billets. We assumed that the ratio of 1000/1050 billets needing Master's degrees to student billets would be maintained in the future.

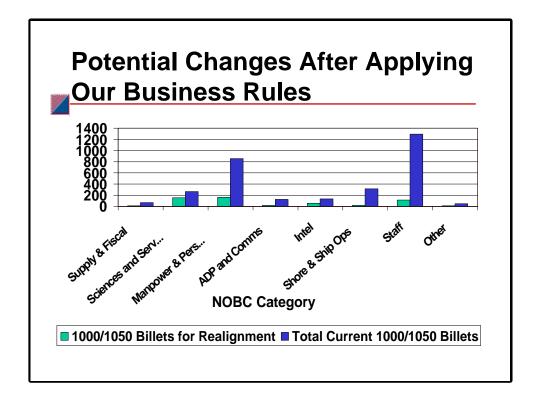


These data come from the June 2005 Navy Total Force Manpower Management System (TFMMS) file and show billets authorized (BA). Note the low number of sea 1000/1050 billets. Examples of 1000/1050 billets at sea are afloat staffs or Commanding Officers of amphibious ships. This means that the problem of how to staff 1000/1050 billets is a problem of how to staff shore billets, not sea billets.

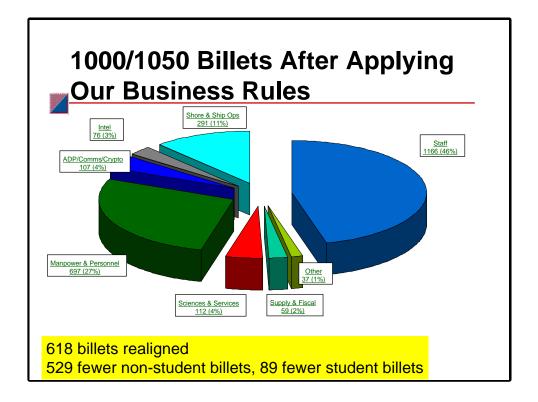
This study will concentrate on 1000/1050 shore billets because shore, nonstudent billets make up the overwhelming majority of 1000/1050 billets. Also, the Navy is currently evaluating the 1000/1050 student billet base. After the Navy finishes its work on the 1000/1050 billet base, it will use this study to help determine the number of student billets necessary to support our recommended 1000/1050 billet base.



Over 2/5 of 1000/1050 non-student billets are staff billets. Currently, the rest of the 1000/1050 billet base is divided among many different functions, including (but not limited to) URL Officer Training, Sciences and Services, Supply & Fiscal, Shore Operations, and Intelligence.

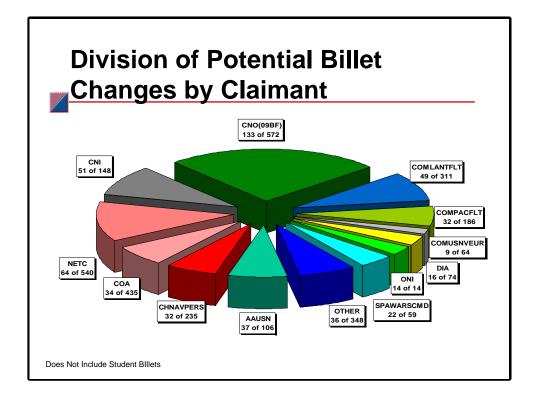


The slide above shows the total number of billets in each NOBC category and the total number of billets up for realignment out of the 1000/1050 billet base. Using our business rules, a total of 529 non-student billets need to be realigned. This does not include additional 1000/1050 student billets up for realignment because they support 1000/1050 billets that require Master's degrees. As the Navy is taking a harder look at its student billets, it is not clear how many student billets will no longer be necessary within the URL to train officers for 1000/1050 billets. As mentioned earlier, we will assume that an officer needs an 18-month student tour to fill a billet for 3 years. In other words, for each billet we remove from the 1000/1050 billet base that requires a Master's degree, we remove <sup>1</sup>/<sub>2</sub> of a student billet.

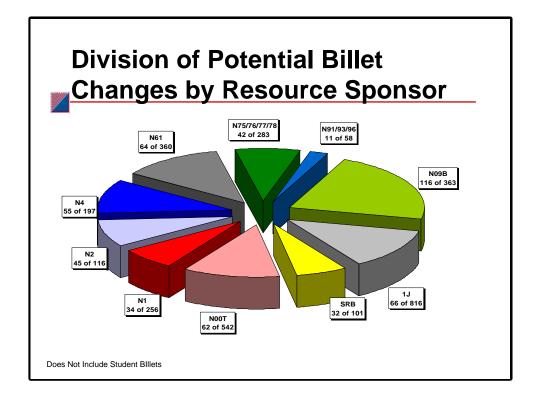


After applying our business rules, we find 618 billets that are candidates for realignment. Overall, there are large cuts in Personnel, Intel, and Sciences and Services. The Staff billets show large cuts as well, but those billets are proportionately a larger fraction of 1000/1050 billets after the application of our business rules than before.

