

# Surface Force XO/CO Fleet-Up Consequences

Amanda Kraus, Jennifer L. Schulte, and William B. Boning

with

David L. Reese

September 2014



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.

**Distribution**

Distribution Unlimited. Specific authority: N00014-11-D-0323.

Copies of this document can be obtained through the Defense Technical Information Center at [www.dtic.mil](http://www.dtic.mil) or contact CNA Document Control and Distribution Section at 703-824-2123.

**Approved by:**

**September 2014**

A handwritten signature in black ink that reads "David M. Rodney".

David M. Rodney, Director  
Fleet and Operational Manpower Team  
Resource Analysis Division

## Executive summary

- Overall tasking:
  - Assess “Executive Officer to Commanding Officer (XO/CO) Fleet Up” as a long-term command and distribution model for the Surface Warfare community
- Findings:
  - As a command model, Fleet Up may have had positive effects on operational readiness as indicated by Command Excellence Awards for destroyers, and on command climate as indicated by enlisted ship and Navy attrition from destroyers, frigates, and dock landing ships
  - As a distribution model, Fleet Up appears to have increased O5 command and promotion opportunities. But, tour-length rigidity may negate this in the future as tour start dates are shifting to the right, and command-screened officers are waiting to start command assignments
- Recommendations:
  - Continue with Surface Force XO/CO Fleet Up
  - Monitor tour start dates for O5 afloat commands and associated O5 command opportunity
  - Conduct another review of Fleet Up effects in about five years



In 2008, Surface Force “Executive Officer to Commanding Officer (XO/CO) Fleet Up” began with the arrival of the first “Fleet Up” XOs to their commands. In spring 2013, after nearly five years of implementation, Commander Naval Surface Forces asked CNA to assess the viability of Fleet Up as a long-term command and distribution model for the Surface Warfare (SW) community.

In response to this tasking, the research summarized in this document compares key outcomes under Fleet Up to historical and concurrent outcomes associated with the traditional SW model. Specifically, the research team compared traditional and Fleet Up outcomes in two broad categories—those related to command and those related to distribution.

In the former category, the team found that Fleet Up may have had positive effects on operational readiness as indicated by Command Excellence Awards for destroyers, and on command climate as indicated by enlisted ship and Navy attrition from destroyers, frigates, and dock landing ships. In the latter category, Fleet Up appears to have increased O5 command and promotion opportunities, but tour-length rigidity may negate this in the future as tour start dates are shifting to the right and command-screened officers are waiting to start their command assignments.

It should be noted that these findings are stated with some circumspection because the broad scope of the study limited the depth of the analysis and because it is not yet possible to see trends over time. Thus, an even more succinct summary of the findings is that the analysis revealed neither major wins nor major red flags, with the possible exception of the shifting tour start dates.

In the absence of evidence that Fleet Up is not a viable command model for the Surface Warfare community, we recommend continuing with its implementation. However, we also recommend close monitoring of tour start dates for O5 afloat commands and associated O5 command opportunity, as well as conducting another review of Fleet Up effects in about five years.

## Issues and tasking

- Overall tasking: *Assess XO/CO Fleet Up as a long-term command and distribution model for the Surface Warfare (SW) community*
- Issues:
  - Has Surface Force XO/CO Fleet Up achieved its intended purposes?
  - Have there been any unintended consequences of implementing XO/CO Fleet Up for the SW community?
- Project tasks: Assess the impact of Fleet Up on
  - Surface Warfare Officer (SWO) career progression
  - SW community outcomes
  - Command quality and ship readiness



In December 2005, Commander, Naval Surface Forces (COMNAVSURFOR) announced the adoption of “Executive Officer to Commanding Officer Fleet Up” for the Surface Warfare (SW) community.

Fleet Up is primarily a command model according to which an officer completes an Executive Officer (XO) tour at a particular command and then immediately “fleets up” to start a Commanding Officer (CO) tour at the same command. Compared to the traditional model, according to which XO and CO tours are at different commands and separated by at least one unrelated tour, the Fleet Up model is intended to provide greater leadership stability, which is, in turn, expected to yield improved readiness.

Because the sequencing of the XO and CO tours is different under the Fleet Up and traditional command models, each has its own associated career path. Thus, Fleet Up is also a distribution model and, in addition to its implications for readiness, it also has implications for Surface Warfare Officer (SWO) career and SW community management.

The shift to the Fleet Up model began in 2008 for selected Commander Commands and Major Commands. It is now nearly complete and there is enough data to begin to examine its effects. Thus, COMNAVSURFOR asked CNA to assess the viability of Surface Force XO/CO Fleet Up as a long-term command and distribution model for the SW community.

In response to this tasking, this research effort compares key outcomes under Fleet Up to historical and concurrent outcomes associated with the traditional model. Specifically, the research team compared traditional and Fleet Up outcomes in two broad categories—those related to command and those related to distribution.

## Findings

- Fleet Up as a command model
  - It does not appear that Fleet Up XO and COs are fired at excessively high rates
  - Fleet Up may have had positive effects on:
    - Operational readiness as indicated by Command Excellence Awards for DDGs
    - Command climate on DDGs, FFGs, and LSDs, as indicated by enlisted ship and Navy attrition
  - Fleet Up has had no measurable effect on material readiness as indicated by inspection results for DDGs
  - Survey respondents indicate that Fleet Up doesn't hurt, and may improve, command quality and XO/CO teamwork
- Fleet Up as a distribution model
  - O5 command and promotion opportunities have increased and this may be helping to narrow the inventory/requirements gap
  - But, tour-length rigidity may negate this in the future: tour start dates have shifted two years to the right, and command-screened officers are waiting to begin command assignments
  - There is little evidence that changes in the career path have affected other distribution-related personnel outcomes—either positively or negatively



This slide summarizes the study's main findings. In general they are self-explanatory.

It should be noted, however, that the findings are purposely stated with some circumspection. For command-related findings, this is because the broad scope of the study limited the depth of the analysis. More thorough treatments of any of the effects studied here would generate more conclusive results. For distribution-related effects, this is because it is not yet possible to see trends over time. The section on Status of Fleet Up Implementation will show that only three cohorts of Fleet Up officers have reached the O5 promotion point and only two cohorts have completed O5 Fleet Up tours.

Thus, an even more succinct summary of the findings is that the analysis revealed neither major wins nor major red flags, with the possible exception of the shifting tour start dates.

## Recommendations

- Continue with Surface Force XO/CO Fleet Up
  - There is nothing to indicate that Fleet Up is not viable as a command model
- Monitor tour start dates for O5 afloat commands and associated O5 command opportunity
  - Lack of tour-length flexibility under Fleet Up is the only potential show stopper
- Conduct another review of Fleet Up effects
  - In about five years, it will be possible to assess the impact of Fleet Up on post-Commander Command (PCC) outcomes and there will be enough data to see trends
  - Identify a few effects to study thoroughly to generate conclusive results



This slide lists three recommendations based on the evidence summarized on the previous slide and presented in detail in the rest of this document.

First, we recommend continuing with Surface Force XO/CO Fleet Up. There is nothing to indicate that Fleet Up is not viable as a command model, and there are some indications that command quality has improved as expected under the Fleet Up regime.

Second, we recommend close monitoring of the tour start dates for O5 afloat commands, as well as of O5 command opportunity. Tour start dates cannot keep shifting to the right, so a trade-off will eventually have to be made: to keep tour dates from shifting it will be necessary to decrease the number of officers screened for command, which will decrease command opportunity. Of all the study results, lack of tour-length flexibility under Fleet Up may be the only potential show stopper.

Third, we recommend conducting another review of Fleet Up effects in about five years when the transition to Fleet Up is complete. At that point, it will be possible to begin to draw conclusions about the long-term distributional impact of Fleet Up. In particular, it will be possible to assess the initial impact of Fleet Up on post-Commander Command (PCC) outcomes and to see trends in the career outcomes that occur between the Department Head tour and promotion to Commander.

Finally, we also suggest that a future study be narrower in scope to allow for more conclusive results via more thorough treatments of existing data, including the datasets built for this study. For example, a study that focused only on the distributional effects of Fleet Up would allow more detailed investigations of the assignments that Fleet Up officers have over the course of their careers. Similarly, a study that focused only on the command-related effects of Fleet Up would allow for a more rigorous study of the relationship between the Fleet Up command model and ship-specific attrition rates.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up
- Analytical approach, data, and methods
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up

This annotated briefing is organized according to the outline on this slide. At the beginning of each section, a modified outline slide highlights the main subsections within it. The notes on each of these outline slides describe the overall purpose of each section and identify primary information sources and references.

Note also that there is no “Conclusions” section. By including the “Findings” and “Recommendations” slides in this Introduction, we have opted to put the conclusions at the beginning of the document rather than at the end. In addition, each individual section ends with a summary or summaries.

## Outline

---

- Background
  - Fleet Up as a command model
  - Fleet Up as a distribution model
  - Reasons for change
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up
- Analytical approach, data, and methods
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up



In this section, we provide conceptual definitions of Fleet Up as a command model and as a distribution model. We then explain the key reasons for adopting Fleet Up for the SW community.

The primary sources for this section are references [1], [2], and [3]. Additional references are noted as appropriate.

## Fleet Up as a new command model

- As a command model, Fleet Up differs from the traditional SW model in three key ways:

### Traditional model

- XO and CO tours on different ships with at least one tour in between
- XO screened XO-Afloat; CO screened CO-Afloat
- XO = Lt CDR (O4); CO = CDR (O5) or CAPT (O6)

vs.

### Fleet Up model

- Combined XO and CO tours on the same ship with no tour in between
- Both XO and CO screened for command
- Both XO and CO = CDR (O5) or CAPT (O6)



Conceptually, XO/CO Fleet Up is a command model whose defining feature is a combined XO/CO tour during which an officer completes an XO assignment at a particular command and then immediately “fleets up” to start a CO assignment at the same command. The Fleet Up command model requires that both the XO and CO have been screened for command, and, under a Fleet Up command model, the XO and CO hold the same rank. In contrast, the traditional Surface Force command model is characterized by separate XO and CO tours which are served at different commands and are divided in time by at least one unrelated tour, typically a shore tour. Under this model, the XO is not command screened and the XO and CO are separated by at least one rank.

The Navy’s Aviation community has used the Fleet Up command model for many years. It has been considered successful in a setting where flight leadership duties may be alternated with little regard to rank and where the working relationships between the CO, the XO, and the rest of the squadron may be fairly informal. In the SW community (as well as the Submarine community) the CO’s relationships with both the XO and the rest of the crew have traditionally been more formal and more distant. As a result, it has traditionally been supported by a model in which the CO has clear rank and experience seniority over anyone else at the command, including the XO. (See reference [4].)

## Fleet Up as a new distribution model

- As a distribution model, Fleet Up differs from the traditional SW model in two fundamental ways:
  - A different due-course career path with different milestone timing
  - A different screening process for Commander Command
- *Specific differences, which follow from the details of the Surface Force XO/CO Fleet Up design, are described on slides 11 through 22.*



Because the timing and sequencing of the XO and CO tours is different under the Fleet Up and traditional command models, each has its own associated due-course career path and screening process. The due-course path can be viewed from two perspectives—that of the individual officer and that of the community.

For the individual officer, the due-course career path is a series of sea and shore assignments designed to provide the experiences needed to progress from Ensign to Captain in the Navy’s closed, up-or-out personnel system. Generally, each assignment should enable the officer to acquire the experience and learn the skills needed to do the job at each next level of leadership and, ultimately, to serve effectively as the CO of a ship or squadron. Following the due-course path allows each officer not only to learn the technical and personal skills to be a competent ship driver and an effective leader, but also to demonstrate that learning in order to screen for command and be competitive for promotion. More specifically, the assignments that make up the SWO career path fall into several categories. First and foremost are community-specific training assignments followed by community-specific operational assignments with increasing levels of authority. In addition to these warfare-related assignments, the SWO career path also includes assignments for graduate education, shore tours on various staffs, and assignments related to joint experience and training.

For the community, the career path provides the framework for managing and assigning officers in a way that optimizes the flow of all personnel through the system. Specifically, the career path must maximize readiness via its effects on retention rates, command opportunity, promotion rates, detailing efficiency, and personnel costs.

Thus, Fleet Up is also, effectively, a distribution model. The details of how adopting the new command model changed the SW distribution model are described in the section on Surface Force XO/CO Fleet Up.

## The primary motivation for adopting a new model

Control-grade inventory and control-grade requirements in FY 2005

Rank	Inventory	Requirements (ROPA)	Difference	Gap Inventory/ROPA
O4 (LCDR)	1,044	1,358	-314	0.77
O5 (CDR)	891	1,095	-204	0.81
O6 (CAPT)	435	528	-93	0.82
<b>Total</b>	<b>2,370</b>	<b>2,981</b>	<b>-611</b>	<b>0.80</b>

Source: Reference [1] for April 2005.

Notes: ROPA stands for Reallocated Officer Programmed Authorizations. It includes community-specific authorizations for discrete coded billets (i.e., Officer Programmed Authorizations or OPA) plus the SW community's allocation of non-discrete billets (i.e., 1000/1050 billets), which was 40 percent of the total per standard Navy practice. In reference [1], the requirements data in this table were labeled as OPA, but a comparison with data for the same period provided by PERS-41 showed that it was actually ROPA.



The decision to adopt Fleet Up for the Surface Force was the result of community planning exercises that took place during 2005. The case for change began with a substantial gap between control-grade inventory and control-grade manning requirements. However, as Fleet Up was being assessed as a potential solution to this basic *distribution* problem, it became apparent that it also had the potential to yield *command-related* benefits.

The table above shows the gaps between SWO control-grade inventories and manning requirements (defined by Reallocated Officer Programmed Authorizations, or ROPA) as they stood in April 2005.\* Although forecasts through 2010 indicated that the situation should improve slightly for O4 due to recently adopted retention incentives, they also showed that it would likely get worse for O5 and O6. Based on then-current average retention rates, promotion rates, and tour lengths, as well as the then-current Force of Record, community planners determined that the existing distribution system would create an average of 145 O5s and 58 O6s each year, but that 175 O5s and 75 O6s would be needed to close the inventory-requirements gaps.

Planners attributed the O5 and O6 gaps not only to general shortages of O4s and O5s to feed into these grades, but also to particular shortages of O4s and O5s in career-enhancing positions associated with high probabilities of promotion selection. Specifically, planners concluded that the traditional distribution model, and its accompanying career path, was not creating enough O4 XO and O5 CO opportunity to select Commanders and Captains at the rates needed to correct the ROPA shortfalls in these grades. Nor was the traditional model creating enough PCCs to allow SWOs to fill their share of critical O5 billets on senior staffs.

\*See reference [5] for a discussion of officer management challenges associated with ROPA.

## Closing the gap by increasing XO and CO opportunity

Annual CO billets to be filled for specified numbers of ships and tour lengths

CO billets to be filled each year	Tour length (months)										
	24	23	22	21	20	19	18	17	16	15	14
With 100 ships	50	52	55	57	60	63	67	71	75	80	86
With 112 ships	56	58	61	64	67	71	75	79	84	90	96

Notes: The ship counts reflect the expected FY 2006 and FY 2010 force structures used in the SW community planning exercises described in [1]. The number of positions to fill each year is equal to the number of command billets divided by the tour length; these calculations don't account for attrition and unintended turnover that will increase demand.



For a given force structure, the usual way to increase CO (XO) opportunity is to shorten CO (XO) tour lengths: for a given number of billets, shorter tours mean more frequent rotation, so more officers leave their positions each year and there are more positions to be filled each year. The table above shows this relationship for O5 CO billets given the expected FY 2006 and FY 2010 force structures used in the SW community planning exercises of 2005 [1].

In 2005, average O5 CO tour lengths were about 22 months, but planners calculated that they would have to decrease to 18 months to create the desired level of CO opportunity. Specifically, as explained on the previous slide, CO opportunity needed to be high enough to create 75 PCCs eligible for selection to O6. The table shows that, for the FY 2010 force structure that was expected at the time, an 18-month CO tour would achieve the goal.

Similarly, average O4 XO tour lengths were about 19 months, but planners calculated that they would have to decrease to shorter than 15 months in order to expand XO opportunity enough to increase the number of O4s likely to be selected for O5 from 145 to 175.

From a readiness perspective, however, these tour lengths were considered too short because they would increase the turnover, or “churn,” of command leadership, which can be destabilizing and have negative effects on the performance of command personnel. In 2005, leadership churn was already considered high, so an increase in turnover was undesirable. Thus, community planners began considering other solutions, and Fleet Up emerged as the option that would both solve the distribution problem and maintain command leadership stability.

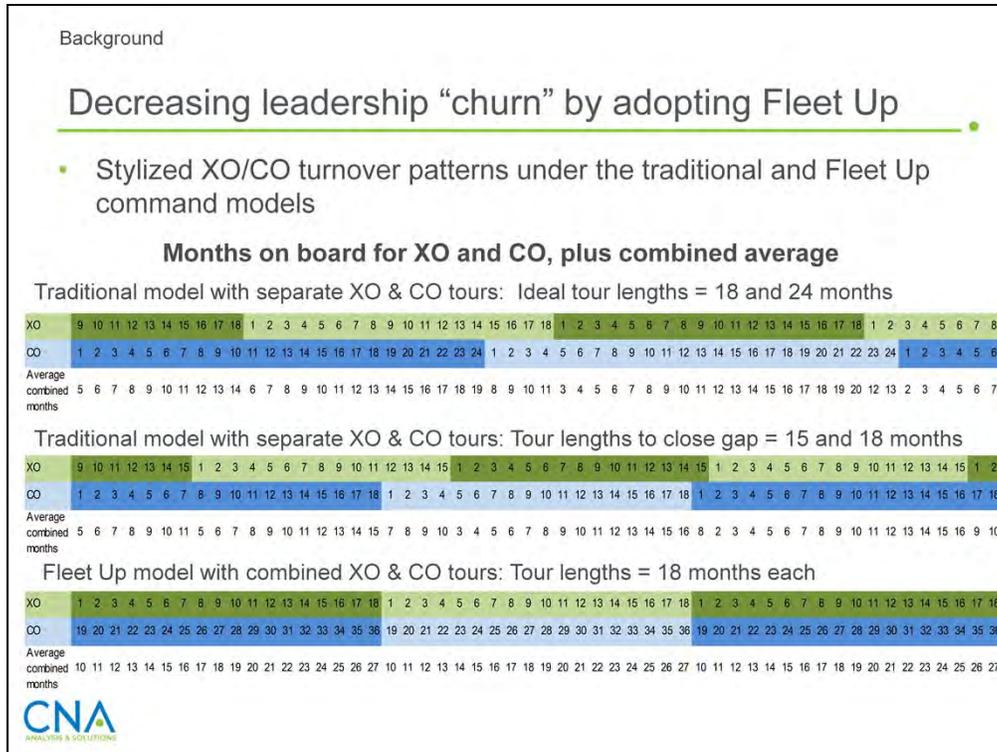


Figure 1 provides stylized illustrations of XO and CO turnover under the traditional and Fleet Up models for a hypothetical 54-month period. For the traditional model, there are two examples—one for the historically ideal O5-command XO and CO tour lengths (18 months and 24 months, respectively) and one for the tour lengths required to close the inventory-requirements gaps (15 months and 18 months, respectively). Both of these examples begin with the first month of the CO’s tour and arbitrarily assume that the XO has been in place for 9 months. For the Fleet Up model, there is one example based on 18-month XO and CO tour lengths. It starts with the fleeting up of the CO in fleet in the 19th month of his tour and the simultaneous arrival of the new XO.