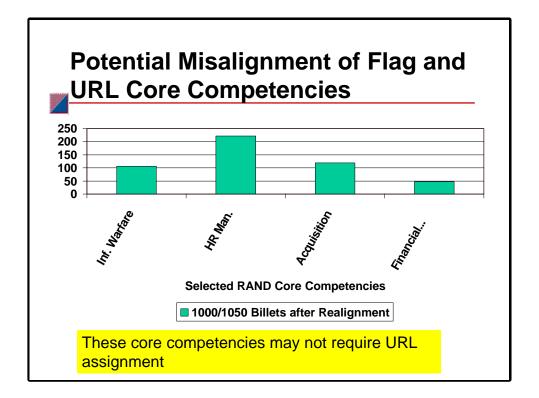
We are realigning 179 billets that require Master's degrees. Given the assumed 2:1 ratio of Master's degree billets to student billets mentioned before, we would be able to cut 89 student billets. If the real ratio is different, the number of student billets to be cut will also change.



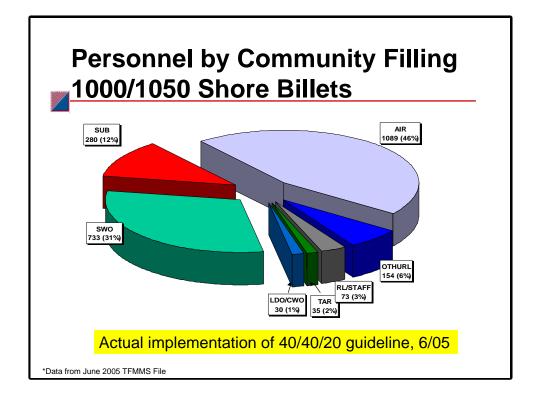
This slide divides the potential 1000/1050 billet changes by claimant. As we can see, the billets up for realignment are spread across the claimants. The claimants with the largest shares of billets up for realignment are mostly those with large fractions of the current stock of 1000/1050 non-student billets, such as CNO(09BF) and NETC/COA/CHNAVPERS.



This slide divides the potential 1000/1050 billet changes by resource sponsor. As shown, the billets up for realignment are spread across the resource sponsors. The resource sponsors with the largest shares of billets up for realignment are mostly those with large fractions of the current stock of 1000/1050 non-student billets, such as N09BF and N1/N00T.



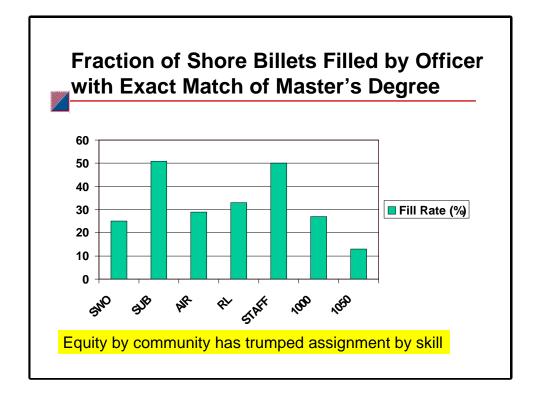
Above we show billets falling into flag core competencies that may not be competencies of the overall URL. Very different numbers of billets fall into each of these core competencies after realignment, and it is not clear that all of these billets are needed to fulfill the URL flag core competency, especially in larger core competencies, such as HR Management. Therefore, the Navy could possibly realign additional 1000/1050 billets in these core competencies beyond the application of our business rules.



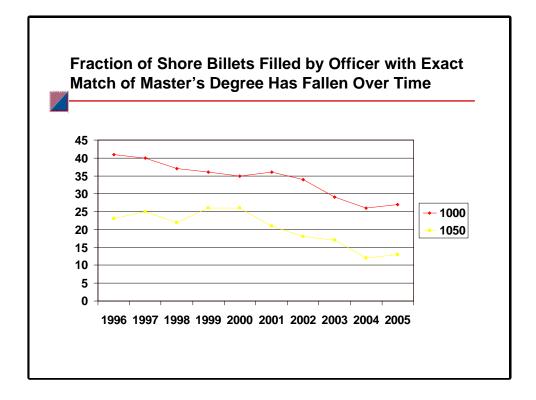
The pie chart above shows how the various communities are filling 1000/1050 billets. The Aviation community is filling just over 45 percent of 1000/1050 shore billets. Surface Warfare fills about 30 percent, and the Submarine community fills around 10 percent of 1000/1050 shore billets—only slightly more than RL/Staff communities.

The current 40/40/20 allocation of 1000/1050 billets among URL communities is arbitrary and has no relationship to the Navy's ability to fill 1000/1050 billets. Over time, the relative size of each community has changed and will continue to change to confound the 40/40/20 division. More specifically, the Aviation community has grown and the Submarine community has shrunk in relative size to the Surface Warfare community. Each community's ability to fill 1000/1050 billets has changed accordingly.

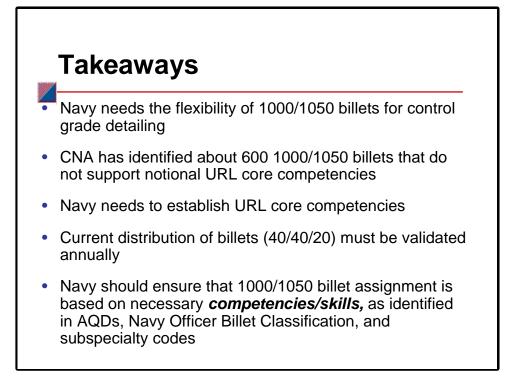
The lesson here should be that the Navy should fill 1000/1050 billets with the best qualified officers, without regard to community. The number of officers from each community available to fill 1000/1050 billets depends on accessions, retention, sea requirements, and the career paths of each community.



This slide shows whether shore billets that require a Master's degree are filled by officers with the correct educational qualifications. The Master's degree requirement for a position is listed as part of the subspecialty code. We find that the Navy does a poor job of getting officers with Master's degrees into 1000/1050 billets that require those degrees; less than 25 percent of 1000/1050 billets requiring a Master's degree are filled by officers with that degree prescribed on the billet. This is a lower percentage than for other communities and means that the Navy has officers in jobs that they are not prepared to perform. Given that an officer spends only 2 to 3 years in a tour, officers without the education they need may spend much of the time they are in a job learning the skills they need to be successful. In some cases, officers may never be successful in a billet if they lack the appropriate educational qualifications. This is very inefficient. The Navy should prioritize AQDs and subspecialties while filling 1000/1050 billets. Instead, 1000/1050 billets are given to communities to fill, making it less likely that the officers are qualified to fill the 1000/1050 billets to which they are detailed.



Here we see that the Navy used to do a better job of matching officers to billets by the skills required to fill them. This suggests that the Navy needs to strongly emphasize skills, and **not** communities, in filling 1000/1050 billets. The Navy did a better job filling these billets in years past; it can do so again.



This slide presents CNA's conclusions to this study.

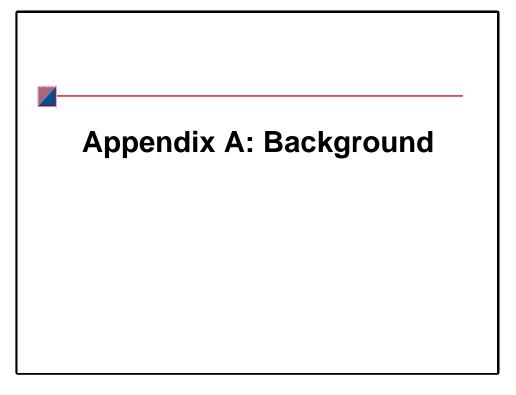
The Navy needs 1000/1050 coded billets for control grade detailing. There are several current URL core competencies that do not belong in a discrete officer community. An efficient manpower system labels jobs with the skills needed to perform the job, and no more. Placing current 1000/1050 billets within discrete communities would violate this principle and would not give the Navy the flexibility it needs to get the right officer in the right billet.

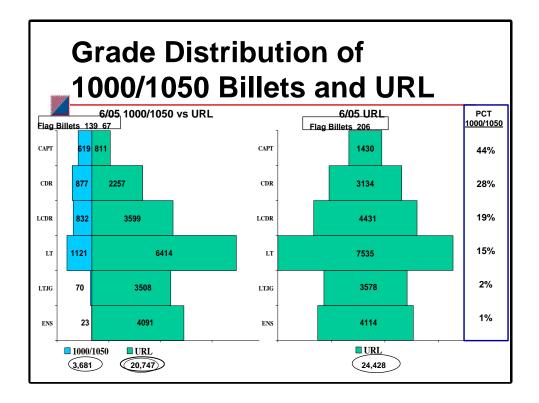
CNA has identified about 600 1000/1050 billets that do not support URL notional core competencies. We recommend that the Navy remove these billets from the URL billet base. Many other current 1000/1050 billets fit into URL core competencies but are very similar to current RL billets, meaning that these billets could be in either the RL or the URL, depending on the needs of the Navy. Also, to increase the return on investment in officer training, URL billets should not require specialized advanced education that would be more appropriate for RL billets. It is inefficient, for example, for the Navy to pay for an officer to receive a Master's degree and use that training for only one tour because of other requirements of the URL career path.