The figure shows when and how frequently XO and CO turnover occurs under each model. Under the traditional model, the XO and CO tours are separate and the XO tour is shorter than the CO tour. As a result, the XO turns over more often than the CO, and the XO turnover can occur any time during the CO’s tenure: in the middle, when the CO is well along in his tour; at the beginning when the CO is also new, both in the job and at the command; or at the end, when the current CO is getting ready to rotate and be replaced by a new CO.

This rotation pattern leads to large variations in the frequency of turnover for the leadership team. In the notional traditional example, the longest period of stability is 18 months, when an XO tour is fully encompassed by a CO tour and the combined average time on board for the XO and CO reaches its maximum of 20 months. But, that same XO tour is also associated with the minimum period of stability (and minimum combined average time on board) because it ends only 2 months before the completion of the CO tour. Of course, turnover is even more frequent with the shorter tours needed to fill the inventory-requirements gaps. In contrast, under the Fleet Up model, the XO and CO tours are the same length and rotation is coordinated so that the new XO arrives as the current XO fleets up to CO. Although the fleeting up CO will be new to the job, he won’t be new to the ship and the crew. Thus, individual turnover is consistent, happening only once every 18 months for the XO only, and the combined average time on board never drops below 10 months.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
  - Tour lengths
  - Fleet Up across the force
  - Command screening under Fleet Up
  - The Fleet Up due-course career path
- Expected effects of Fleet Up
- Analytical approach, data, and methods
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up



Changing from the traditional command model to the Fleet Up command model entailed making many enabling changes to the SWO due-course career path as well as other aspects of community management. This section describes details of Surface Force XO/CO Fleet Up, focusing especially on key differences between the traditional model and the new Fleet Up model. The main purpose of this section is to begin to define the parameters of the analysis. In particular, the information presented here provides the context for understanding the expected effects of Fleet Up described in the following section.

There are two important things to note about this description:

1. Some features of Surface Force XO/CO Fleet Up evolved over the course of the planning process and in the first years of implementation. Thus, the current vision of the model deviates from the original plan in a variety of ways for a variety of reasons. Where relevant to the analysis, this description notes differences between the current program and the original plan.
2. As will be shown, the biggest changes associated with Surface Force XO/CO Fleet Up occur during the years leading up to and immediately following the Commander (O5) command tour. Thus, this description focuses primarily on the aspects of Fleet Up that relate to O5 command.

Information in this subsection comes from references [1], [2], [3], [6], and [7]. References [1] and [2] refer to the initial 2005 plan, while references [3], [6], and [7] show current implementation. Additional references are noted as appropriate.

## Planned O5 Fleet Up tour lengths and XO/CO churn

Model and tour lengths <sup>1</sup>	Transitions (over a hypothetical 54-month period)	Tenure at transition (months)		Average combined tenure (for 54-month period) <sup>2</sup>		
		XO	CO	Mean	Max	Min
Traditional XO = 18 mos CO = 24 mos	New CO	9	1	10.5	20	2
	New XO	1	11			
	New CO	15	1			
	New XO	1	5			
	New XO	1	23			
	New CO	3	1			
Traditional XO = 15 mos CO = 18 mos	New CO	9	1	8.9	16.0	1.5
	New XO	1	8			
	New CO	12	1			
	New XO	1	5			
	New CO	15	1			
	New XO	1	2			
Fleet Up XO = 18 mos CO = 18 mos	New XO / CO fleets up	1	19	18.5	27	10
	New XO / CO fleets up	1	19			
	New XO / CO fleets up	1	19			

Note: (1) See slide 10 for a description and illustration of the examples from which these data are drawn. (2) These are means of the average combined months on board for the XO and CO shown in the third row of each example on slide 10.



The first key feature of Surface Force XO/CO Fleet Up is the length of the combined XO/CO tour. To create the desired number of PCCs (see slide 8), the planned O5 command Fleet Up tour length is 36 months—18 months for XO and 18 months for CO.\*

Based on this planned combined tour length, the table in the slide uses the examples from slide 10 to make additional comparisons of expected XO and CO churn under the Fleet Up model versus the traditional model.

For each example from the figures in slide 10, the second column of the table calls out a transition event: the arrival of a new XO or a new CO. The third and fourth columns show the number of months that the XO and CO have been in place at the time of each event. Finally, the last three columns summarize the average combined time on board for the XO and CO across the whole 54-month period.

Comparing the data for the two traditional examples shows how shortening the XO and CO tour lengths decreases both the mean and maximum average combined time aboard. The data for the Fleet Up example show that the mean, maximum, and minimum average combined time at the command for the XO and CO are all higher than under even the notional tour lengths for the traditional model. Thus, comparing across the two models shows how Fleet Up should allow the CO tour length to decrease (thus increasing command opportunity) while not only maintaining, but actually decreasing, leadership churn.

\*See slides 15 and 22 for other Fleet Up tour lengths.

## Planned tour-length adjustability, start YCS, and cohort size

Example 1: 75 XO/CO Fleet Up billets to fill each year; 95 officers screened CO-Afloat each year									
Year	Effective cohort size	Billets filled by start YCS				Number of officers waiting to start			
		15.5	16.5	17.5	Total	1 year	2 years	3 years	Total
1	95	75			75	20			20
2	115	55	20		75	40			40
3	135	35	40		75	60			60
4	155	15	60		75	75	5		80
5	175	0	75		75	70	30		100
6	195	0	70	5	75	45	75		120
7	215	0	45	30	75	0	75	65	140

Example 2: 75 XO/CO Fleet Up billets to fill each year; 60 officers screened CO-Afloat each year									
Year	Effective cohort size	Billets filled by start YCS				Number of officers starting early			
		15.5	14.5	13.5	Total	1 year	2 years	3 years	Total
1	60	60	15		75	15			15
2	45	45	30		75	30			30
3	30	30	45		75	45			45
4	15	15	60		75	60			60
5	0	0	60	15	75	60	15		75
6	0	0	45	30	75	45	30		75
7	0	0	30	45	75	30	45		75



As indicated earlier, the standard way to change command opportunity is to change command tour lengths. This is also the way to keep command opportunity constant in response to changes in the number of officers screened for command and/or changes in force structure.

To accommodate such inevitable fluctuations, each half of the Surface Force XO/CO Fleet Up tour is planned to be adjustable by  $\pm 1$  month (or  $\pm 2$  months for the whole tour), depending on the need. Although this gives planners some flexibility, it is not as much flexibility as they had under the traditional model. In particular, because the separate XO and CO tours could be adjusted independently under the traditional model, their lengths could change by more than one month each.

With less ability to adjust tour lengths, the other response to changes in cohort size is to change tour start dates. Surface Force XO/CO Fleet Up calls for the O5 Fleet Up tour to start at YCS 15.5. Assuming a fixed tour length and number of billets to fill (75), the charts above show how tour start dates shift if the number of officers screened for command consistently differs from the number of command billets to fill.

Example 1 shows the effects of consistently screening 20 more officers for command than there are positions to fill. The columns under “Billets filled by start YCS” show that the rightward shift of the tour start date starts immediately as the “extra” 20 screened officers must wait to start their Fleet Up tours. It takes only two years for the majority of tour starts to be occurring one year later than planned and only five years for all tour starts to occur one year later. In the sixth year, tour starts begin occurring two years later than planned. The columns under “Officers waiting to start” show the effects of the later tour start dates on officers who must wait to begin their tours.

Example 2 shows the effects of consistently screening 15 fewer officers for command than there are billets to fill. From year 1, tours begin starting one year earlier than planned and by year 5, all tours are starting at least one year earlier and a few begin two years earlier.

## Fleet Up across the Force: O5 Afloat commands

Conversions to Fleet Up for O5 command by ship class—planned and actual	
Converted	Planned, but not converted
<ul style="list-style-type: none"> <li>• Guided Missile Destroyers (DDGs)</li> <li>• Guided Missile Frigates (FFGs)</li> <li>• Dock Landing Ships (LSDs)</li> <li>• Littoral Combat Ships (LCSs)</li> </ul>	<ul style="list-style-type: none"> <li>• Mine Countermeasure Ships (MCMs)</li> <li>• Amphibious Transport/Landing Platform Dock Ships (LPDs)</li> </ul>
Sources: References [1] and [3].	



To take advantage of expected readiness benefits associated with the Fleet Up command model, Surface Force XO/CO Fleet Up sought to standardize Fleet Up across the Force—to all levels of command and to both afloat and special-mission commands. For some commands, however, application of Fleet Up was either not possible or not appropriate. As a result, several non-Fleet Up CO and XO billets still remain.

Continuing with the focus on Fleet Up for O5 commands, this slide and the next identify O5 CO Afloat and CO Special Mission (CO-A and CO-SM) billets that were affected by the shift to Fleet Up. A third slide identifies remaining non-Fleet Up XO billets for O4s.

The table above identifies the four ship classes that were ultimately converted to the Fleet Up command model for O5 Afloat command: DDGs, FFGs, LSDs, and LCSs. The section on Fleet Up Implementation Status shows how many officers have started tours in each fiscal year so far.

In addition, the table shows that two other ship classes were originally intended to be O5 Fleet Up commands but, ultimately, did not convert:

- MCMs: Before Fleet Up implementation began, the MCMs were re-designated as O4 commands. (Coastal Minehunters (MHCs) were also originally designated as O5 commands but were re-designated as O4 commands before Fleet Up implementation. All MHCs were, however, decommissioned in the intervening years.)
- LPDs: Six LPDs were briefly converted to O5 Fleet Up commands, but in 2011 the decision was made to re-designate LPDs as O6 commands with XO and CO billets shared among SWOs and Aviators. (See reference [8].)

## Fleet Up across the Force: O5 Special Mission commands

CO-Special Mission commands by Fleet Up status	
Fleet Up	Not Fleet Up
<ul style="list-style-type: none"> <li>• Navy Recruiting Districts (NRDs)</li> <li>• Beach Master Units (BMUs)</li> <li>• Assault Craft Units (ACUs)</li> <li>• Navy Coastal Warfare Squadrons (NCWSs)</li> <li>• Marine Expeditionary Security Squadrons (MSRONS)</li> <li>• High Speed Vessels (HSVs)</li> <li>• Afloat Training Groups (ATGs)</li> <li>• Marine Service Support Groups (MSSGs)</li> </ul>	<ul style="list-style-type: none"> <li>• Riverine Squadrons (RIVRONS)</li> <li>• Maritime Prepositioning Squadrons (MPSRONS)</li> <li>• USS <i>Constitution</i></li> <li>• Commander, Fleet Activities Chinhae (CFAC)</li> <li>• Military Sealift Command Offices (MSCOs)</li> <li>• Provincial Reconstruction Teams (PRTs)</li> </ul>
Sources: References [1] and [3].	



There is a range of Special Mission commands at the O5 command level. This slide identifies those that follow the Fleet Up command model and those that do not.

According to staff at PERS-41, the total number of CO-SM billets is 35, with about two-thirds Fleet Up and one-third not Fleet Up. With the exception of the NRD CO-SM tour, the Fleet Up CO-SM tours are shorter than the Fleet Up CO-Afloat tours—30 months, with 15 months each for XO and CO. The CO-SM tours that are not Fleet Up are also 15 months long. Note that, for a given number of billets, the shorter tour lengths create more opportunity each year.

## Fleet Up across the Force: Non-Fleet Up XO billets and tours

Non-Fleet Up XO billets—Afloat and Special Mission	
Afloat	Special Mission
<ul style="list-style-type: none"> <li>• Guided Missile Cruisers (CGs)</li> <li>• Decommissioning ships</li> <li>• Ships with traditionally screened COs</li> </ul>	<ul style="list-style-type: none"> <li>• Damage Control Assistants (DCAs) on aircraft carriers</li> <li>• DCAs on LHDs/LHAs</li> <li>• Auxiliaries Officers (AUXOs) on aircraft carriers</li> <li>• Command, Control, Communications, Computers, Collaboration, and Intelligence (C5I) Officers on LHDs/LHAs</li> <li>• Chief Staff Officers for RIVRONs, MSRONs, and MPSRONs</li> <li>• Officers in Charge (OICs) on HSVs</li> </ul>
Sources: References [1] and [3].	



Surface Force XO/CO Fleet Up maintains some non-Fleet Up XO Afloat and Special Mission (XO-A and XO-SM) billets, which must be filled by officers who are screened in these categories.

There are three categories of remaining XO-A billets: First, CGs will continue to operate under the traditional model and will, therefore, have traditional O4 XO-A billets. Second, decommissioning ships, which require XOs, but not COs, also create an indefinite requirement for standalone XO-A billets. Finally, during the transition to Fleet Up, ships led by officers screened for command under the traditional process still needed traditional XO-As. Based on these requirements, reference [3] estimated that the number of non-Fleet Up XO-A billets would be about 30 at the beginning of the transition to Fleet Up but that they would decline over time and stabilize at about 20 once Fleet Up was fully implemented.

To create sufficient XO opportunity to yield enough O5s to fill the inventory/requirements gap, Surface Force XO/CO Fleet Up also provides for XO-SM assignments not associated with Fleet Up CO-SM commands. This was done by shifting some traditional post-XO billets to XO-SM status. Current non-Fleet Up XO-SM billets are listed in the table on the slide. According to reference [1], the annual demand for XO-SMs in these billets is about 54.

## XO and CO screening under the traditional model

The traditional model with separate XO and CO screens				
Screen	Outcomes	Tour paygrade	Guidelines for screen rates	Notional promotion rates
3 looks for XO	Screen XO-A	O4	50% of officers from each O4 Promotion Year Group (PYG) who retained to YCS12	100% of successful XO-As promote to O5
	Screen XO-SM	O4	41 XO-SM billets filled from each O4 PYG	90% of successful XO-SMs promote to O5
3 looks for CO	Screen CO-A	O5	40% of each O5 PYG	100% of successful CO-As promote to O6
	Screen CO-SM	O5	8 CO-SM billets filled from each O5 PYG	60% of successful CO-SMs promote to O6

Source: Reference [1]



The XO and CO screening processes are key features of any command/distribution model because they affect the mechanisms by which officers progress along the due-course career path and, in particular, the rate at which they promote through the up-or-out personnel system.

This slide summarizes the XO and CO screening processes under the traditional model, which called for separate XO and CO screens, each allowing three looks with two possible outcomes.

The three looks for XO occurred in consecutive years starting at YCS9.5, and an officer could screen XO-A or XO-SM on any look. Screening rates were based on O4 promotion year groups (PYGs). According to reference [1], the number of officers who screened XO-A on each look was determined by the goal of having 50 percent of officers from each O4 PYG who retained to YCS12 screened with this outcome. The number of officers who screened for XO-SM was based on the need to fill 41 XO-SM billets from each O4 PYG. XO-screened officers were slated to and completed XO tours as O4s and were selected for promotion to O5 if successful in their XO assignments, with the notional O5 selection rate slightly lower for XO-SMs than for XO-As.

The three looks for CO occurred in consecutive years starting at YCS13.5 and, as with XO, an officer could screen CO-A or CO-SM on any look. Screening rates for CO were based on O5 PYGs. According to reference [1], the number of officers screened CO-A on each look was determined by the goal of achieving an overall CO-A screen rate equal to 40 percent of each O5 PYG. The number of officers screened CO-SM on each look was determined by the goal of having eight officers from each O5 PYG to fill the annual demand for eight CO-SM billets. CO-screened officers completed CO-A or CO-SM tours as O5s. Officers who completed successful CO-A tours were expected to be promoted to O6 with near certainty, while officers who completed CO-SM tours were only expected to have a 60 percent chance of promoting to O6.

## XO and CO screening under the Fleet Up model

The Fleet Up model with one combined XO and CO screen process				
Outcome	Look	Tour paygrade	Guidelines for screen rates	Notional promotion rates
CO-A	1 <sup>st</sup> , 2 <sup>nd</sup> , or 3 <sup>rd</sup> look	O5	<ul style="list-style-type: none"> <li>• 42% of officers from each O4 PYG who retained to YCS12</li> <li>• 95% of these on the 1<sup>st</sup> or 2<sup>nd</sup> look</li> </ul>	<ul style="list-style-type: none"> <li>• 100% of CO-A screened officers promote to O5</li> <li>• 100% of successful CO-As promote to O6</li> </ul>
CO-SM	3 <sup>rd</sup> look only	O5	24 CO-SM billets filled from each O4 PYG	25% of successful CO-SMs promote to O6
XO-A	2 <sup>nd</sup> look only	O4	Selection to match demand defined by XO-A billets	100% of successful XO-As promote to O5
XO-SM	2 <sup>nd</sup> look only	O4	Selection to match demand defined by XO-SM billets	50% of successful XO-SMs promote to O5

Source: Reference [1].



This slide describes the Fleet Up screening process for O5 command. The fact that Surface Force XO/CO Fleet Up retains some non-Fleet Up XO-A and XO-SM positions means XO screening is still necessary. With this in mind, the O5 Command screening process was designed to ensure that every CO has an XO tour and that every XO has the opportunity for command. To achieve these goals, there are three looks and four screening outcomes as shown in the table above.

Officers may screen CO-A on any look. The overall CO-A screen rate is targeted at 42 percent of officers from any given O4 PYG who make it to first-look eligibility (roughly YCS12). About 95 percent of officers who screen CO-A do so on the first or second looks, which occur at two and three years after promotion to O4, respectively. These CO-A-screened officers will promote to O5 and complete O5-command Fleet Up tours. If they are successful in their assignments, they will promote to O6 with a notional 100-percent probability.