The Navy needs to establish URL core competencies. The analysis here is based on notional core competencies as defined by RAND and supplemented by CNA. The number of 1000/1050 billets that are not core to the URL depends on the definition of URL core competencies. If the Navy decides that URL core competencies must change, the definition of URL core billets will change accordingly.

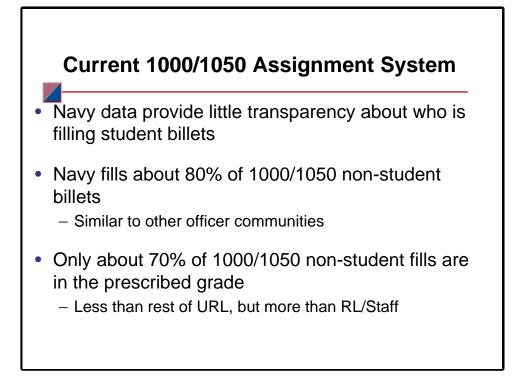
The current distribution of billets must be validated annually. The current expectation that the people filling 1000/1050 billets will be split 40/40/20 (SWO/AIR/SUB) is unrealistic and needs to be updated annually to determine the number of officers from each community available to fill 1000/1050 billets.

The Navy should prioritize skills (AQDs and subspecialties) over communities in filling 1000/1050 billets. The Navy used to fill 1000/1050 billets by looking at the requirements of the billet (AQD/subspecialty/paygrade) and finding the best officer to fill the billet. Now, the Navy focuses more on how the billets are allocated among communities and focuses less on getting officers with the right AQDs and subspecialties into the right billets. As a result, the Navy does a worse job than it used to of getting officers to billets with the correct skills. This needs to change. How 1000/1050 billets are allocated among communities shouldn't matter as much as the Navy filling its billets with officers who have the right skills to succeed in such billets.



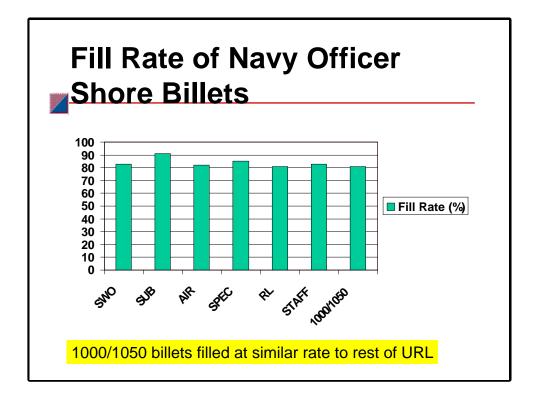


The information on this slide comes from the Navy's June 2005 TFMMS files. It shows the grade distribution of both 1000/1050 billets and the URL. 1000/1050 billets are spread fairly evenly throughout the LT-CAPT paygrades and are a larger percentage of billets in higher paygrades than lower paygrades. The number of 1000/1050 billets compared with the overall URL billet base increases with paygrade. This means that, as officers move toward the flag level, more of their work has to do with the overall management of the Navy (and military) and less with the management of a particular warfare community.

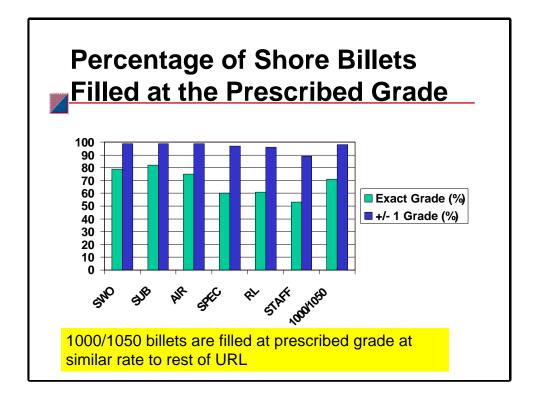


From the Navy data, it is not clear who is filling student billets. Ideally, 1000/1050 student billets would directly support 1000/1050 billets. That said, the Navy's personnel and manpower system is such that it is very difficult to track people as they move through student billets. It is also difficult to know what students are studying at each school.

The Navy fills about 80 percent of its 1000/1050 non-student shore billets, which is about the same as the rest of the URL. About 70 percent of 1000/1050 fills are at the correct paygrade, also similar to the rest of the URL, but more than RL/Staff communities.