On the second look, officers may also screen XO-A or XO-SM. The number of officers who screen in these categories is based on the projected number of billets to fill in each one. XO-A- and XO-SM-screened officers are assigned to non-Fleet Up XO billets as O4s and will be considered for promotion to O5 during those tours. The notional O5 selection rates for XO-A and XO-SM officers are 100 percent and 50 percent, respectively.

Officers who screen XO-A on the second look can screen CO-A or CO-SM on the third look. Officers who screen CO-A (about five each year) will fill unexpected CO vacancies on Fleet Up ships and, if successful, they will promote to O6 at the same rates as those who screen CO-A on the first and second looks. Those who screen CO-SM will fill Fleet Up CO-SM billets and have a 25-percent chance to promote to O6. XO-SM-screened officers who promoted to O5 may also screen CO-SM on the third look. These CO-SM-screened officers also promote to O6 with about 25-percent likelihood.

## Fleet Up command screening and progression to O6

Notional flow along the due-course path from O4 to O6		
	Traditional model <sup>1</sup>	Fleet Up model <sup>2</sup>
Career progression for each O4 PYG from YCS12	<ul style="list-style-type: none"> <li>65% of the O4s at YCS12 screen XO-A or XO-SM</li> <li>95% of XO-A/XO-SM officers select for O5</li> <li>45% of the XO-screened O5s screen CO-A or CO-SM</li> <li>90% of CO-A/CO-SM officers select for O6</li> </ul>	<ul style="list-style-type: none"> <li>45% of the O4s at YCS12 screen CO-A or CO-SM</li> <li>95% of CO-A/CO-SM officers select for O5</li> <li>90% of CO-A/CO-SM officers select for O6</li> </ul>
Implied O5 command opportunity (as a percentage of O4s at YCS12)	$65\% * 95\% * 45\% = 28\%$	45%
Implied O6 promotion rate (as a percentage of O4s at YCS12)	$65\% * 95\% * 45\% * 90\% = 25\%$	$45\% * 95\% * 90\% = 38\%$
<small>Notes: (1) The notional traditional screen and promotion rates come from [1]. The screen rates are approximations based on the following rules of thumb: The XO-A/XO-SM assumes that 50 percent of an O4 PYG will screen XO-A regardless of the cohort size and the number of XO billets; an additional fixed number of officers will screen XO-SM; the CO-A/CO-SM rate assumes 40 percent of the XO-A/XO-SM-screened O5s will screen CO-A regardless of cohort size or the number of CO billets; an additional fixed number will screen CO-SM. (2) The notional Fleet Up screen and promotion rates come from PERS-41.</small>		



In the Navy's up-or-out personnel system, command screening outcomes and performance in subsequent screened assignments determine which and how many officers are considered due-course for promotion to Commander and Captain. Thus, changes in the screening process can change the number of officers from any given cohort moving along the due-course path. The calculations in the slide above show that, compared with the traditional model, the Fleet Up model allows more officers to flow through the system.

For any given O4 PYG, the share of officers who select for O6 is equal to the product of the relevant screening and selection probabilities. Based on the above sequence for the traditional model, that calculation is  $.65 * .95 * .45 * .9 = .25$ , indicating that roughly 25 percent of officers who reached YCS12 as O4s were likely to be selected for promotion to O6.

Under Fleet Up, the calculation is  $.45 * .95 * .9 = .38$ , indicating that roughly 38 percent of officers who reach YCS12 as O4s should be selected for promotion to O6.

These calculations show that, in addition to increasing CO opportunity by creating more CO openings, Fleet Up should also increase O6 promotion opportunity by eliminating the hurdle associated with the XO screen. Note, in particular, that the Fleet Up O6 promotion opportunity is greater even though the notional promotion selection probabilities for O5 and O6 are the same under both models, as is the probability of screening for O5 command.\*

\*Under both models, additional officers will also be promoted to O5, but they won't be "due course" in the sense that they generally won't be promotable to O6.

## Changes to the SWO due-course career path

- Compared with the traditional model, Surface Force XO/CO Fleet Up changes the following aspects of the due-course career path:
  - The timing and lengths of the O5 CO tour and its associated XO tour
  - The O5 command screen process and timing
  - The sea/shore rotation from the second Department Head (DH) tour to the Major Command (MC) tour
  - Training requirements
  - The timing and length of the MC tour



To accommodate the changes in the lengths of the XO and CO tours and in the command screening process, additional changes to the overall due-course career path had to be made. The next few slides compare the new Fleet Up career path to the career path associated with the traditional command model. These comparisons help to illustrate the features of Surface Force XO/CO Fleet Up already described. They also highlight additional features not yet discussed.

The differences between the traditional and Fleet Up career paths begin during the second DH tour. Therefore, the comparisons begin at YCS9 and go through retirement at YCS30. The key changes relate to the timing and lengths of the XO and CO tours, the O5 command screening process, sea/shore rotations, and training requirements.

Descriptions of both paths are notional. Changes in community conditions, especially cohort size, will cause the timing of key milestones and tour lengths to change from fiscal year to fiscal year. For example, the figure in the next slide shows O5 flow point at YCS15 for both career paths, which is on the early side of the preferred range.\* Similarly, the traditional career path shows that the notional CO tour is 24 months long, but reference [1] indicates that the average CO tour length had decreased to 22 months in 2005, presumably as a result of efforts to increase CO opportunity. In actual practice, there is also substantial variation across individual officers. For example, officers who require additional competitive Fitness Reports (FITREPs) may go to a competitive sea duty assignment after the second Department Head (DH) tour while still being considered “due course.”

\*According to Department of Defense Instruction (DoDI) 1320.13, the preferred window for promotion to O5 is 16 years,  $\pm 1$  year.

### Due-course career paths: Traditional vs. Fleet Up, YCS9-19.5

YCS	Traditional		Fleet Up			
			Primary		Secondary	
9.0	O4 Board					
9.5	2nd DH tour	1st look XO	2nd DH tour	O4 Board	2nd DH tour	O4 Board
10.0	O4 promotion					
10.5	2nd look XO		O4 Promotion		O4 Promotion	
11.0	1 shore tour		1st shore tour		1st shore tour	
11.5	3rd look XO					
12.0						
12.5	PL		1st look CO Afloat		2nd shore tour	1st look: Fail to screen
13.0	XO tour		2nd shore tour			
13.5	1st look CO		2nd look CO Afloat		2nd look: XO-A/XO-SM	
14.0	O5 Board		O5 Board		PL	O5 Board/PXO PL
14.5	2nd look CO					
15.0	O5 promotion		PL	O5 promotion	XO tour	O5 promotion
15.5	1 or 2 shore tours				3rd look: Screen CO-A	
16.0					(or AZ O5 promotion)	
16.5			XO/CO tour		3rd shore tour	
17.0						
17.5	PL				PL	PCO PL
18.0						
18.5	CO tour				CO tour	
19.0						
19.5						

Sources: References [1], [6], and [7].



The figure in this slide compares the traditional and Fleet Up career paths from YCS9 to YCS19.5. Key changes illustrated by the figure are summarized as follows.

**The screening process:** The figure highlights the changes in XO and CO screening that have already been described. These changes in timing have three important implications: (1) With a first-look command screening outcome at YCS12.5, the Fleet Up screening schedule gives a stronger indication of career viability at a time when officers may still be making decisions about whether to stay in the community for a full 20-year career. (2) The second look for O5 Command occurs before the in-zone O5 promotion board, making CO screening, rather than XO performance, the primary determinant of O5 promotion selection. (3) The third look for O5 Command allows officers who didn't screen on the first or second look to get back on the due-course path.

**The combined tour and tour timing:** Under Fleet Up, the XO tour starts later and the CO tour starts earlier. This shift in timing is necessary to fulfill the Fleet Up requirement that both the XO and CO be screened for command and that they hold the same rank. The shift also makes the XO and CO “near peers” in terms of YCS, though the slating guidelines require that the CO is always senior to the XO.

**Tour timing and the sea/shore rotation:** Under Fleet Up, there is more sustained ashore time between the DH and XO tours. This is expected to increase geographic stability if assignments are made appropriately. Likewise, the longer sea tour associated with the 36-month XO/CO Fleet Up tour should increase geographic stability while at sea.

**Training requirements:** Under the Fleet Up model, combining the XO and CO tours eliminates the need for the XO pipeline (PL) course for due-course officers.

### Due-course career paths: Traditional vs. Fleet Up, YCS18.5-30

YCS	Traditional	Fleet Up	
		Primary	Secondary
18.5			
19.0		1st PCC tour	
19.5			
20.0			
20.5	1st look MC	1st look MC	1st PCC tour
21.0	1 PCC tour O6 Board	2nd PCC tour O6 Board	O6 Board
21.5	2nd look MC	2nd look MC	2nd look MC
22.0	O6 promotion	O6 promotion	O6 promotion
22.5	PL 3rd look MC	PL 3rd look MC	PL 3rd look MC
23.0			
23.5	MC tour, ship or squadron	MC tour, ship or squadron	MC tour, ship or squadron
24.0			
24.5			
25.0			
25.5			
26.0			
26.5			
27.0	Post-MC shore tours	Post-MC shore tours	Post-MC shore tours
27.5			
28.0			
28.5			
29.0			
29.5			
30.0	Retire if not previously promoted		



Sources: References [1], [6], and [7].

The figure in this slide compares the traditional and Fleet Up career paths from YCS18.5 to YCS30. Key differences illustrated by the figure are summarized as follows.

**The time between the CO and MC tours:** Due to the change in the timing of the O5 CO tour, the Fleet Up path allows for more time between the CO and MC tours to do career-enhancing PCC assignments. If the assignments are made carefully, this change in timing could also increase geographic stability during this period.

**The length and timing of the MC tour:** Fleet Up lengthened the MC tour from 24 months to 36 months and pulled the notional start time for the tour back by 6 months. MC Fleet Up also changed the timing and grade associated with related tours, but these changes don't show up in the figure. Specifically, for squadron commands, the position of Chief Staff Officer, which had been held by a post-XO O5, has been replaced by the Deputy Commodore position, which is held by an O6.

Together, the figures on this slide and the previous slide show that the main changes in the SWO career path and in likely SWO career outcomes are associated with adopting Fleet Up for O5 commands. This is the main reason that this section, as well as later analyses, focuses on O5 commands.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
  - Expected effects of Fleet Up
    - As a command model
    - As a distribution model
- Analytical approach, data, and methods
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up



The SW community adopted Surface Force XO/CO Fleet Up to achieve interconnected command- and distribution-related goals (i.e., to close the control-grade inventory/requirements gaps without loss to readiness). In the course of working out the implementation details for Fleet Up, however, community planners identified additional advantages associated with adopting the new model, as well as some potential disadvantages.

The previous sections described features of the Fleet Up model and the specific changes implementing it has entailed for the SW community. This section describes the expected command- and distribution-related effects—positive and negative—associated with each Fleet Up feature and each expected change.

The expectations described here serve as a guide for the subsequent analysis by identifying what to look for in the data and helping to define the criteria for the overall assessment of Surface Force XO/CO Fleet Up. The key questions are: which expected outcomes have actually been realized, and do the positives appear to outweigh the negatives?

Information in this section comes from references [1], [2], and [3], plus pre-project discussions with PERS-41 staff.

Expected effects of Fleet Up—as a command model

### Expected positive effects on command quality and readiness

Fleet Up feature	Expected change vs. traditional model	Expected positive effect
Combined Tour	Increases leadership stability: Decreases XO/CO churn	Improved crew performance and morale
	Increases leadership stability: Increases individual tenure at command	Better individual XO and CO performance Better transition for new CO
	Changes tour timing	
	Eliminates separate XO pipeline	
XO and CO both screened for command and hold same rank	May blur distinction between XO and CO positions	
	Makes XO and CO near peers	Better XO/CO teamwork and communication if good match
New screening process and timing	1 <sup>st</sup> look for O5 Command happens earlier	



The chart above summarizes the expected *positive* effects of the Surface Force XO/CO Fleet Up on command quality and readiness.

As already indicated, reducing XO/CO churn was expected to have positive effects on readiness via positive effects on crew performance and morale. Increases in individual command tenure (to 36 months from just 18 or 24 months) were also expected to improve readiness by improving individual performance. For the CO, potential performance improvements were expected because his time as XO would familiarize him with both the crew and the ship, thus eliminating or reducing the learning period at the beginning of the CO tour. For the XO, potential performance improvements were expected because the knowledge that he would fleet up to CO would cause him to take a longer-term view of his XO role.

The press release announcing the shift to Fleet Up summarized these expectations in the following way: “A commanding officer will reap the benefits of the actions and policies he or she institutes as executive officer. He or she will know the crew upon assumption of command and will be intimately familiar with the material condition and the combat readiness of the ship” [9].

The logic behind these expectations is mostly intuitive, but there is some formal research to support it. Reference [10] found that personnel turbulence can make pre-mobilization training for Army reserve units less effective and less efficient, while studies of civilian work teams (see reference [11]) indicate that performance can improve over time as members get to know each other. References [12] and [13] both find evidence that ships with longer-serving COs have better material readiness. Reference [14] found that recruiter productivity starts out low, but increases over the first few months of the tour as recruiters learn their jobs and their recruiting markets.

Expected effects of Fleet Up—as a command model

### Potential negative effects on command quality and readiness

Fleet Up feature	Expected change vs. traditional model	Potential negative effect
Combined Tour	Increases leadership stability: Decreases XO/CO churn	Over-emphasis on quality of XO/CO match Reduced ability to respond to bad climate
	Increases leadership stability: Increases individual tenure at command	Potential for burnout
	Changes tour timing	Worse leadership performance due to time away from the waterfront
	Eliminates separate XO pipeline	Decreased XO content Sub-optimal timing for CO content
XO and CO both screened for command and hold same rank	May blur distinction between XO and CO positions	Worse leadership team performance
	Makes XO and CO near peers	Worse XO/CO teamwork and communication if bad match
New screening process and timing	1 <sup>st</sup> look for O5 Command happens earlier	Reduced quality of command screen decisions



In addition to the expected positive command-related effects of Fleet Up, reference [1] also acknowledged some potential *negative* effects, which are summarized in the chart.

To the extent that the traditional model supported a specific relationship between the CO, the XO, and the crew, there was concern that Fleet Up could upset that balance. First, it was considered possible that with both the XO and CO screened for command, Fleet Up could blur the lines between the XO and CO roles in a way that might reduce individual and/or combined leadership quality. In particular, there was concern that the XO might be perceived—by himself or by the crew—as a pre-CO, rather than as a true XO. Second, under the Fleet Up model, the XO and CO are “near peers.” Planners were uncertain how this might affect the working relationships between XOs and COs—would it improve the flow of ideas or inhibit free discussion? Whether the “near-peer” XO/CO relationship was likely to have a positive or negative effect on leadership performance was expected to depend on the personalities involved. Thus, there was also concern that Fleet Up could overemphasize the importance of the relationship between the XO and the CO and limit the community’s ability to alter an unhealthy command climate that arises due to a bad XO/CO match. This is the negative side of leadership stability.

Under the Fleet Up screening process, O5 command screening decisions are made based on fewer years of service and less experience at sea. Thus, it was considered possible that this change could lower the average quality of officers selected for command.

As Fleet Up was being implemented, additional concerns about the combined tour arose. First, there was concern that the 36-month long tour was resulting in high burnout out for officers completing Fleet Up tours. Second, there was concern that time away from the waterfront during the long gap between the DH and XO/CO tours could lead to a loss in proficiency. Third, there were indications that the combined XO/CO pipeline course focused too much on CO content, while delivering it at the wrong time for the CO tour.

Expected effects of Fleet Up—as a distribution model

Expected positive effects on career and community management

Fleet Up feature	Expected change vs. traditional model	Expected positive effect
Combined Tour	Increases O5 command opportunity (via shorter CO tour length)	More O5s, PCCs, and O6s to close control-grade inventory gap
	Eliminates separate XO pipeline course	Lower training costs Greater training efficiency
	Eliminates need for operational detailing	Greater detailing flexibility and efficiency
	Decreases tour-length flexibility	
Tour timing and sea/shore rotation	Improves work/life balance	Higher retention, especially O4 Ability to reach personal goals
	Creates potential for greater geographic stability	Higher retention, especially O4 Lower PCS costs
	Increases potential number of PCC assignments	Better SWO fill of O5 1000/1050 billets
	Increased detailing flexibility	More SWOs in fulfilling joint requirements
New screening process and timing	Eliminate separate XO screen	Better flow of officers through pipeline to create more O5s, O6s, and PCCs
	Earlier O5 command screening	Higher O4 retention of former enlisted



The most important expected distributional benefit of adopting Fleet Up was the increased flow of SWOs along the career path to create more O5s, PCCs, and O6s and a consequent narrowing of the O5 and O6 inventory/requirements gaps. The chart above summarizes additional expected positive effects identified in reference [1].

Under the traditional model, coordinating the separate XO and CO tours to ensure that turnover for each position fits into the operational schedule of the ship is a difficult task that can result in sub-optimal outcomes for both the community and individual officers. The regular XO/CO transition pattern of the Fleet Up model, however, eliminates the need for this “operational detailing” and was, thus, expected to increase detailing efficiency. Combining the XO and CO tours also allowed for the elimination of the separate XO pipeline course, which was expected to increase detailing flexibility by making extra time available for career-enhancing assignments, as well as to decrease training and travel costs.

The new sea/shore rotation was also expected to yield benefits. First, by providing greater potential for geographic stability at key points, it could decrease the number of compensated permanent change of station (PCS) moves and, thus, decrease PCS costs. Second, it was expected to have a positive effect on retention via improvements in work/life balance, especially for O4s. A 2004 survey of junior SWOs (reference [15]) found that the lack of balance between personal and work time, especially time spent away from home, was the top factor influencing junior SWOs’ desire to leave the Navy. The survey also found that geographic stability after the DH tour was the second-most popular retention incentive for this group. Finally, the longer ashore times were expected to create more detailing flexibility: O4s would have more opportunity to fulfill joint requirements and achieve full Joint Service Officer (JSO) status, while more O5s could complete two PCC tours, making SWOs better positioned to fill O5 1000/1050 billets and key billets on senior staffs.

Expected effects of Fleet Up—as a distribution model

### Potential negative effects on career and community management

Fleet Up feature	Expected change vs. traditional model	Potential negative effect
Combined Tour	Increases O5 command opportunity (via shorter CO tour length)	Crowding out of promotions for SM-screened officers and those on specialty career paths
	Eliminates separate XO pipeline course	
	Eliminates need for operational detailing	
Tour timing and sea/shore rotation	Decreases tour-length flexibility	Limited ability to respond to changing community conditions
	Improves work/life balance	
	Creates potential for greater geographic stability	
	Increases potential number of PCC assignments	Increased PCC retirements based on performance in command
New screening process and timing	Increased detailing flexibility	
	Eliminate separate XO screen	
	Earlier O5 command screening	Lower O4 retention of non-former enlisted



Finally, the last chart in the section summarizes the potential negative distributional effects of Fleet Up, identified in reference [1].

First, the increases in O5 CO-A opportunity were thought to have the potential to crowd out O5 promotions of officers screened for SM commands and those on Specialty Career Paths (SCPs). Second, there were concerns about the decrease in adjustability of tour lengths. This was expected to limit the SW community’s ability to respond to changes in community conditions, such as changes in cohort sizes, changes in force structure, and the introduction of new crew manning initiatives.

Other potential negative effects relate to retention. Specifically, the changes to the timing of O5 command screen were expected to have different effects on retention for different groups. On the positive side, it was thought that earlier command screening combined with the earlier CO tour could potentially increase the retention of prior enlisted O4s approaching the 20-year retirement mark but attracted by the opportunity to command. On the negative side, earlier O5 command screening was thought to have the potential to decrease the retention of non-prior-enlisted O4s who would have an earlier signal of non-viability in the community. Since non-prior-enlisted O4s are the larger group, the negative effect would be more likely to dominate. Finally, the earlier completion of the CO tour was also expected to have the potential to negatively affect retention. Specifically, it was thought to have the potential to increase PCC retirements based on performance in command.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up
- Analytical approach, data, and methods
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up



This section describes the analytical approach used in this study and how it follows from the expected effects of Fleet Up identified in the previous section. It also provides general descriptions of the methods and data used, though more specific descriptions are provided at various points throughout the briefing.

## Approach defined by nature and range of effects

- The expected effects are feature specific and depend on whether a given change took place:
  - Fleet Up feature ⇒ Expected change ⇒ expected/potential effects
  - Approach:
    1. Determine whether the expected change took place
    2. If change took place, determine whether the associated expected effects occurred
- There are many expected effects
  - Approach:
    - Study as many effects as possible ⇒ breadth rather than depth
    - Cast a wide net to look for red flags that may indicate that Fleet Up is not a viable command or distribution model for the SW community
- Most changes occur between YCS10 and YCS20
  - Approach: Focus on this part of the career and, especially, O5 commands



The overall approach used in this study follows from the nature and range of the expected effects of adopting Fleet Up, as both a command model and a distribution model.

First, each expected effect follows from a specific expected change that is associated with one or more of the features that distinguish the Fleet Up model from the traditional model. Therefore, the analysis of each effect begins with a determination of whether the expected enabling change took place.

Second, the wide range of expected effects, combined with the study tasking to address them all, necessitates a “broad” rather than a “deep” approach. Specifically, casting a wide net means that each analysis is aimed at finding red flags, or outstanding indicators, that Fleet Up is unviable, either as a command or distribution model. The analysis is not aimed at explaining or quantifying fine differences between traditional outcomes and Fleet Up outcomes. Areas of concern revealed here should be studied more thoroughly.

Finally, most of the expected changes associated with Fleet Up occur between YCS10 and YCS20. As a result, the analysis of Fleet Up as a distribution model focuses on career outcomes for paygrades O4 and O5, and the analysis of Fleet Up as a command model focuses on O5 afloat commands.

## Wide net requires multiple methods and datasets

- Methods:
  - Descriptive: Basic counting, tracking, and cross tabulations
  - Comparisons: Raw rates and regression analysis
- Datasets
  - Fleet Up dataset to describe Fleet Up implementation
  - Comparison dataset to follow officer career progression and compare traditional and Fleet Up outcomes
  - Command Excellence dataset to assess the effect of Fleet Up on operational readiness
  - Inspection Results dataset to assess the effect of Fleet Up on material readiness
  - Enlisted Attrition dataset to assess the effect of Fleet Up on command climates
  - Survey data to provide context and aid in interpreting results from the other datasets



The wide range of effects to analyze required a similarly wide range of methods and datasets.

The methods used in this study range from descriptive methods based on simple counting and cross tabulations to comparisons using more sophisticated statistical techniques, such as regression analysis. In general, the methods used were the simplest ones possible to show whether an expected change took place or an expected effect was realized. The choice of method was also determined by the nature of the underlying data.

In total, six datasets were used in this study. They are listed above and described in detail in the following sections.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up—positive and negative
- Approach, methodology, and data
- Status of Fleet Up implementation
  - Approach and data
  - Implementation status
  - Plan vs. actual
  - Summaries
    - Implementation status
    - Observed effects
    - Implications for analysis
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up



This section describes the actual manner and stage of Surface Force XO/CO Fleet Up implementation. Per the conclusions drawn in the Background section, the focus is on Fleet Up for O5 Command.

The primary objective of this section is to further refine the focus and scope of the analysis. It addresses this question: Has Surface Force XO/CO Fleet Up been implemented as planned? Consistent with the approach described on slide 29, this question is about determining whether the expected changes associated with Fleet Up took place and whether the expected effects can be studied.

The section also, however, yields direct evidence regarding some of the expected effects.

## Approach and data

- Approach: Describe Fleet Up implementation and compare actual outcomes to planned outcomes
- Data: Fleet Up dataset
  - Sample: Officers who have started O5 Afloat XO/CO Fleet Up tours
  - Timeframe: From first ship conversion in FY 2008 through 1<sup>st</sup> quarter of FY 2014
  - Sources:
    - PERS-41 records on ship conversions and Fleet Up screening
    - Bi-annual and quarterly extracts from the Officer Master Files (OMF)
  - OMF data on tour begin and end dates verified against PERS-41 records



This section follows an essentially descriptive approach, using basic cross tabulations and counting to show the status of Fleet Up implementation and to compare actual changes and outcomes to planned changes and outcomes.

The analysis in this section is based on the Fleet Up dataset that includes officers who had started O5 Command XO/CO Fleet Up tours from the beginning of implementation in FY 2008 through December 2013, the last month for which data were available.

The Fleet Up dataset was created using information provided by PERS-41 merged with personnel records from the CNA's extracts from the Officer Master Files (OMF).<sup>\*</sup> Specifically, PERS-41 provided the schedule by which ships with O5 COs converted from the traditional model to the Fleet Up model as well as Board results for officers screened using the new Fleet Up screening process. Merged together, these three data sources allow us to identify different types of Fleet Up officers (see next slide) and to follow their career progression. In this dataset, the begin and end dates of XO and CO tours from the OMF have been corrected to match dates in PERS-41 records; this is not true in the larger Comparison dataset.

We would like to acknowledge that creation of this dataset would not have been possible without the information, as well as considerable support and patience, provided by LCDR Jamie Murdock, PERS 411B.

<sup>\*</sup>CNA receives regular OMF extracts. From 1982 to 2004, we received March and September extracts. From March 2005, we have received extracts on a quarterly basis.

## Basic timeline: Planned vs. actual

- Original plan:
  - Change to Fleet Up model announced in December 2005
  - Conversions to occur on a ship-by-ship/billet-by-billet basis
  - Implementation to begin in CY 2006, with most changes occurring in 2008 and 2009
- Actual implementation:
  - New XO/CO Fleet Up screen implemented in April 2007
    - O4 PYG05 (initial YG1995) first Fleet Up-screened cohort
  - Conversions began in 2008, but most occurred between 2009 and 2011



As the data in the following slides show, Fleet Up implementation has gone generally according to plan, although its start was somewhat delayed.

Implementation of Fleet Up was planned to and has been done on a ship-by-ship/billet-by-billet basis. Adoption of the new model was announced in December 2005 and ship conversions were expected to begin in CY 2006, with most changes occurring in 2008 and 2009. In fact, conversions did not begin until 2008 and most occurred between 2009 and 2011.

The main reason for the implementation delay was the time required to design the new screening process, which was not applied until April 2007. O4 PYG05 (initial YG1995) was the first Fleet Up-screened cohort.

## Cohorts and groups: Traditional officers

Mapping milestones and YCS to fiscal years by YG—traditional cohorts

Initial YG; YCS0	1st look XO; YCS9	O4 PYG; YCS10	2nd look XO; YCS11	3rd look XO; YCS12	Start XO tour; YCS13	1st look CO; YCS14	2nd look CO; YCS15	3rd look CO; YCS16	Start CO tour; YCS16
Fiscal Year (FY)									
1990	1999	2000	2001	2002	2003	2004	2005	2006	2008
1991	2000	2001	2002	2003	2004	2005	2006	2007	2009
1992	2001	2002	2003	2004	2005	2006	2007	2008	2010
1993	2002	2003	2004	2005	2006	2007	2008	2009	2011
1994	2003	2004	2005	2006	2007	2008	2009	2010	2012

Note: The Fleet Up screen was implemented in 2007. For officers from YG90-94, who screened for XO under the traditional screening process, the SW community ran a separate, CO-only screen until they were all out of CO looks. The green shaded cells highlight the cohorts to which this separate screen applied and how long it was in place.



There are three main groups of officers that are relevant to the analysis of Fleet Up for Commander Command: traditional officers, Fleet Up officers, and retoured officers. This slide describes “traditional” officers.

Traditional officers are those who passed YCS12 before the Fleet Up screening process was implemented in FY 2007 (i.e., those in O4 PYG04 and earlier). Based on historical O4 promotion timing, this generally translates to officers in initial year group 1994 (YG94) and earlier.

Officers in these cohorts followed the traditional career path, were evaluated for both XO and CO under the traditional screening process, and, if screened for XO-A and CO-A, served in traditional XO billets as O4s and traditional CO billets as O5s. To show how the Fleet Up implementation process defines this group, the table above maps notional career milestones to fiscal years for YG cohorts FY90 to FY94, starting with the first look for XO and ending with the start of the CO tour.

The table shows that all officers in these YGs would have screened for XO under the traditional model and likely started their XO tours before implementation of the Fleet Up screening process. In addition, most would have also had their first look for command before implementation of the new screen (see cells not shaded in green).

For members of those YG cohorts not screened for command by 2007, the SW community ran a separate, CO-only screen until they were all out of CO looks. As a result, most officers from these YG cohorts followed the traditional career path from accession through promotion to O6. Therefore, career outcomes for these officers—as individuals and in cohorts—provide the baseline against which to evaluate Fleet Up outcomes. The exceptions are retoured officers, or retours; they are described on the next slide.

## Cohorts and groups: Retour and Fleet Up officers

Mapping milestones and YCS to fiscal years by YG—Fleet Up cohorts

Initial YG; YCS0	O4 PYG; YCS10	1 <sup>st</sup> look; YCS12	2 <sup>nd</sup> look; YCS13	Start Fleet Up tour and 3 <sup>rd</sup> look; YCS15	Complete Fleet Up tour; YCS18
Fiscal year (FY)					
1995	2005	2007	2008	2010	2013
1996	2006	2008	2009	2011	2014
1997	2007	2009	2010	2012	2015
1998	2008	2010	2011	2013	2016
1999	2009	2011	2012	2014	2017
2000	2010	2012	2013	2015	2018

Note: The dataset goes through the 1<sup>st</sup> quarter of FY 2014. The green shaded cells highlight milestones cannot yet have been reached.



This slide describes the other two groups of officers: Fleet Up officers and retours.

Fleet Up officers are those who screened for command under the new Fleet Up screening process (i.e., those in O4 PYG05 and later). Based on historical O4 promotion timing, this translates to officers in YG95 and later (though there are three Fleet Up officers from earlier YGs due to individual variations in promotion timing). To show how the Fleet Up implementation process defines this group, the table above maps notional career milestones to fiscal years for YG95-00, starting with the first look for CO-A and ending with completion of the O5 Fleet Up tour.

The table illustrates three subgroups of Fleet Up officers based on historical O4 promotion timing at YCS11. First, officers from YG95 were the first group to be screened using the new process and nearly all of them should have had time to start and complete their Fleet Up tours. Second, nearly all officers from YG96 and YG97 and many from YG98 should have had time to start their Fleet Up tours, but most will not have had time to complete them. Finally, no officers from YG99 (or later) have had time to start their Fleet Up tours, even if they have screened for command.

Retours constitute a unique group that is neither purely traditional nor purely Fleet Up. Instead they are a hybrid of each, which was a necessary part of the transition from the old model to the new. Specifically, to convert ships from the traditional command model to the Fleet Up model, it was necessary to bridge the gap between those officers screened for CO under the traditional process and the newly screened Fleet Up officers by “retouring” previously XO-served officers in XO billets from which they fledged up as soon as new Fleet Up XOs were identified and sent through the training pipeline. Thus, retours were screened for XO-A and CO-A under the traditional model; completed traditional XO-A tours, then did Fleet Up tours in which the XO portion was abbreviated. These officers come primarily from YGs 90-94, but a few came from later year groups.

## Implementation status: Ship conversions

Ship conversions by ship class, fiscal year, and officer type

FY of arrival of first retour or Fleet Up XO							
Ship type	Total	2008	2009	2010	2011	2012	2013
All ships and XOs							
DDGs	62	0	9	18	16	15	4
FFGs	12	0	4	5	0	1	2
LSDs	11	0	5	3	0	0	3
LCS crews	8	2	0	2	0	1	3
Total	93	2	18	28	16	17	12
Ships with retour XOs							
DDGs	27	0	7	12	5	3	0
FFGs	2	0	1	1	0	0	0
LSDs	5	0	2	3	0	0	0
LCS crews	3	2	0	1	0	0	0
Ships with Fleet Up XOs							
DDGs	35	0	2	6	11	12	4
FFGs	10	0	3	4	0	1	2
LSDs	6	0	3	0	0	0	3
LCS crews	5	0	0	1	0	1	3



The table above shows conversions from the traditional to the Fleet Up command model by ship type and fiscal year. In the table, conversion is defined by the arrival of the first retoured or Fleet Up XO. Consistent with the O5 CO-A commands listed on slide13, the table shows conversions for DDGs, FFGs, LSDs, and LCS crews.

**DDGs:** All 62 DDGs in the fleet were planned to convert to Fleet Up, and actual conversions were complete as of FY 2013.

**FFGs:** FFG conversions to Fleet Up were driven by the decommissioning schedule for this ship class. Between FY 2009 and FY 2013, 12 FFGs were converted, but four have since been decommissioned. As of the first quarter of FY 2014, there were 10 FFGs remaining in the fleet with two remaining under the traditional model because they will decommission soon. There are still officers who were screened under the traditional model and are in or awaiting command seats.

**LSDs:** All 12 of the fleet's LSDs were planned to convert, and as of the first quarter of FY 2014 the process was complete for 11 of 12 ships. The last LSD was scheduled to receive its first Fleet Up XO in March 2014, just past the data window for this analysis.

**LCS crews:** There are currently four LCS class ships in the fleet and, since all were commissioned after the adoption of Fleet Up, it was not necessary for these ships to "convert." During this analysis, LCSs were manned using a "blue and gold" 2-crew-per-hull rotation, so for the four ships there are eight crews.

Thus, the data show that, from a ship perspective, the transition to the Fleet Up model for O5 commands is virtually complete with 93 hulls converted. Note, however, that the Fleet Up planners from 2005 expected a relevant force structure of 112 ships by FY 2010. The difference is primarily due to slower-than-expected commissioning of LCSs and it means that CO opportunity should be lower than expected.

## Implementation status: Fleet Up tour starts

Fleet Up tour starts by fiscal year and officer type

FY of start	Total	Tour starts		Converted ships
		Retours	Fleet Up	
FY08	2	2	0	2
FY09	22	10	12	20
FY10	48	19	29	48
FY11	54	6	48	64
FY12	60	3	57	81
FY13	57	0	57	93
FY14 (1 <sup>st</sup> qtr.)	14	0	14	93
Total	257	40	217	



The data in the table above show tour starts by fiscal year and officer type. Thus, the perspective has shifted from the ship to the officer.

The data in the table are self explanatory, but they show two important aspects of Fleet Up implementation. First, they define the Fleet Up sample: 257 officers—40 retour and 217 Fleet Up—who started O5 XO/CO-A Fleet Up tours between FY 2008 and the first quarter of FY 2014.

Second, they show how annual demand for XOs and COs in O5 Afloat Fleet Up billets has grown as ships were converted from the traditional to the Fleet Up model. The data show that annual tour starts have not yet reached the planning goal of 75 (see slides 8 and 9).

## Implementation status: Tour status (1)

Tour status for officers who have started a Fleet Up tour,  
by retour and Fleet Up

Fleet Up tour status	Counts			Percentage of starters		
	Total	Retour	Fleet Up	Total	Retour	Fleet Up
Started a Fleet Up XO tour	257	40	217			
Completed a Fleet Up XO tour	168	39	129	65%	98%	59%
Didn't complete/haven't completed Fleet Up XO tour <sup>1</sup>	89	1	88			
Fleeted up to CO <sup>2</sup>	162	39	123	63%	98%	57%
Didn't fleet up <sup>3</sup>	6	0	6			
Completed a Fleet Up CO tour	81	33	48	32%	83%	22%
Didn't complete/haven't completed Fleet Up CO tour <sup>4</sup>	81	6	75			
Reached YCS20	28	27	1	11%	68%	0%

Notes: (1) One retour XO and four Fleet Up XOs were fired; other XOs are still in their Fleet Up XO assignments and have not had time to complete. (2) Nine officers who did technically fleet up did not do their CO tours on the same ships where they did their XO tours. (3) Three XOs weren't certified to fleet up; one couldn't fleet up because of illness; two did not fleet up because of FFG decommissioning or LPD transition. (4) Three retour COs were fired; one Fleet Up CO was fired; other COs are still in their Fleet Up assignments and have not had time to complete.



The table in this slide tracks the tour status of officers in the Fleet Up dataset. The data show that only 32 percent of all officers who have started XO/CO Fleet Up tours have completed them. The figure is only 22 percent for Fleet Up officers. The data also show that only one Fleet Up officer has reached YCS20 and none have reached the O6 promotion window. Thus, from the officer and the community perspective, the transition to Fleet Up is still incomplete.