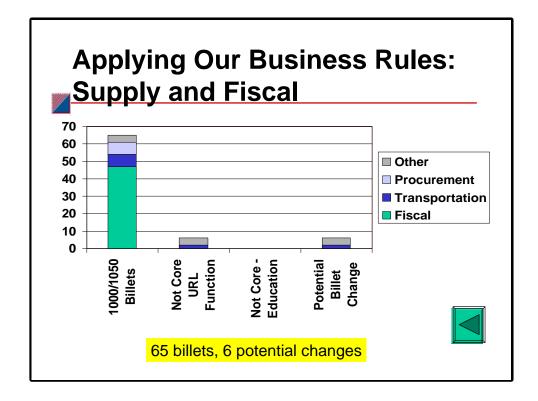
This slide considers the fill rates for Navy officer shore, non-student billets in June 2005. About 80 percent of 1000/1050 officer billets are filled, which is about the same as shore billets from discrete officer communities. This also suggests that the Navy is overfilling billets in other areas (such as sea duty or the Individuals Account), or putting officers in billets that don't exist, because there is an overall match between officer inventory and requirements.



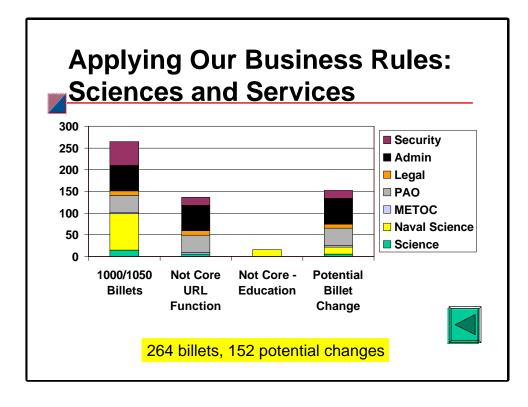
Around 70 percent of 1000/1050 billets are filled with officers whose paygrade matches that on the billet. This rate is slightly lower than the rest of the URL (which is closer to 80 percent), but higher than the rate for RL and Staff communities.

We note that almost all shore billets are filled within one pay grade of the prescribed grade, but some billets are filled by someone more than one grade off the prescribed grade for that billet. This includes 57 1000/1050 shore, non-student billets.

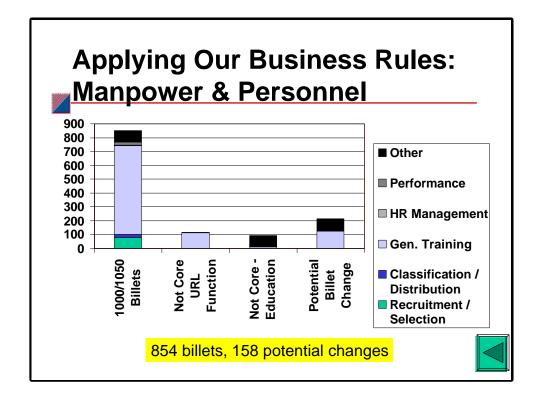




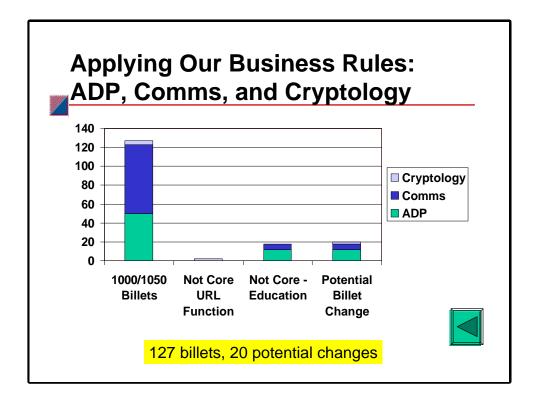
Supply and Fiscal gives the clearest exposition of which 1000/1050 billets are and which are not core URL billets. Supply and Fiscal billets have NOBC 1xxx. These billets are divided into Fiscal (10xx), Procurement (14xx), Transportation (12xx), and Other billets. We kept all of the Fiscal and Procurement billets; they fall into the Financial Management and Acquisition core competencies, respectively. Air traffic control billets under Transportation were listed for realignment, as well as general supply billets (Other). Note that many financial management billets require Master's degrees, but those billets were kept because they are essential to performing a URL core competency (financial management).



A majority of Sciences and Services billets (2xxx) don't fit under any URL core competency. Of 264 billets, 152 billets could potentially be realigned. This includes all Oceanography (METOC, 23xx), Public Affairs (PAO, 24xx), Legal (25xx), and Administrative (26xx) billets from the URL. We kept some Physical and Natural Science (20xx) billets (mostly space), some Security (27xx) billets (force protection), and several Naval Science (21xx) billets. Many Naval Science billets are acquisition and project management billets that fill URL core competencies. The only Naval Science billets up for realignment are those with educational requirements that seem more appropriate for the RL (such as Master's degrees in electrical engineering). This is a judgment call since most of these billets are also acquisition billets. The Navy needs to look at these billets and see if it can get a reasonable rate of return on the investment in these officers' educations. Most likely they cannot, which is why these particular billets are up for realignment even though they fit a URL core competency.