The table notes explain the few cases where officers either haven't finished a tour or didn't fleet up because of something other than not having enough time to do so. First, out of the 217 officers who have started Fleet Up XO tours, five were fired and out of 162 officers who started Fleet Up CO tours, four were fired. Of the COs, three were fired in FY 2012, a year in which a total of 22 COs were fired throughout the Navy.\* Second, only three of the 168 officers who completed XO tours were not certified to Fleet Up. We have no data to indicate whether this is a positive or negative signal. From a positive perspective, it could mean that the Fleet Up screen is selecting the right officers for CO-A. From a negative perspective, it could mean that the Fleet Up model doesn't provide a strong enough mechanism to stop unqualified XOs from taking command.

The table notes also indicate that, of the 162 officers who completed XO tours and fleeted up to CO, nine did not fleet up on the same ship for various reasons. In these cases, the expected readiness benefits associated with the Fleet Up command model are unlikely to be realized. Four cases were due to FFG decommissioning or LPD transition, which should not occur in the future, but three cases were for other, unidentified reasons that may be repeated. The remaining two cases were due to hull swaps; in these cases, the CO's would get the benefits of knowing the crew, but not the ship.

\*The XO and CO firings were all reported in *Navy Times* articles, which described the reasons in varying levels of detail. For the XO firings, the reasons were: loss of confidence, but no misconduct; striking a subordinate; not responding appropriately to hazing incidents; findings from a squadron command investigation; and application of the new screening policy by the CO. For the CO firings, the reasons were: sexual harassment; misconduct; a pattern of unprofessional behavior among the ship's crew; and a collision.

## Implementation status: Tour status (2)

Tour status for Fleet Up officers who have started a Fleet Up tour, by initial YG and tour start FY

Initial YG of Fleet Up officers							
	YG93	YG94	YG95	YG96	YG97	YG98	YG99
Started a Fleet Up XO tour	1	2	65	80	47	18	4
Completed a Fleet Up XO tour	1	2	61	56	8	1	0
Fleeted up to CO	1	2	59	53	7	1	0
Completed a Fleet Up CO tour	1	2	34	10	1	0	0
FY of Fleet Up tour start							
	FY08	FY09	FY10	FY11	FY12	FY13	FY14
Started a Fleet Up XO tour	0	12	29	48	57	57	14
Completed a Fleet Up XO tour	0	12	28	47	40	2	0
Fleeted up to CO	0	12	27	46	36	2	0
Completed a Fleet Up CO tour	0	12	26	10	0	0	0



The table on this slide show tour starts for Fleet Up officers by fiscal year and year group. The data show the following:

- There is no Fleet Up YG cohort from which all members have completed their Fleet Up tours.
- Only those Fleet Up officers who started their tours in the first two years of implementation have completed them.

Thus, it isn't yet possible to observe trends in Fleet Up implementation or effects.

## Plan vs. actual: Tour start YCS

Tour start YCS for Fleet Up officers, by start FY and initial YG

Start FY	Tour start YCS								Total	Command screened
	11	12	13	14	15	16	17	18		
2009	0	0	4	7	1	0	0	0	12	
2010	0	0	1	21	7	0	0	0	29	
2011	1	0	1	13	26	7	0	0	48	
2012	0	0	0	3	32	19	3	0	57	
2013	0	0	0	4	30	18	3	2	57	
2014	0	0	0	2	8	3	1	0	14	
Initial YG										
YG93	0	0	1	0	0	0	0	0	1	1
YG94	0	0	0	0	2	0	0	0	2	3
YG95	0	0	3	26	20	11	3	2	65	75
YG96	1	0	1	16	34	24	4	0	80	91
YG97	0	0	1	2	32	12	0	0	47	71
YG98	0	0	0	2	16	0	0	0	18	88
YG99	0	0	0	4	0	0	0	0	4	77
<b>Total</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>50</b>	<b>104</b>	<b>47</b>	<b>7</b>	<b>2</b>	<b>217</b>	



The previous slides described the status or progress of Fleet Up implementation. Next we consider whether Fleet Up has been implemented as planned, starting with tour start YCS.

Recall that the notional Fleet Up career path calls for the O5 XO/CO Fleet Up tour to start at YCS15.5. The data above show that the modal start YCS for Fleet Up officers is indeed sometime during YCS15. But the data also show that the start dates are shifting to the right, which is highlighted with the green shading in the chart. Another way to see the shift is to consider changes in the shares of command-screened officers from each YG who started their tours by YCS15: For YG95, this share was 61 percent, but for YG98 (which reached YCS15 in FY 2013), the share can be no more than 21 percent.

Note that even for YG95 and YG96, the number screened for command is greater than the number who have started tours, which indicates there are screened officers from every Fleet Up YG still waiting to start their tours.

Thinking back to two previous slides, this shift in start dates isn't surprising. First, recall how slide 13 showed that screening more officers for command than there are billets to fill will immediately cause tour start dates to shift right. Second, recall that slide 37 showed that in no fiscal year have more than 60 Fleet Up officers started tours, yet the data above show that more than 60 have been screened for command in every Fleet Up YG.

In fact, the most recent Career Planning Briefs show career paths with YCS17 as the notional start time for XO/CO Fleet Up tour. (See reference [16].)

## Plan vs. actual: Tour lengths

Average tour lengths of *complete* XO and CO tours for Fleet Up officers, by start FY and initial YG

	Average tour length			Sample size	
	XO	CO	Total	XO	CO
Start FY					
2009	20.0	19.3	39.3	12	12
2010	19.1	18.2	37.0	28	26
2011	18.3	16.5	33.6	47	10
2012	17.1			40	0
2013	7.0			2	0
Initial YG					
FY93	18.0	19.0	37.0	1	1
FY94	17.5	18.0	35.5	2	2
FY95	18.8	18.5	37.7	61	34
FY96	17.7	16.9	34.3	56	10
FY97	17.1			8	1
Overall					
Average	18.1	18.1	36.9	129	48
Maximum	27.0	24.0	49.0		
Minimum	2.0	12.0	30.0		



Next we consider Fleet Up tour lengths.

According to the notional Fleet Up career path, the O5 Afloat XO/CO tour length should be 36 months, with 18 months for each portion. The chart above shows overall average tour lengths for Fleet Up officers, as well as averages by the fiscal year when the tour starts (start FY) and by YG. The data show that overall average tour lengths have been close to notional, but there is also a fair amount of variation (see the overall maximum and minimum).

The data also show that average tour lengths appear to be decreasing over time by both fiscal year and YG, but they haven't changed by much more than the planned  $\pm 1$  month for each portion or  $\pm 2$  months total.

Combined with the data on the previous slide, the data on this slide indicate that the planned adjustability in the tour length may not provide enough flexibility to keep tour start dates in the desired range.

## Plan vs. actual: Examples of XO/CO churn

Command model	Date of transition	Tenure at XO or CO transition			Summary statistics <sup>1</sup>		
		XO	CO	Combined	Max	Min	Avg
<b>USS Mitscher (DDG 57)</b>							
Traditional	New CO (Aug 2007)	13	1	14	41	3	22.3
	New XO (May 2008)	1	10	11			
	New CO (Feb 2009)	10	1	11			
	New XO (Jun 2010)	1	17	18			
	New CO (Jul 2010)	2	1	3			
Fleet Up	New XO (Feb 2012)	1	21	22	60	22	38.8
	New XO (Oct 2013)	1	21	22			
<b>USS Hopper (DDG 70)</b>							
Traditional	New CO (Jan 2007)	17	1	18	41	4	20.7
	New XO (Mar 2007)	1	3	4			
	New XO (Apr 2008)	1	16	17			
	New CO (Jul 2008)	4	1	5			
	New XO (Jan 2010)	1	19	20			
	New CO (Apr 2010)	4	1	5			
Fleet Up	New XO (Nov 2011)	1	23	24	60	21	38.0
	New XO (Jun 2013)	1	20	21			

Notes: (1) Average, maximum, and minimum combined XO and CO months on board for whole period: August 2007 through December 2013 for DDG 57 and January 2007 through December 2013 for DDG 70.



Finally, this slide illustrates the effect of Fleet Up on XO/CO churn and leadership stability using data on actual XO/CO transitions for two ships—the USS *Mitscher* (DDG 57) and the USS *Hopper* (DDG 70).\*

For both ships, the data cover about six years (74 months for DDG 57 and 78 months for DDG 70) with roughly the first four years falling under the traditional model and the last two years falling under the Fleet Up model.

Following the format of the chart on slide 12, which illustrates the *expected* effects of Fleet Up on XO/CO churn and leadership stability, the chart above identifies each XO and CO transition throughout the data period and the tenure of the XO and CO at each one. The summary statistics then show the average, maximum, and minimum average combined months on board for the XO and CO.

The summary statistics show, as expected, that the average combined time under the Fleet Up model is longer than under the traditional model—60 versus 40 months for both ships. The data also show, in particular, that the minimum average combined time is greater for both ships—21 or 22 months instead of 3 or 4 months.

Based on these examples, Fleet Up has decreased XO/CO churn and increased leadership stability as expected.

\*These ships were chosen more or less at random to serve as examples of the effects of Fleet Up on XO/CO churn; there is nothing special or unusual about their data.

## Summary: Implementation status

---

- Ship conversions are virtually complete
  - Only one planned conversion had not taken place by 31 December 2013, the end of the data period
- For the community, however, the transition to Fleet Up is incomplete:
  - Only 22 percent of Fleet Up officers who have started tours have completed them
  - No Fleet Up officers have reached the O6 promotion window

The slide summarizes the conclusions regarding the status of Fleet Up implementation.

## Summary: Observed Fleet Up effects

- **Distributional:** The Fleet Up model may not be sufficiently flexible to adjust to changes in community conditions
  - Although the average start YCS is 15, as planned, start dates are shifting to the right and many screened officers are waiting to begin their tours
- **Command related:**
  - Fleet Up increases leadership stability as expected:
    - Fleet Up increases individual ship tenure
    - Fleet Up decreases XO/CO churn by standardizing the rotation pattern
  - Fleet Up COs do not seem to be fired at excessively high rates
    - Out of 162 who started Fleet Up CO tours, 4 have been fired; 3 were fired in 2012, a year in which 22 COs were fired Navy-wide

This slide summarizes the distributional and command-related effects of Fleet Up revealed by analyzing Fleet Up implementation.

## Summary: Implications for analysis

- For the community, the transition to Fleet Up is incomplete. This means some expected effects can't be analyzed:
  - O6 promotions and changes in the O6 inventory/requirements gap
  - Numbers of PCCs, PCC assignments (senior war college and O5 1000/1050 billets), and PCC retirements
  - Trends in implementation or outcomes
- Fleet Up has generally been implemented as planned and expected changes have taken place. Some small deviations from the plan, may, however, mitigate expected effects:
  - Early tour starts could limit the observed effect of time between DH and XO
  - Late tour starts could limit the (eventual) effect on PCC assignments
  - Fleeting up to different ships could limit the scope for observed command benefits
- Phased implementation creates a natural experiment: It is possible to compare traditional and Fleet Up ship performance during same period

This slide summarizes the implications of Fleet Up implementation for the rest of the analysis.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up—positive and negative
- Approach, methodology, and data
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
  - Approach and data
  - Effects associated with the combined tour
  - Effects associated with changes in tour timing
  - Effects associated with the new screen
  - Summary
- Command-related effects of Fleet Up



This section identifies the distributional effects of Fleet Up. Using OMF and other data, the section shows whether the expected positive, and potential negative, effects that can be studied have occurred. Following the approach described on slide 29, the analysis is organized by Fleet Up feature. The section starts with effects resulting from the combined tour and then moves to effects resulting from the changes in tour timing and the new screening process.

## Approach and data: Primary approach

- Approach: Compare traditional and Fleet Up outcomes associated with each Fleet Up feature
- Outcomes of interest: Career-related and personal outcomes from YCS12 to YCS16
- Methods:
  - Compare shares and rates by YG and overall
  - No statistical tests to evaluate differences
- Data: Comparison dataset
  - Sample:
    - Officers from traditional cohorts YG90-94
    - Officers from Fleet Up cohorts, YG95-99
  - Timeframe: Outcomes through the 1<sup>st</sup> quarter of FY 2014
  - Source: OMF data



The primary approach in this section is to compare career and personal outcomes for officers from traditional cohorts with those of officers from Fleet Up cohorts. The outcomes of interest (i.e., the expected effects of Fleet Up) occur at various points along the career path from the end of the DH tour (YCS12) until promotion to O5 (YCS16). Surface Force XO/CO Fleet Up has not been in place long enough to look at outcomes beyond the O5 promotion point.

In general, the outcomes are represented by the number or share of officers in each group experiencing each one. It was beyond the scope of the project to do detailed statistical modeling for every outcome, so the comparisons are in terms of simple differences that don't control for other factors. The differences are not evaluated for statistical significance. The goal is to show community-wide changes and whether they contradict or are consistent with expectations.

The analysis in this section is based on the large Comparison dataset built from personnel records in the OMF. The sample includes all officers from YG90-99 who have had uninterrupted service in the Navy since their initial commissioning (YCS0) and who were in the SW community continuously from YCS9. The traditional cohorts (YG90-94) include both traditional officers and retours. The Fleet Up cohorts (YG95-99) exclude officers from earlier YG cohorts who can be observed to have screened under the traditional system.

At the time of the analysis, the most recent data available were through December 31, 2013, the first quarter of FY 2014. Thus, career outcomes are tracked as far as possible up to this point. YG97 is the last full cohort to complete YCS16, the standard O5 promotion point.

## Approach and data: Secondary approach

- Approach: Use survey responses to provide context and to aid in interpretation of results from personnel data
- Outcomes of interest: Fleet Up officers' opinions about the Fleet Up career path
  - Opinions expressed on a 5-point scale indicating agreement or disagreement with statements in the survey
- Method: Report responses that relate to the expected changes examined with the personnel data
- Data: Survey data on opinions about the Fleet Up command model and its associated career path
  - Fielding and response rate:
    - 66 officers identified as completing O5 Afloat XO/CO Fleet Up tours
    - 52 surveys sent via e-mail to those for whom addresses could be found
    - 30 responses (11 retours; 19 Fleet Up) ⇒ an overall response rate of 58%
  - Sample: 19 Fleet Up officers who responded
  - Timeframe: Surveys sent May 19, 2014 and received by June 30, 2104



To supplement the quantitative analyses in this study, opinion surveys were also sent to officers who had completed Fleet Up tours. The survey asked officers for their opinions about Fleet Up as a command model, as well as about the Fleet Up career path. This section reports responses in the latter category as they relate to or help interpret results from the personnel data.

The survey topics and questions were developed based on information from the section on the expected effects of Fleet Up, as well as on input from interviews with SW community leaders and the original architects of Surface Force XO/CO Fleet Up.

The survey structure called for respondents to indicate their agreement or disagreement with statements on a range of topics using a 5-point scale: 5 = strongly agree; 4 = agree; 3 = neither agree nor disagree; 2 = disagree; 1 = strongly disagree. Because the sample size is small, responses are reported as simple tabulations and aggregated into three larger categories: Agree = 4 or 5; Neutral = 3; and Disagree = 1 or 2. Respondents were also asked open-ended questions about their experiences and these responses are used to provide insight into the responses to the rating questions on the same topics.

At the time the survey was being developed, 66 officers had been identified as having completed O5 Afloat Fleet Up tours, either as retours or as Fleet Up officers.\* E-mail addresses were available for 52 of these tour completers and surveys were sent to all in late May 2014. By the end of June, 30 responses had been received—11 from retours and 19 from Fleet Up officers—for an overall response rate of 58 percent.

The analysis in this section reports responses from the 19 Fleet Up officers who responded to the survey. Retours are not included here because they did not follow the Fleet Up career path. It should also be noted that some respondents did not answer every question, so for some results, the sample size is less than 19.

\*A slightly different survey was sent to officers who completed O6 afloat Fleet Up tours; it is described in the next section.

## Combined tour: O5 promotion opportunity

O5 promotion opportunity<sup>1</sup> and related screening status under the traditional and Fleet Up models

Traditional outcomes by milestone		Initial YG				
	1990	1991	1992	1993	1994	Average
Number of O4s at YCS12	175	164	161	152	142	159
% of YCS12 O4s screened XO-SM or XO-A	49.7%	56.7%	67.1%	67.1%	77.5%	63.6%
% of XO-screened officers promoted to O5 <sup>2</sup>	92.0%	91.4%	87.0%	90.2%	88.2%	89.8%
<b>O5 promotion opportunity</b>	<b>77.1%</b>	<b>75.6%</b>	<b>75.2%</b>	<b>78.3%</b>	<b>76.8%</b>	<b>76.6%</b>

Fleet Up outcomes by milestone		Initial YG				
	1995	1996	1997 <sup>3</sup>	1998 <sup>4</sup>	1999	Average
Number of O4s at YCS12	152	212	195	196	201	191
% of YCS12 O4s screened XO-SM/A or CO-SM/A	74.3%	84.4%	78.6%	65.8%	61.4%	72.9%
% of XO- & CO-screened officers promoted to O5 <sup>2</sup>	96.5%	91.6%	86.4%	--	--	91.5%
						<b>Average without YG97</b>
						<b>94.0%</b>
<b>O5 promotion opportunity</b>	<b>78.9%</b>	<b>80.7%</b>	<b>71.3%</b>	<b>--</b>	<b>--</b>	<b>77.0%</b>
						<b>Average without YG97</b>
						<b>79.8%</b>

Notes: (1) O5 promotion opportunity = number promoted to O5 / number of O4s at YCS12. (2) Promotion to O5 conditional on completing YCS16 to ensure that all in-zone promotions are captured. (3) YG97 corresponds to the FY 2013 Board which made substantially fewer selections than usual. (4) Since promotion to O5 is conditional on completing YCS16, O5 promotions are not observed for YG98 and later.



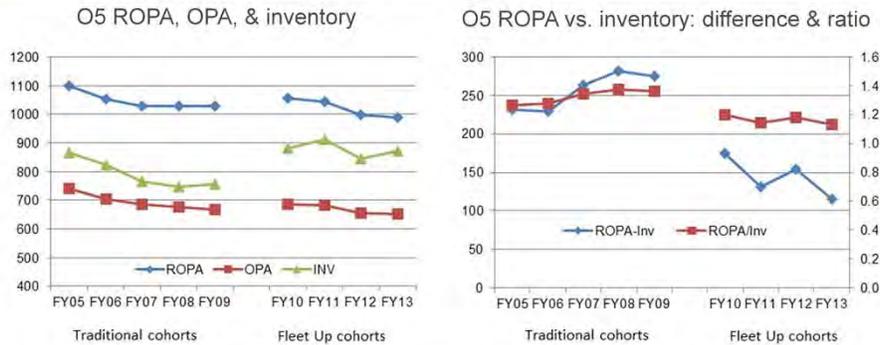
Surface Force XO/CO Fleet Up was designed, in part, to increase SWO O5 inventories by increasing the number of officers in assignments associated with high probability of O5 promotion selection. Using the number of SWO O4s as the base population, the chart above compares the shares of officers from traditional and Fleet Up cohorts who screened for the assignments that mattered under each model (XO for traditional and XO or CO for Fleet Up) and who ultimately promoted to O5.

For each group, the first row shows the number of SWO O4s at YCS12 and the second row shows the shares screened for key assignments. The data show that the shares of officers in Fleet Up cohorts screened for CO or XO have been, on average, higher than the shares of officers in traditional cohorts screened for XO only. Note, however, that the XO/CO screen rates for YG98 and YG99 were lower than the traditional average XO screen rate. This was due to very low XO-A and XO-SM screen rates for these cohorts. The third row for each officer group confirms that these are indeed the key assignments for O5: roughly 90 percent of officers screened in the selected assignments were promoted.

Finally, the fourth row for each group (highlighted in green) shows O5 promotion opportunity—the share of all SWO O4s at YCS12 promoted to O5, regardless of screen status. It is only possible to follow O5 promotion for the first three Fleet Up cohorts. The chart shows that promotion opportunity was higher than the traditional average for YG95 and YG96, but not for YG97. Members of YG97 were promoted to O5 in FY 2012, in which significantly fewer than normal promotions occurred, and in FY 2013, in which promotion opportunity for the whole Unrestricted Line fell to 70 percent from 80 and 90 percent in the previous two years, respectively.

Thus, these data indicate that, all else equal, O5 promotion opportunity did expand under Fleet Up. However, the YG97 result serves as a reminder that promotion opportunity is also affected by factors that are outside the community’s control.

## Combined tour: The O5 inventory/requirements gap



	ROPA	INV	Diff	Ratio
FY05 - FY09 avg	1,048	792	256	1.33
FY10 - FY13 avg	1,022	878	144	1.16
FY05 - FY09 change	-6.2%	-12.8%		
FY10 - FY13 change	-4.1%	15.6%		



Source: Data provided by BUERS-41.

This chart shows the actual changes in the O5 inventory/requirements gap that the increase in O5 promotion opportunity was expected to drive.

The data show that the O5 inventory/ROPA gap has decreased since FY 2010, the year in which members of the first Fleet Up cohort (YG95) were promoted to O5. Specifically, the gap has decreased whether measured as a difference (ROPA-inventory) or a ratio (ROPA/inventory) and the decrease has been due to both decreases in requirements and increases in inventory.

To the extent that the larger inventories from FY 2010 on were due to the increases in O5 promotion rates associated with Fleet Up, then Fleet Up has contributed to narrowing the inventory/requirements gap.

## Combined tour: O5 command opportunity

O5 command opportunity<sup>1</sup> under traditional and Fleet Up models

		Initial YG					Average	Notional <sup>2</sup>
Traditional outcomes by milestone		1990	1991	1992	1993	1994		
Number of O4s at YCS12		175	164	161	152	142	159	
Ever screened for O5 command		76	77	75	53	54	67	
<b>O5 command opportunity</b>		<b>43.4%</b>	<b>47.0%</b>	<b>46.6%</b>	<b>34.9%</b>	<b>38.0%</b>	<b>42.0%</b>	<b>28%</b>
		Initial YG					Average	Notional <sup>3</sup>
Fleet Up outcomes by milestone		1995	1996	1997	1998	1999		
Number of O4s at YCS12		152	212	195	196	201	191	
Ever screened for O5 command		87	99	89	105	0	95	
<b>O5 command opportunity</b>		<b>57.2%</b>	<b>46.7%</b>	<b>45.6%</b>	<b>53.6%</b>		<b>50.8%</b>	<b>45%</b>

Notes: (1) Command opportunity is equal to number ever screened for command / number of O4s at YCS12. (2) The notional rate for traditional command opportunity comes from multiplying the notional rates associated with traditional due-course career progression presented on slide 19: .65 \* .95 \* .45. (3) The notional rate for Fleet Up command opportunity was provided by PERS-41; see slide 19.



Surface Force XO/CO Fleet Up was also designed to increase SWO O6 inventories by increasing O5 command opportunity via shorter O5 command tours.

The effect of Fleet Up on O6 promotion opportunity cannot yet be observed, but it is possible to see how O5 command opportunity has changed under Fleet Up. Using the number of SWO O4s as the base population, the chart above compares the shares of officers from traditional and Fleet Up cohorts who screened for O5 command.

These data show that O5 command opportunity has, on average, been higher for Fleet Up cohorts than for traditional cohorts. This indicates that Fleet Up has the *potential* to increase O6 promotion opportunity as expected.

## Combined tour: Training costs

Estimated number of officers attending each pipeline course<sup>1</sup>

Traditional				Fleet Up			
YG	XO	CO	Total	YG	XO	XO/CO	Total
1990	87	76	163	1995	31	82	113
1991	93	77	170	1996	84	94	178
1992	108	75	183	1997	80	72	152
1993	102	53	155	1998	42	86	128
1994	110	54	164	<b>Average</b>	<b>59</b>	<b>84</b>	<b>143</b>
<b>Average</b>	<b>100</b>	<b>67</b>	<b>167</b>				

Notes: (1) Based on number of officers screened in each relevant category: Traditional XO = screened XO-SM or XO-A by end of YCS12; Traditional CO = screened CO-SM or CO-A by end of YCS19; Fleet Up XO = screened XO-SM or XO-A at end of YCS14; Fleet Up XO/CO = screened CO-A or CO-SM at end of YCS14.



By combining the traditional XO and CO tours into one, the Fleet Up model also combined the traditional model's separate XO and CO pipeline (PL) courses into one. This was expected to have both distributional and command-related effects.

From the distribution perspective, combining the two courses was expected to decrease training and associated travel costs. Within the resource constraints of the project, it was not possible to investigate changes in training costs, but it was possible to determine the *potential* for training savings by estimating the change in the number of officers completing each PL course based on screening status.

Specifically, although Fleet Up eliminates the separate XO course for Fleet Up tours, it maintains non-Fleet Up XO-A and XO-SM billets, which have training pipelines (see reference [3]). Assuming that officers screened in each category would also attend the associated PL course, the chart above provides estimates of the number of officers attending each one under the traditional and Fleet Up models.

The data show that the average number of officers likely to have attended a standalone XO PL course has decreased under Fleet Up, but that the average number likely to have attended a CO PL course has increased. Overall, the average number of officers going through either an XO or CO pipeline has decreased by 24 per YG.

Thus, these estimates indicate that training costs have probably decreased, but perhaps not by as much as expected.

## Tour timing: Potential for community-wide impact

Share of SWOs following XO/CO Fleet Up due-course career path

Milestone	Initial YG					Average
	1995	1996	1997	1998	1999	
Number of O4s at YCS12	152	212	195	196	201	191
Screened CO-A or CO-SM by YCS14	82	95	74	87	78	85
<b>% of YCS12 O4s screened CO-A or CO-SM by YCS14</b>	<b>53.9%</b>	<b>44.8%</b>	<b>37.9%</b>	<b>44.4%</b>	<b>38.8%</b>	<b>44%</b>



We turn now to the effects of changes in tour timing and the sea/shore rotation. The longer shore time between the DH and XO tours was expected to cause three key changes that would have multiple positive effects:

- Increased career flexibility to allow completion of more joint and educational assignments
- Increased geographic stability to lower PCS costs
- Improved work/life balance to improve O4 retention

The next several slides address each of these changes and effects in turn. This slide provides overall context by considering the potential for change for all SWOs in the relevant paygrades. Specifically, the community-wide impact of the Fleet Up career path on assignment patterns for all SWO O4s depends, in part, on how many SWOs follow the due-course path.

The data in the chart show that just under 45 percent of SWOs who reach YCS12 as O4s screen CO-SM or CO-A by YCS14 (i.e., on the first or second look) and, therefore follow the primary due-course career path. The remaining 55 percent of any given cohort follow a career path that looks much more like the traditional one. (See slide 21.) Therefore, the effect of Fleet Up on community-wide outcomes may be smaller than expected.

## Tour timing: Post-DH assignments

Assignments for SWO O4s who completed at least YCS15

Assignment type	Traditional <sup>1</sup>	Fleet Up <sup>2</sup>
Average percentage of time on sea duty <sup>3</sup>	53.4%	52.6%
Average percentage of assignments sea assignments <sup>3</sup>	41.5%	40.1%
Percentage of officers doing 1 joint tour <sup>4</sup>	37.6%	39.2%
Percentage of officers doing multiple joint tours <sup>4</sup>	5.0%	3.9%
Percentage of officers earning a joint Additional Qualification Designation (AQD) <sup>4</sup>	78.1%	79.8%
Notes: (1) Officers from YG90-94; sample size = 740. (2) Officers from YG95-98; sample size = 682. (3) Calculated for entire career. (4) Assignments during YCS10-20.		



By increasing the amount of shore time between the DH and XO tours, Fleet Up was expected to increase career path flexibility and allow more officers to complete more joint assignments.\*

The data in the chart above show that officers from the traditional and Fleet Up cohorts have:

- Spent about the same amount of time on sea duty and in sea assignments
- Been equally likely to complete joint tours
- Been equally likely to earn a joint Additional Qualification Designation (AQD)

Thus, based on these data, there is no evidence that officers from traditional and Fleet Up cohorts have different assignments after their DH tours.

\*Fleet Up was also expected to allow more officers to attend junior War Colleges and more command-screened officers to fill instructor billets, but the data did not support analysis of these outcomes.

## Tour timing: Survey responses about post-DH assignments

Number of respondents reporting each experience

Years between DH and XO				
<3	3-4	4-5	>5	Total
4	7	6	2	19

Number of assignments between DH and XO			
1	2	3	Total
7	8	2	17

The extended shore time between my DH and XO/CO Fleet Up tours made it possible for me to complete the assignments I needed to be competitive for promotion.

Disagree	4
Neutral	3
Agree	8
Total	15



To learn what Fleet Up officers think about the extra shore time between DH and XO tours, the survey asked respondents about their experiences during that part of their careers.

In terms of years and numbers of assignments between DH and XO, respondents reported a wide range of experiences. In particular, more than half reported having less than the notional four to five years of shore time between the two tours, though most reported having two tours or more.

Regarding the value of pre-command tours for promotion competitiveness, respondents were more likely to be positive than negative or neutral.

In open-ended responses, 13 of 18 respondents indicated that they attended Naval War College and/or completed their joint requirements during this time period. Three respondents specifically mentioned that they were glad to get this done early because it created later PCC detailing flexibility.

In general, the survey respondents were able to use this time productively. There is no indication, however, that it was perceived as better to have it all together, rather than interrupted by an XO tour.

### Tour timing: Permanent Change of Station (PCS) moves

Raw and regression-adjusted average PCS moves<sup>1</sup> from YCS10-20 for traditional and Fleet Up YG cohorts

	Raw average <sup>2</sup>	Regression-adjusted average <sup>3</sup>	95% confidence interval	
			Upper bound	Lower bound
Traditional	4.1	5.14	4.52	5.75
Fleet Up	3.0	4.91	4.28	5.54

Notes: (1) PCS moves are defined as moves to or from Alaska and Hawaii and moves that entail changing from one Permanent Duty Station (PDS) to another PDS that is in a different country or is 50 or more miles away. (2) Raw averages calculated for traditional YG90-96 and for Fleet Up YG94-99. They do not account for the fact that officers from traditional YGs have reached later YCS points. (3) Regression-adjusted averages are predicted moves based on a regression model that simultaneously controls for career path, YG, and last YCS completed. The sample size is 1,501 traditional and Fleet Up officers.



By extending the shore time between DH and XO, Fleet Up was also expected to increase the potential for greater geographic stability.

For officers in traditional and Fleet Up year groups, the chart above shows two indicators of geographic stability based on the number of PCS moves between YCS10 and 20.

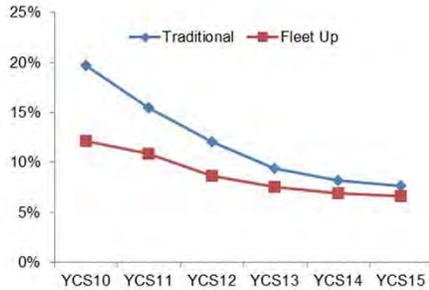
The first column shows the average number of moves for each group. Based on this measure, traditional officers have averaged one more PCS move than Fleet Up officers during this career period.

The raw average, however, does not account for the fact that traditional officers are from earlier YGs and, therefore, have more years of service, on average. The second column shows regression-adjusted averages that capture differences between traditional and Fleet Up officers, holding constant YG and last YCS completed. The regression-adjusted average for traditional officers is slightly higher than the regression-adjusted average for Fleet Up officers, but the difference is not statistically significant.

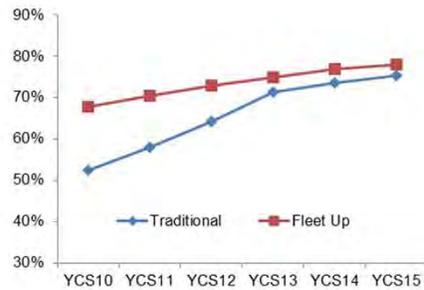
Thus, the data do not indicate that the Fleet Up career path has significantly reduced the community-wide number of PCS moves. This means that overall geographic stability has probably not increased substantially and that the scope for decreases in PCS costs is probably limited.

## Tour timing: Work/life balance and family status

Never-married<sup>1</sup> percentage of O4 SWOs by YCS<sup>2</sup>



Percentage of O4 SWOs with children by YCS<sup>2,3</sup>



Notes: (1) Never-married = single, but not divorced. (2) Base population = SWOs who were O4s by YCS12 and completed YCS15. (3) For percentage with children, the traditional sample includes retours.



Even if it hasn't increased geographic stability, longer shore time between DH and XO may have created a better work/life balance for SWO O4s and allowed them to achieve personal goals that are more difficult to accomplish while at sea, such as getting married or having children.

The charts above show the shares of traditional and Fleet Up cohorts who were single and who had children at each YCS point from YCS10 to YCS15.

Starting at YCS10, the data show that members of Fleet Up YG cohorts were less likely to be single and more likely to have children at the beginning of the relevant career period. Then, for both metrics, the Fleet Up/traditional gap closes as YCS increases, indicating that members of Fleet Up cohorts were less, rather than more, likely to get married or have more children during this stage of the career.

Although there is nothing to indicate whether these patterns will hold in the future, they do not provide evidence that the extra time between DH and XO has, so far, changed work/life balance in a way that enables Fleet Up cohorts to get married or have children.

## Tour timing: Survey responses about work/life balance

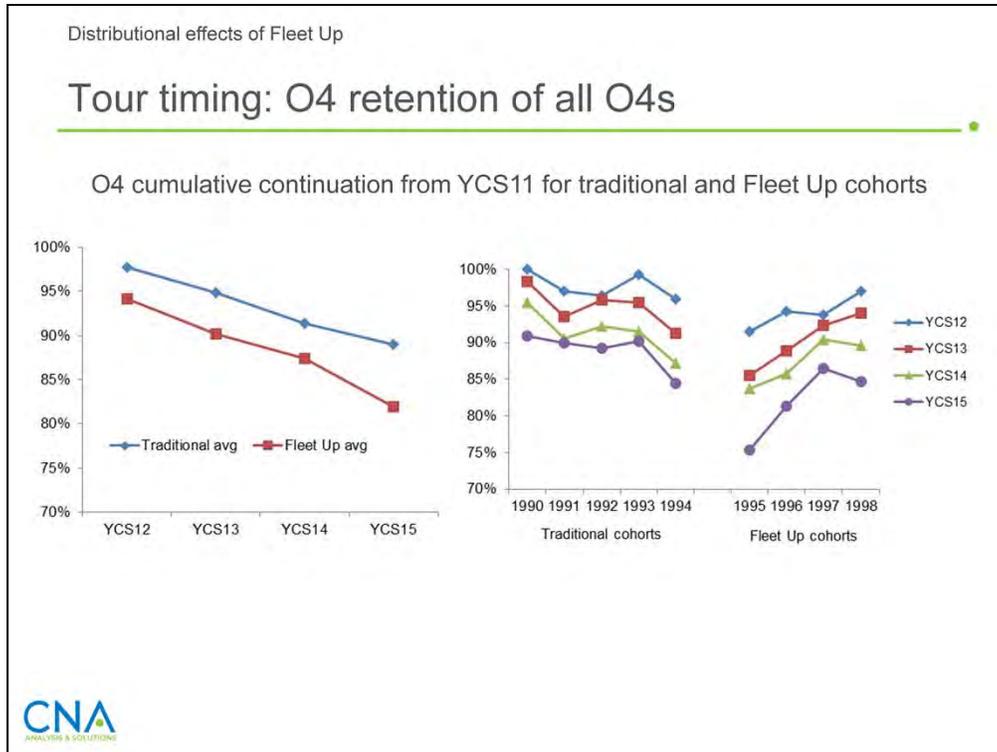
The extended shore time between my DH and XO/CO Fleet Up tours made it possible for me to achieve personal and/or family-related goals.

Disagree	2
Neutral	3
Agree	11
Total	16



The Fleet Up survey asked respondents directly about the impact of the extended shore time on their personal lives. The chart above shows that 11 of 16 respondents agreed that the extended shore time between the DH and XO/CO tours allowed them to achieve personal and/or family goals.

Thus, for these survey respondents, the extra time between DH and XO may have improved work/life balance.



From the community’s perspective, the benefit of providing better work/life balance for SWOs is a potential increase in O4 retention.

The charts above show different views of cumulative continuation from YCS11 to YCS15 for O4s in traditional and Fleet Up cohorts.

The chart on the left shows that, at every YCS point, average cumulative continuation is lower for Fleet Up cohorts than for traditional cohorts. This suggests the Fleet Up may have caused O4 retention to fall.

The chart on the right, however, tells a different story. Each line in this chart shows how continuation to each YCS point changed over time. The data show that the trends for the traditional cohorts were downward, but the trends for the Fleet Up cohorts were upward. Thus, although average continuation for the Fleet Up cohorts was lower, O4 continuation has actually been increasing since Fleet Up was implemented.