Instructor billets, such as those for teaching chemistry at the Naval Academy, were determined not to be core to the URL and are candidates for realignment. However, such billets as NROTC and USNA—teaching midshipmen how to be URL officers—are core URL billets. All of the remaining billets fit into the HR Management (defined by RAND) URL core competency, and all such billets remain in the URL unless they require a Master's degree, in which case they should be in the HR community (RL). There are 854 billets, and 158 are candidates for realignment.

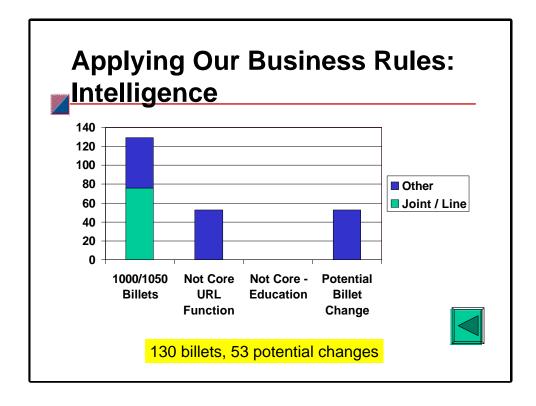


This slide shows Cryptology (98xx), Communications (95xx), and Automatic Data Processing (ADP, 97xx) billets. The nature of these billets has likely changed greatly in recent years with advances in information technology. Overall, there are 127 billets with 20 recommended for realignment.

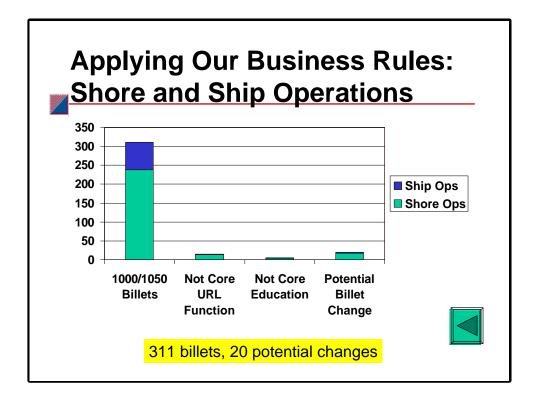
It appears that several Cryptology billets would be better placed in the RL due to the low paygrade (ENS) of the billets.

Most Communications billets seem to fall under URL core competencies, but there are several that require advanced education that might be better used in other communities.

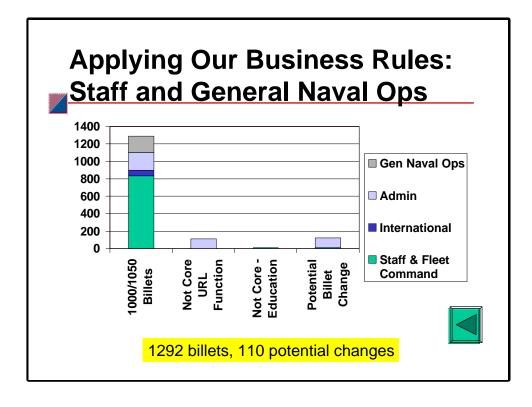
Many of the ADP billets are similar to those in the RL Information Professional (IP) community. Billets in that community requiring Master's degrees should be moved to the IP community where the Navy can get a better return on its educational investment.



We left Intelligence billets in the URL if they were joint billets, figuring that they fit into the Joint and Combined Warfare core competency. While we do remove some Joint billets from the URL in other NOBCs, we do not do so here. In many cases, the difference between Intel billets and URL billets is unclear. In the long term, the Navy might be able to remove some Intel billets from the 1000/1050 billet base if there were enough Intel officers to fill the gapped billets. Other intelligence billets were recommended for realignment.



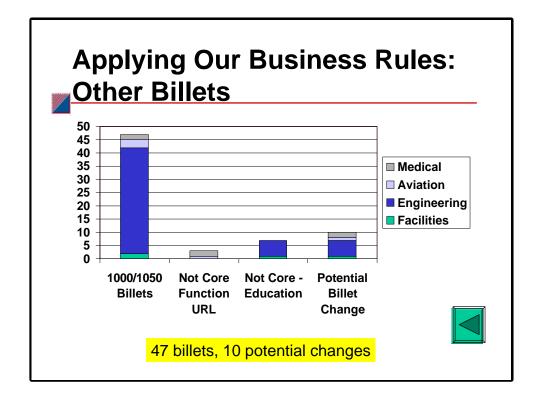
Shore and Ship Operations cover a wide variety of types of billets, most of which fall within URL core capabilities. The billets include many command (CO) and executive officer (XO) billets. Overall, there were only 20 potential realignments out of 311 total billets. Most of these were realignments were because the work did not seem to be URL core functions (some seemed more appropriate for METOC or LDOs). Several of these billets required advanced degrees in information warfare or engineering, making them good candidates for moves to RL communities.