These average continuation rates do not isolate the effects of Fleet Up from other changes that were occurring at the same time (e.g., changes in economic conditions), so these data do not support a conclusion that Fleet Up caused O4 retention to increase. At a minimum, however, they do indicate that Fleet Up has probably not caused O4 retention to fall.

## Tour timing: Survey responses on retention

Knowing that I would have extended shore time between my DH and XO/CO Fleet Up tours made me more willing to stay in the SWO community.

Disagree	6
Neutral	5
Agree	4
Total	15

If I had not expected to have the extended shore time between my DH and XO/CO Fleet Up tours, I would have left the SWO community (either by lateraling or leaving the Navy).

Disagree	10
Neutral	4
Agree	1
Total	15



Survey responses about the impact of Fleet Up on retention offer additional insight into the impact of Fleet Up on retention.

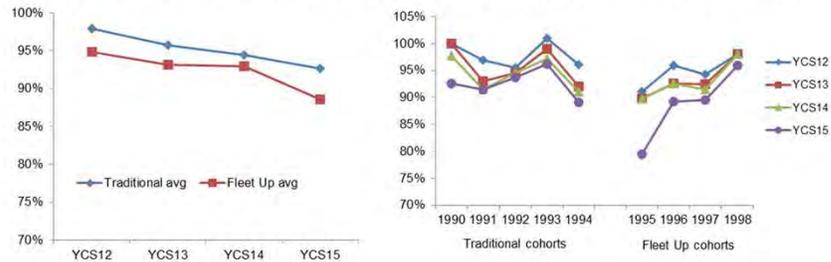
Looking at both charts, the data show that only 4 of 15 respondents agreed that the extra time between DH and XO provided by the Fleet Up career path was an inducement to stay SWO and only one of these agreed that he would have left without it.

Likewise 6 of 15 respondents disagreed that the extra time was an inducement to stay SWO and an additional 4 respondents (for a total of 10) disagreed that they would have been likely to leave without it.

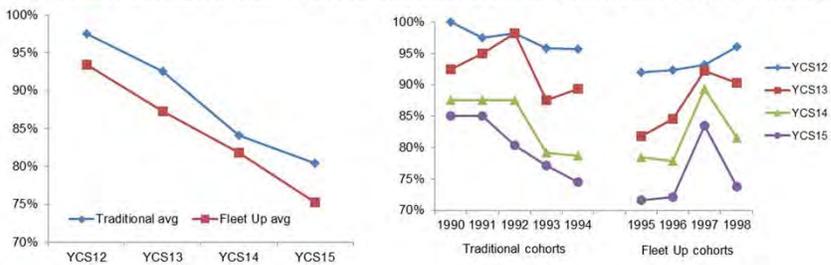
Thus, for these survey respondents, the change in tour timing was not an important determinant of retention.

## The new screen: O4 retention by prior enlisted status

O4 cumulative continuation from YCS11 for traditional and Fleet Up cohorts: **Prior enlisted**



O4 cumulative continuation from YCS11 for traditional and Fleet Up cohorts: **Non-prior enlisted**



Finally, the change in the screening process and, in particular, the change in the timing of the first look for command, was expected to have potentially opposite effects on the retention of officers with and without prior enlisted experience: the earlier command screening was expected to increase retention of O4s with prior experience but decrease retention of O4s without prior experience.\*

The charts above show the same view of continuation shown on slide 59, but the data are now shown separately for prior and non-prior enlisted officers.

The charts on the left shows that, while the two groups have different retention behaviors, the traditional/Fleet Up differences are similar.

Likewise, the charts on the right show that for both groups, the trend in continuation over time is downward for traditional cohorts and upward for Fleet Up cohorts. The exception is the noticeable drop in continuation from YCS12 for non-prior enlisted officers in YG98.

Overall, though, these data do not suggest that Fleet Up has had consistently opposite effects on the retention of prior and non-prior enlisted officers.

\*Note: The shares of officers with prior enlisted experience were substantially higher for the Fleet Up cohorts than for the traditional cohorts: 50 percent versus 28 percent.

## Summary

- Effects of the combined tour according to personnel data
  - Under Fleet Up, more officers have screened for key XO and CO positions and the O5 promotion rate has increased
  - O5 command opportunity has increased and, therefore, so has the *potential* to increase O6 promotion opportunity
  - The gap between O5 inventory and O5 ROPA has decreased over time, mainly due to increases in inventory. To the extent that the increases in inventories were due to the increases in O5 promotion rates, Fleet Up may have contributed to narrowing the inventory/requirements gap
  - Training costs have probably decreased but not by a great deal and not in all years
- Effects of changes in tour timing and the new screen according to personnel data
  - The effect of Fleet Up on community-wide outcomes may be smaller than expected
  - Personnel data show no evidence that officers from traditional and Fleet Up cohorts have different assignments after their DH tours
  - The personnel data provide no strong evidence that the extra time between DH and XO has greatly improved work/life balance
  - The data do not indicate that Fleet Up caused overall O4 retention to fall or that it caused the O4 retention of officers with and without prior enlisted experience to change in opposite directions
- Effects of changes in tour timing according to survey data
  - In general, survey respondents indicated that the extra time between DH and XO allowed them to complete career-enhancing assignments
  - For these survey respondents, the extra time between DH and XO may have improved work/life balance
  - For these survey respondents, the change in tour timing was not an important determinant of retention



This slide summarizes the distributional effects of Fleet Up as indicated by personnel and O5 survey data.

## Outline

---

- Background
- Surface Force XO/CO Fleet Up
- Expected effects of Fleet Up—positive and negative
- Approach, methodology, and data
- Status of Fleet Up implementation
- Distributional effects of Fleet Up
- Command-related effects of Fleet Up
  - Approach and data
  - Quantitative analyses: Fleet Up and command quality
  - O5 survey responses by Fleet Up feature
  - O6 survey responses: Fleet Up and command quality
  - Summaries
    - Quantitative analyses
    - Survey responses



This section identifies the command-related effects of Fleet Up. Using quantitative and qualitative data, it investigates the relationship between the Fleet Up command model and command quality according to multiple measures.

## Approach and data

- Primary approach: Use regression analysis to examine the effects of Fleet Up on indicators of command quality:
  - Winning of Command Excellence Awards (CEAs)—an indicator of a crew’s operational performance and readiness
    - Data: OMF and Enlisted Master Record (EMR) data merged with data from annual announcements on award winners
  - Results of material readiness inspections—an indicator of a ship’s material readiness
    - Data: OMF data merged with data on inspection results and ship maintenance
  - Enlisted attrition—an indicator of crew morale and command climate
    - Data: OMF data merged with EMR data at the unit level
- Secondary approach: Use survey responses to provide context and aid in interpretation
  - 19 Fleet Up officers who have completed O5 XO/CO Fleet Up tours
  - 11 Captains who completed Squadron Command tours



The primary approach used to investigate the effects of Fleet Up as a command model is to use regression analysis to quantify the effects of having a Fleet Up CO rather than a traditional CO on three indicators of command quality: a ship’s operational readiness as measured by winning Command Excellence Awards (CEAs); a ship’s material readiness as indicated by results of material inspections conducted by the Navy’s Board of Inspection and Survey (INSURV); and a ship’s command climate as indicated by the attrition rates of enlisted crew members. More detailed information about the methodologies and data used for each analysis is provided at the beginning of each subsection.

Mirroring the investigation of Fleet Up’s distributional effects, survey data are again used as a secondary approach to supplement the results from the quantitative analyses. First, the section presents data from the same O5 Fleet Up survey described in the previous section. Here, the questions address respondents’ opinions about the impact of the Fleet Up model on their own command experiences. Second, the section presents data from a survey of officers who completed Fleet Up tours as Squadron Commanders. These officers were asked to comment on any perceived performance differences between traditional and Fleet Up COs in their squadrons.

The O6 survey is similar to the O5 survey: it was developed using the same process and information, has the same structure, and was fielded in the same manner. For O6s, the total number of surveys sent was 36 and there were 11 responses, for a response rate of 31 percent.

## Fleet Up and command quality: Operational readiness (1)

- Hypothesis: Fleet Up improves a ship's operational readiness via its impact on leadership stability
- Hypothesis test: Estimate the effect of a CO's Fleet Up status on the likelihood that his ship wins a CEA in a given year
- Outcomes of interest = Win any CEA or win a CEA in one of 5 areas:
  - Maritime Warfare (MW); Engineering; Command, Control, Communications and Information Warfare Excellence (CCCI); Ship Safety (SS); Logistics Management (LM)
- Data: Command Excellence dataset
  - Sample: DDGs only; 63 ships
  - Timeframe: 2010 through 2013
  - Primary source: Official memos announcing Battle Efficiency and CEA winners in each year



Fleet Up was expected to improve command quality and readiness via increases in leadership stability. To test whether Fleet Up has resulted in better operational readiness, we analyzed the relationship between a ship's likelihood of winning a CEA and the Fleet Up status of the ship's CO.

For analytical purposes, CEA's are useful indicators of a ship's operational readiness because they are determined each year (which is more frequent than INSURV inspections, so the sample is larger) and are measured against a fixed criteria (in contrast to Battle Efficiency awards, where ships compete with each other, so winning performance does not represent a fixed performance level). There are five CEA categories listed in the slide above. We examine them each separately and as a combined whole. The outcome variable is binary; the ship either does or does not earn an award.

The analysis is based on DDG data from 2010 through 2013. This sample selection was driven by two factors. First, DDGs are the only Fleet Up ship class with enough hulls to provide a sample size large enough to support statistical analysis. Second, the time period captures the years during which there were ships with both traditional and Fleet Up COs.

The dataset was created by merging information from official memos announcing Battle Efficiency and CEA winners with a dataset that maps OMF data on ship COs to data on ship crews from CNA's extracts of the Enlisted Master Record (EMR).

## Fleet Up and command quality: Operational readiness (2)

- Explanatory variables of interest = 5 CO status categories:
  - Traditional CO with no CO transition (i.e., the CO was in the job the entire calendar year)
  - Traditional CO who transitioned from a traditional CO
  - Fleet Up CO who transitioned from a traditional CO
  - Fleet Up CO who transitioned from a fleet up CO
  - Fleet Up CO with no CO transition
- Control variables:
  - Calendar year
  - Number of enlisted personnel on board
  - Ship
- Estimation method: Logit regression
  - The appropriate method for outcome variables that equal either one (win an award) or zero (don't win an award)



Our preliminary data analysis suggested that ships were less likely to earn CEAs in years when the CO turned over. Thus, the explanatory variables of interest are five categories formed from the CO's Fleet Up *and* turnover status. These categories are listed on the slide; they capture the possible combinations of traditional/Fleet Up COs and whether or not the CO turned over in the calendar year. A ship falls into only one category each year. That category is coded as 1 for that year, and the other categories for that year are coded as 0.

Additional control variables are also included in the model:

- Calendar year is included to control for the fact that the emphasis on achieving CEAs can change over time.
- The number of enlisted personnel is included to control for the fact that the size of the crew may affect the ships' ability to earn an award. More people might give the ship both more labor to accomplish work, and because there is a larger pool of people, the ship might be more likely to have some exceptional performers who help the ship earn the awards. For the safety award, additional people might increase the likelihood of an accident occurring that disqualifies the ship.
- Ship fixed effects (a variable for each hull) are included to capture any unit-specific effects (such as fleet or location).

The estimation technique used for this analysis is Logit regression. Regression analysis, in general, is appropriate because it estimates the effect of the CO's Fleet Up status holding constant the effects of other factors that may also determine CEA outcomes. Logit regression, in particular, is appropriate it is designed to estimate the effects of each factor in a way that will get as close as possible to predicting observed successes and failures.

### Fleet Up and command quality: Operational readiness (3)

Marginal effect of CO status on a DDG's probability of winning a CEA from 2010 through 2013

CO status <sup>1</sup>	Combined <sup>2</sup>	MW <sup>2</sup>	Eng <sup>2</sup>	CCCP <sup>2</sup>	SS <sup>2</sup>	LM <sup>2</sup>
Traditional to traditional	-0.042	-0.054	-0.092	-0.061	-0.032	0.073
	0.044	0.087	0.112	0.108	0.096	0.102
	0.340	0.537	0.412	0.57	0.737	0.475
Traditional to Fleet Up	0.099*	-0.165	0.104	0.029	0.359**	0.246**
	0.052	0.104	0.122	0.125	0.098	0.120
	0.058	0.115	0.395	0.814	0.00	0.041
Fleet Up to new Fleet Up	0.062	-0.342**	0.100	0.067	0.239*	0.376**
	0.072	0.131	0.160	0.176	0.144	0.151
	0.392	-0.010	0.531	0.702	0.097	0.013
Fleet Up with no transition	0.172**	-0.014	-0.041	0.157	0.345**	0.524**
	0.071	0.148	0.182	0.178	0.14	0.131
	0.017	0.924	0.824	0.381	0.014	0.000

Notes: (1) CEAs are awarded based on crew performance during a calendar year. CO status jointly defines the turnover and Fleet Up status of each ship's CO in the award year. (2) Separate effects are estimated for each CEA award area (Maritime Warfare; Engineering; Command, Control, Communications and Information Warfare Excellence; Ship Safety; and Logistics Management), as well as for winning an award in "any" of these areas. The data reported for each outcome are the estimated marginal effect and its associated standard error and p-value. Coefficients with p < 0.05 indicate statistical significance at the 5-percent level and are indicate with "\*\*"; coefficients with p < 0.10 indicate statistical significance at the 5-percent level and are indicate with "\*".



The results of the analysis are summarized in the table above which reports the marginal effects of the CO status variables for the combined regression and the individual-award regressions. The marginal effects are the effects on the likelihood of winning an award of changing to the designated CO status from the reference status of a traditional CO who is in place for the full year.

Consider first the results of the combined regression\* which estimates the probability of winning any type of award and are shown in column 1:

- Traditional to traditional: A ship in this category is estimated to have a 0.04 percent lower probability of getting an award than a ship with a traditional CO who is in place the whole year. This is not statistically significant.
- Traditional to Fleet Up: A ship in this category is estimated to be 10 percent more likely to receive an award than a ship with a traditional CO who was onboard all year. This result is statistically significant at the 10-percent level and suggests that the transition is better with a CO who was XO.
- Fleet Up to Fleet Up: A ship in this category is estimated to be 6 percent more likely to get an award than a ship with a traditional CO who is in place the whole year, but this is statistically insignificant.
- Fleet Up with no transition: A ship in this category is estimated to be 17 percent more likely to get an award than a ship with a traditional CO who is in place the whole year. This is a relatively large effect and it is statistically significant at the 5-percent level, reinforcing the suggestion that transitions reduce performance.

\*In addition to the control variables already identified, this model includes an indicator variable for each award category.

## Fleet Up and command quality: Operational readiness (4)

Marginal effect of CO status on a DDG's probability of winning a CEA from 2010 through 2013

CO status <sup>1</sup>	Combined <sup>2</sup>	MW <sup>2</sup>	Eng <sup>2</sup>	CCCI <sup>2</sup>	SS <sup>2</sup>	LM <sup>2</sup>
Traditional to traditional	-0.042	-0.054	-0.092	-0.061	-0.032	0.073
	0.044	0.087	0.112	0.108	0.096	0.102
	0.340	0.537	0.412	0.57	0.737	0.475
Traditional to Fleet Up	0.099*	-0.165	0.104	0.029	0.359**	0.246**
	0.052	0.104	0.122	0.125	0.098	0.120
	0.058	0.115	0.395	0.814	0.00	0.041
Fleet Up to new Fleet Up	0.062	-0.342**	0.100	0.067	0.239*	0.376**
	0.072	0.131	0.160	0.176	0.144	0.151
	0.392	0.010	0.531	0.702	0.097	0.013
Fleet Up with no transition	0.172**	-0.014	-0.041	0.157	0.345**	0.524**
	0.071	0.148	0.182	0.178	0.14	0.131
	0.017	0.924	0.824	0.381	0.014	0.000

Notes: (1) CEAs are awarded based on crew performance during a calendar year. CO status jointly defines the turnover and Fleet Up status of each ship's CO in the award year. (2) Separate effects are estimated for each CEA award area (Maritime Warfare; Engineering; Command, Control, Communications and Information Warfare Excellence; Ship Safety; and Logistics Management), as well as for winning an award in "any" of these areas. The data reported for each outcome are the estimated marginal effect and its associated standard error and p-value. Coefficients with p < 0.05 indicate statistical significance at the 5-percent level and are indicate with "\*\*"; coefficients with p < 0.10 indicate statistical significance at the 5-percent level and are indicate with "\*".



Next, consider the results for individual awards:

- Traditional to traditional: Ships in this category have lower estimated probabilities of earning most of the area awards (the exception is LM), though none of the marginal effects is statistically significant. Thus, ships that have traditional CO turnover are similar to ships that have a traditional CO who does not turnover.
- Traditional or Fleet Up to new Fleet Up: For ships in these categories, results vary similarly across CEA types. The estimated effects of these transitions are: Negative and significant or near significant for MW; positive and insignificant for Engineering and CCCI; and positive and significant for SS and LM. Thus, transitioning to a Fleet Up CO is better than having a traditional CO all year in two mission areas, but worse in one.
- Fleet Up with no transition: Ships in this category are similar to ships that turnover to Fleet Up COs. They are estimated to be more likely to earn the SS and LM awards (and the marginal effects are generally a little bigger than for the ships that turnover to Fleet Up COs), but less likely to win the MW award. For these ships, however, the marginal effect on MW is negative, but small and statistically insignificant.

Finally, considered together, the combined and individual mission area results indicate that CO turnover reduces the likelihood, at least marginally, that a ship will win a CEA and that ships with Fleet Up COs may be more likely to win CEAs than ships with traditional COs.

It should be noted, however, that this analysis is only suggestive because it does not control for all the factors that could affect operational readiness. Stronger conclusions could be supported by an analysis that controls for additional variables, such as indicators of crew quality and experience, and ship employment.

## Fleet Up and command quality: Material readiness (1)

- Hypothesis: Fleet Up improves a ship's material readiness via its impact on leadership stability
- Hypothesis test: Estimate the effect of a CO's Fleet Up status on his ship's performance during an INSURV inspection
- Outcomes of interest = score on each INSURV demonstration and equipment operating capability (EOC) or the average effect on all scores combined
  - Ships perform 12 demonstrations of warfighting capability and scores are reported for each
  - EOCs are evaluated for all of a ship's systems and scores are grouped into and reported for 18 functional areas
- Data: Inspection Results dataset
  - Sample and timeframe: 40 DDGs that were inspected in FY 2010 through FY2013
  - Sources
    - INSURV data: Reports posted on the INSURV website
    - Maintenance data: Extracted from the Navy Data Environment by OPNAV N43



Fleet Up was also expected to improve material readiness via increases in leadership stability. In particular, fleeting up COs were expected to be more aware of their ships' material condition than newly arriving traditional COs. To test whether this expected effect has actually occurred, we compared the results of INSURV material inspections for ships with Fleet Up COs to the INSURV results for ships with traditional COs.