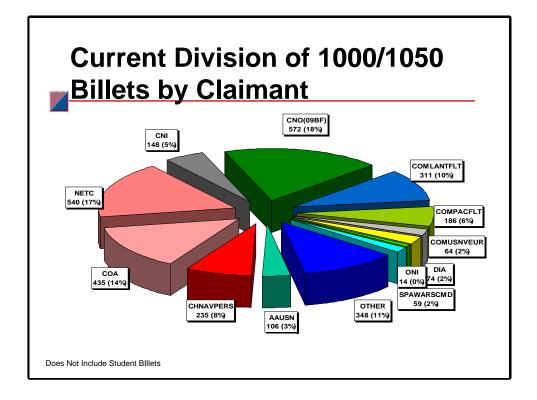
More than two-fifths of 1000/1050 billets are Staff and General Naval Operations. Most of these billets are in URL core competencies, such as Joint Warfare and Strategic Plans and Policy. The only exception to these are certain administrative billets that do not fit neatly into Strategic Plans and Policy, as well as several (11) billets that require education that is better suited to RL communities.

The administrative staff billets recommended for realignment were NOBC 9935 (Flag Aide), NOBC 9021 (Flag LT), and any other administrative billets for LTs. These billets would likely be better filled by LDOs or civilians. Other administrative staff billets appear to be more related to plans and policies. The Navy should examine all of its administrative billets to indeed make sure that officers are actually working on plans and policy, and not doing work that would be better performed by civilians or LDOs.

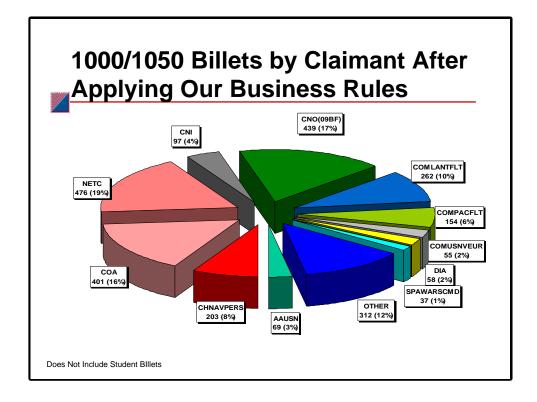
This recommendation is controversial because many of these billets are used to groom officers for more senior billets and to "show officers how the Pentagon works." But, officers would learn more if they were involved in analysis than in serving as aides. In other words, it is much more productive to learn by doing than learn by watching. If the Navy truly feels that these officers are involved in plans and policy, it can justify having URL officers serve in these billets; otherwise, these billets should not be filled with URL officers.



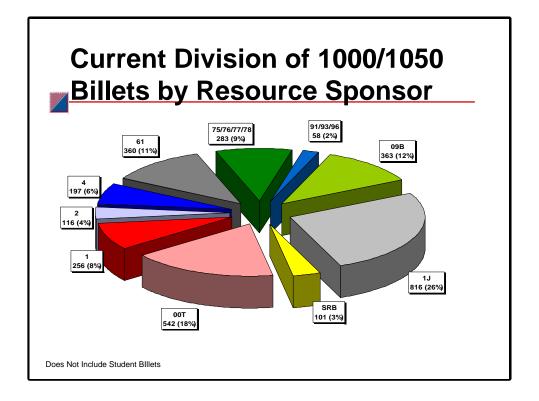
Other billets are the several 1000/1050 billets that fall into the categories of Medical, Aviation, Engineering and Facilities Management. Many of the Engineering billets were acquisition billets; several of these require Master's degrees that would be better suited to those in other communities (such as electrical engineering). Several other billets are suggested for removal because they are not core to the URL.



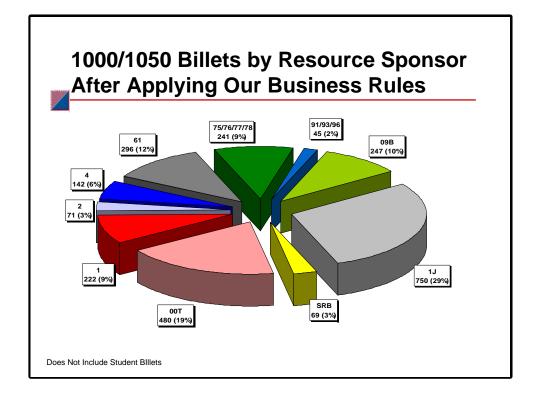
This slide shows the current division of non-student 1000/1050 billets by claimant. As shown, the current 1000/1050 non-student billet base is spread fairly evenly across claimants, with the largest fractions in CNO(09BF) and NETC/COA/CHNAVPERS.



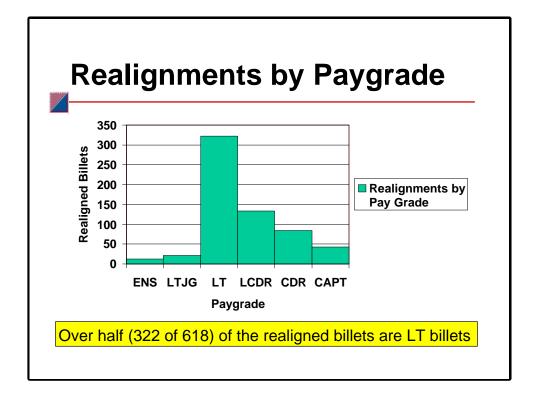
This slide divides the potential 1000/1050 non-student billet base by claimant after applying our business rules to the 1000/1050 billet base. The 1000/1050 billet base is similar to that before applying our business rules, but smaller.



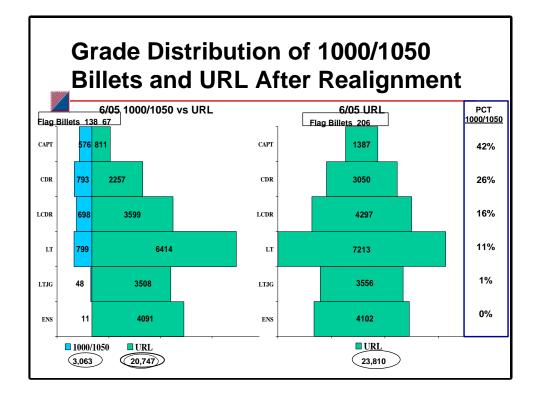
This slide shows the current division of non-student 1000/1050 billets by resource sponsor. We can see that the current 1000/1050 non-student billet base is spread fairly evenly across resource sponsors, with the largest fractions in 00T/1 and 1J.



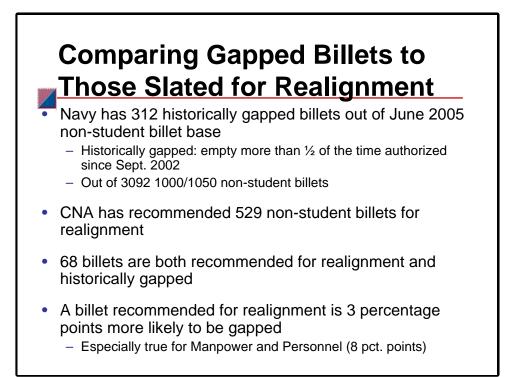
This slide shows the potential 1000/1050 non-student billet base by resource sponsor after applying our business rules. The 1000/1050 billet base is similar to that before applying our business rules, but smaller.

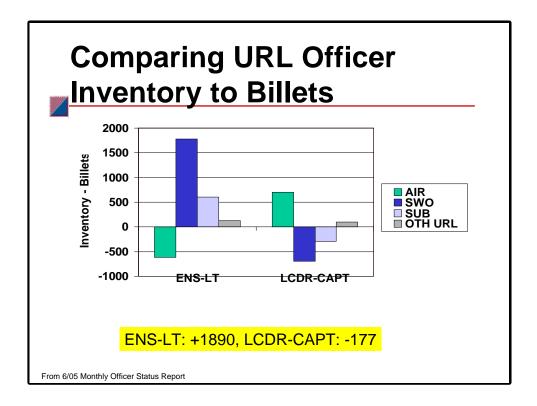


The chart above shows the number of billets realigned by paygrade. For the purposes of this study, we assumed that all of the realigned student billets were LT billets. This assumption is reasonable because none of the billets are War College or similar billets. Instead, all the student billets recommended for realignment are for subjects that could be taken at the Naval Postgraduate School as a LT. For this reason, over half (322 out of 618) of the billets recommended for realignment are LT billets.



The information on this slide comes from the Navy's June 2005 TFMMS files. It shows the grade distribution of both 1000/1050 billets and the URL in the June 2005 TFMMS file after realignment. 1000/1050 billets are spread fairly evenly throughout the LT-CAPT paygrades and are a larger percentage of billets in higher paygrades than lower paygrades. The number of 1000/1050 billets compared with the overall URL billet base increases with paygrade. This means that, as officers move toward the flag level, more of their work has to do with the overall management of the Navy (and military) and less with the management of a particular warfare community. Since many of the realigned billets are at the LT paygrade, the percentage of URL billets that would be 1000/1050 billets falls from 15 percent to 11 percent.





The Navy currently has a large junior officer surplus and a small senior officer shortage. This is a combination of two separate community trends. The Aviation community has an excess of senior officers and a shortage of junior officers, while the Surface Warfare and Submarine communities have large junior officer overages and senior officer shortages. In combination, this means that Aviation fills a disproportionate number of 1000/1050 billets, especially those above LT.

CAB D0012553.A2/Final