INSURV results are appropriate for this analysis because they represent an objective, third-party assessment of a ship's material condition. Specifically, INSURV provides a report of the ship's performance on 30 demonstrations and equipment operating capabilities (EOCs), each graded on a scale of 0 to 1.\* We examine them separately and as a combined whole.

One limitation of the INSURV data, however, is that inspections occur infrequently. This dataset consists of the 40 DDGs that were inspected between FY 2010 and FY 2014. Of these, 20 were led by Fleet Up COs and 20 were led by traditional COs. The concentration of Fleet Up ships increased over time; in 2010 only 1 of 7 ships had a Fleet Up CO, but in 2013, 6 of 9 ships had Fleet Up COs.

The INSURV scores came from the individual ship INSURV reports posted on the INSURV website. The maintenance data came from OPNAV N43, which extracted it from the Navy Data Environment (NDE), a database maintained by Naval Sea Systems Command.

\*See reference [17] for more details on the inspection process.

## Fleet Up and command quality: Material readiness (2)

- Explanatory variable of interest: CO's status—traditional or Fleet Up
- Control variables
  - Age of ship
  - Depot-level maintenance
    - Time since last depot availability ended
    - The amount of depot maintenance in the two years preceding the year of the inspection
  - Operational employment
    - Time since last deployment ended
    - Indicator for ships homeported in Yokosuka, Japan



To isolate the effects of the CO's Fleet Up status on INSURV scores, we used regression analyses that control for other factors that likely influence them. These variables are listed on the slide and described below.

**Age of the ship.** It is likely that older ships have more material readiness problems because of wear and tear. Thus, the model includes the age of the ship at the time of the inspection as a control variable.

**Depot-level maintenance.** Because the depot addresses material problems that are outside the capability of the ship's workforce, it is important to control for the amount and timing of depot maintenance. The model includes control variables for the time since the last depot availability ended, and the amount of depot maintenance the ship had in the two fiscal years preceding the year of the inspection. Unfortunately, the depot maintenance data are by fiscal year, so we cannot tell whether maintenance in the year of the inspection is before or after the inspection. Thus, year-of-inspection maintenance is not included in the model.

**Operational employment.** Ships that are operated more heavily or that have recently completed deployments may have put more stress on the equipment or may not have had as much time to prepare for the INSURV inspection. To account for this, the model includes control variables for the time since the last deployment ended as well as an indicator for ships homeported in Yokosuka, Japan, because they are assumed to have a different operating cycle.

## Fleet Up and command quality: Material readiness (3)

- Estimation method 1: Tobit regression
  - The appropriate method for dependent variables that range between 0 and 1, as do the INSURV test scores
- Estimation method 2: 2-stage instrumental variable (IV) approach
  - Accounts for the possibility of a two-way relationship between the dependent variable and one of the control variables: both INSURV scores and depot-level maintenance may depend on the ship's material condition
  - Uses planned maintenance as the IV because it should not be correlated with the dependent variable
- Alternate estimating sample: Combined scores
  - To increase the sample size for both methods 1 and 2, allows each score to count as an observation
  - Includes a fixed effect for each ship and an indicator variable for each demonstration and EOC
  - Estimates the average effect of Fleet Up status on all scores combined



To account for some specific features of the data, we used two different estimation techniques. The first is Tobit regression. It is the correct method to use when the values of the dependent variable range are censored. Since the INSURV scores range only from 0 and 1, they are effectively censored from above.

The second is the two-stage instrumental variable (IV) approach. Depot-level maintenance might be higher for ships that are in worse condition. If this is the case, the dependent variable (INSURV score) and one of the control variables (amount of depot maintenance) may be simultaneously determined, which would make results from method 1 unreliable. To address this, the IV approach uses an “instrumental” variable that is correlated with the control variable but not the dependent variable. The IV here is the amount of depot maintenance that the ship should have according to the class maintenance plan. Because the planned maintenance is set for the entire class, without consideration of a ship’s unique material condition, it should be correlated with the actual maintenance, but not the INSURV score. The first stage in this approach is to predict actual depot maintenance as a function of planned maintenance. The second stage is to use predicted maintenance as a control variable in the main Tobit regression. (In these data, the IV is positively, but not strongly, correlated with the original control variable. The F-statistic for the first-stage regression is only 4.5; an F-statistic of 10 or higher is desired.)

Another feature of this dataset is the small sample size. For both estimation methods, this is addressed by using an alternate sample in which each test on each ship is an observation and which includes a fixed effect for each ship (to account for some tests being scored consistently higher or lower) and an indicator variable for each demonstration and EOC. For the Tobit method, the standard errors are then clustered by hull; the IV method does not allow clustering. The underlying assumption for this approach is that the effects of the explanatory variables are the same for every demonstration and EOC.

## Fleet Up and command quality: Material readiness (4)

**Results: Method 1**  
Tobit Regression

Notes:

- 1) Measures the estimated effect of the CO's Fleet Up status on the INSURV test score.
- 2) For the combined scores, statistical significance is measured using the standard threshold:  $p = .05$ . For the individual scores, significance is measured using an adjusted threshold:  $p = .0035$ .

Measure	Coefficient <sup>1</sup>	Standard error	p-value <sup>2</sup>
Combined	-0.015	0.011	0.189
Full power demo	-0.064	0.105	0.541
Quick reversal astern demo	0.071	0.068	0.293
Quick reversal head demo	0.032	0.115	0.780
Steering demo	-0.082	0.075	0.275
Anchoring demo	0.096	0.080	0.227
Area DTE	-0.032	0.060	0.597
Self-defense DTE	-0.047	0.062	0.452
5 inch live fire	-0.050	0.224	0.824
CIWS demo	0.263	0.189	0.165
MK 38 live fire	-0.035	0.128	0.785
USW DTE	-0.173	0.070	0.014
Propulsion	0.020	0.020	0.333
Auxiliaries	-0.034	0.016	0.031
Electrical	0.014	0.025	0.579
Damage control	-0.037	0.029	0.202
Deck	-0.030	0.027	0.266
Operations	-0.021	0.023	0.371
Navigation	-0.015	0.019	0.439
USW	-0.057	0.029	0.048
Weapons	-0.017	0.030	0.574
Communications	0.041	0.024	0.080
Information systems	0.013	0.043	0.768
Aviation	-0.016	0.019	0.385
Supply	-0.005	0.013	0.697
Habitability	-0.022	0.013	0.094
NAVOSH	0.034	0.021	0.110
Ventilation	0.067	0.024	0.005
Environmental Protection	0.014	0.026	0.598
Medical	-0.008	0.010	0.439
Preservation	-0.017	0.021	0.410



The table above shows the coefficient on the CO status variable in each model estimated using method 1—standard Tobit regression. The first row reports results from the sample that uses every demonstration and EOC score as an observation. The remaining rows report the results of the demonstration- and EOC-specific regressions.

The first column identifies the demonstration and EOC for which the score is the dependent variable. The second column reports the coefficient on the variable of interest—the CO's Fleet Up status. This is the change in the expected score due to having a Fleet Up CO rather than a traditional CO, all else in the model held constant. For example, the CO status coefficient from the combined regression is -0.015, which means that the expected score on any INSURV score for a ship with a Fleet Up CO would be 0.015 lower than the score for the same ship with a traditional CO.

The third column shows the standard error of the coefficient estimate, a measure of the precision or uncertainty of the estimated effect. Finally, the fourth shows the p-value, also called the significance level. The p-value is the probability of observing a coefficient as different from zero when there is really no effect. Thus, a low p-value suggests that it is very likely that the coefficient is really different from zero (i.e., statistically significant). A common threshold for statistical significance is 5 percent ( $p\text{-value} = 0.05$ ). In this application, we're testing for one effect in 30 different ways (one regression for each demonstration and EOC), which means that the variation in the data might lead to some coefficients being relatively far from zero even if there is no effect. Thus, we adjust the common thresholds for the individual comparisons, so that the overall threshold is at the typical threshold. Specifically, we will use a p-value threshold of 0.0035.\*

\*This is known as a Sidak correction. It sets the individual threshold at  $1-(1-p)^{1/n}$ , where  $p$  is the overall threshold, and  $n$  is the number of tests. In our case,  $p=0.1$ , and  $n=30$ , so the individual threshold is 0.0035.

## Fleet Up and command quality: Material readiness (5)

### Results: Method 2 Instrumental Variables Tobit Regression

Notes:

- 1) Measures the estimated effect of the CO's Fleet Up status on the INSURV test score.
- 2) For the combined scores, statistical significance is measured using the standard threshold:  $p = .05$ . For the individual scores, significance is measured using an adjusted threshold:  $p = .0035$ .

Measure	Coefficient <sup>1</sup>	Standard error	p-value <sup>2</sup>	Chi2	p value
Combined	-0.015	0.009	0.120	1.896	0.169
Full power demo	-0.102	0.119	0.394	1.119	0.290
Quick reversal astern demo	0.024	0.086	0.782	1.445	0.229
Quick reversal head demo	-0.008	0.132	0.949	1.082	0.298
Steering demo	-0.081	0.057	0.153	0.031	0.861
Anchoring demo	0.091	0.082	0.265	0.115	0.735
Area DTE	-0.034	0.059	0.567	0.014	0.905
Self-defense DTE	-0.045	0.064	0.481	0.024	0.876
5 inch live fire	-0.090	0.320	0.778	2.047	0.153
CIVS demo	0.251	0.161	0.119	0.627	0.429
MK 38 live fire	-0.036	0.182	0.844	3.325	0.068
USW DTE	-0.153	0.083	0.064	1.162	0.281
Propulsion	0.014	0.020	0.490	1.415	0.234
Auxiliaries	-0.034	0.016	0.034	0.040	0.842
Electrical	0.021	0.032	0.522	1.992	0.158
Damage control	-0.034	0.033	0.315	0.452	0.502
Deck	-0.033	0.026	0.192	0.306	0.580
Operations	-0.019	0.019	0.306	0.320	0.571
Navigation	-0.020	0.021	0.354	1.241	0.265
USW	-0.046	0.036	0.208	1.768	0.184
Weapons	-0.007	0.039	0.862	2.317	0.128
Communications	0.045	0.029	0.125	0.311	0.577
Information systems	0.003	0.048	0.945	1.179	0.278
Aviation	-0.019	0.019	0.311	1.116	0.291
Supply	-0.008	0.014	0.593	0.963	0.326
Habitability	-0.025	0.015	0.101	1.891	0.169
NAVOSH	0.038	0.025	0.123	0.741	0.389
Ventilation	0.078	0.032	0.015	2.714	0.099
Environmental Protection	0.013	0.022	0.541	0.006	0.939
Medical	-0.009	0.008	0.273	0.180	0.672
Preservation	-0.018	0.021	0.384	0.061	0.805



The table above shows the coefficient on the CO status variable in each model estimated using method 2—Tobit regression with two-stage instrumental variables. As on the previous slide, the first row reports results from the sample that uses every demonstration and EOC score as an observation, and the remaining rows report results of the demonstration- and EOC-specific regressions.

The first four columns mirror the columns in the previous table. The fifth and sixth columns report results of a statistical test for simultaneity, or the extent to which the IV correction is needed. High (low) values of the Chi-squared statistic result in low (high) p-values, which indicate that simultaneity is (is not) present. In nearly every case, the relatively high p-values indicate that the IV correction was not needed.

Considering both tables, the results of this analysis can be summarized as follows.

- The combined regression has a CO status coefficient of -0.015 with p-values of 0.19 (without IV) or 0.12 (with IV). This effect is small and statistically insignificant at conventional levels.
- None of the coefficients on the CO status variable for the individual demonstrations and EOCs are statistically significant at the adjusted p-value of 0.0035. The few tests that have p-values below the traditional thresholds could be the result of noise in the data.

Overall, these results suggest that Fleet Up has little effect on ships' material readiness as measured by INSURV inspection results.

## Fleet Up and command quality: Enlisted attrition (1)

- Hypothesis: Fleet Up improves a ship's command climate via its impact on leadership stability
- Hypothesis test: Estimate the effect of a CO's Fleet Up status on the attrition rates of enlisted personnel serving on his ship
- Outcomes of interest
  - Attrition from the Navy = percentage of each quarter's inventory that attrited from the Navy in the next quarter
  - Early rotation from the ship = percentage of each quarter's inventory that left the ship at least 6 months before the Projected Rotation Date (PRD)
  - By paygrade: E1-E3; E4-5; E6-9; E1-9
  - By ship type: DDG, FFG, LSD
- Data: Enlisted Attrition dataset
  - Sample and timeframe: Traditional and Fleet Up CO tours that started in FY 2005 through FY 2013
  - Sources:
    - OMF data for CO status and other CO characteristics
    - EMR data for enlisted crew members' outcomes



Finally, the increase in leadership stability associated with Fleet Up and, especially, the decrease in XO/CO churn, was also expected to have a positive effect on a ship's overall command climate and crew morale. To test this hypothesis, we estimated the effect of a ship's CO Fleet Up status on the attrition rates of enlisted personnel in the ship's crew.

CEAs and INSURV scores represent direct, intentional assessments of ship and crew performance. In contrast, crew attrition is an indirect indicator of a ship's command climate. Previous CNA research, however, has shown that CO tenure matters for later attrition from the Navy. Specifically, first-term Sailors were less likely to attrite when the CO of their last ship had more tenure in the job. Focus group results from the same study also indicated that overall leadership quality was an important determinant of attrition behavior. See reference [18].

Here, we considered two measures of attrition. First, consistent with the approach in [18], we analyzed attrition from the Navy measured by the percentage of a ship's inventory in a given quarter that is seen to attrite from the Navy in the next quarter. Second, we analyzed early rotation from a ship's crew measured by the percentage of the ship's inventory in any given quarter that left the ship at least six months before the Projected Rotation Date (PRD). For both measures, we estimate the effects of CO-status separately by ship type and enlisted paygrade.

The dataset used for this analysis is the Enlisted Attrition dataset. In this dataset, the unit of observation is one quarter of a CO's tour, up to eight quarters. It was created by merging the OMF data with data from the EMR by individual ship. The COs in the sample are traditional COs who started tours in FY 2005 through FY 2013 and Fleet Up COs who started the CO portion of their Fleet Up tours from FY 2010 through FY 2013. There are no retour COs in the sample and the sample also excludes Fleet Up COs who did their XO and CO tours on different ships.

## Fleet Up and command quality: Enlisted attrition (2)

- Explanatory variable of interest: CO's status—traditional or Fleet Up
- Control variables:
  - Other CO characteristics:
    - The quarter of the CO's tour
    - The length of the CO's tour (total quarters)
    - The CO's YCS
  - Paygrade-specific inventory
  - Fiscal year
- Estimation method: Generalized Linear Model (GLM) regression
  - The appropriate method for outcomes variables that are percentages
  - Separate runs with standard errors clustered at the CO or FY level to account for CO-specific and FY-specific effects, respectively



As in the INSURV analysis, the explanatory variable of interest in this analysis is the CO's Fleet Up status.

The model also includes additional control variables. In particular, given the results in [18], the model includes a variable indicating the quarter of the tour to which the observation corresponds (e.g., first quarter, second quarter, etc.). In addition, paygrade-specific inventories are included to account for manning levels, and fiscal year indicators control for changes in overall attrition levels over time.\*

The estimation technique used for this analysis is a Generalized Linear Model (GLM) regression. This is an appropriate technique because the dependent, or outcome, variable is a proportion. To account for the fact that we observe up to eight quarters for any given CO and up to four quarters for any given fiscal year, estimates were run twice, once with standard errors clustered at the CO level and once with standard errors clustered at the tour FY level. The results are the same regardless of the clustering level.

\*It should be noted that this is not an exhaustive selection of control variables—there are many other determinants of attrition including individual Sailor characteristics, ship deployment histories, and economic conditions. It is possible that including these left out variables would change the estimated effects of the Fleet Up variables reported here. Unfortunately, it was beyond the scope of the study to fully model enlisted attrition behavior.

## Fleet Up and command quality: Enlisted attrition (3)

Marginal effects of CO status on the percentage of a ship's crew that attrited from the Navy, by ship type and paygrade

Ship type and enlisted paygrade	Marginal effect <sup>1</sup>	Standard Error	P-value	Predicted average attrition <sup>2</sup>	
				Traditional	Fleet Up
<b>DDGs</b>					
E1 to E3	-0.006**	0.002	0.002	2.0%	1.4%
E4 and E5	-0.002	0.001	0.101		
E6 to E9	-0.001	0.000	0.076		
E1 to E9	-0.002**	0.001	0.025	0.8%	0.6%
<b>FFGs</b>					
E1 to E3	-0.001	0.003	0.842		
E4 and E5	-0.002**	0.001	0.042	0.7%	0.5%
E6 to E9	-0.001	0.000	0.196		
E1 to E9	-0.002**	0.001	0.002	1.0%	0.8%
<b>LSDs</b>					
E1 to E3	-0.005**	0.002	0.005	2.2%	1.7%
E4 and E5	-0.005**	0.001	0.000	0.9%	0.4%
E6 to E9	0.000	0.000	0.760		
E1 to E9	-0.004**	0.000	0.000	1.2%	0.8%

Notes: (1) Effects that are significant at the 5-percent level are indicated with "\*\*\*". (2) Only reported for significant effects.



The table above shows the results for Navy attrition, by ship type and paygrade. The first column of the table shows the estimated marginal effects of the CO's Fleet Up status on the percentage of the ship's crew that attrited from the Navy in the quarter following the quarter of the observation. The second and third columns show the standard error of the estimate and the resulting p-value. P-values less than 0.05 indicate statistical significance at the 5-percent level. Marginal effects that meet this standard are indicated with "\*\*\*". The marginal effect can be interpreted as follows: the estimated effect times 100 is equal to the percentage-point change in the outcome.

For significant marginal effects the fourth and fifth columns show the predicted average attrition rates of crewmembers from ships with traditional and Fleet Up COs, respectively.

The data show that, for DDGs and LSDs, attrition of junior Sailors is lower for ships with Fleet Up COs than for ships with traditional COs and that, for FFGs and LSDs, attrition of mid-level Sailors is lower for ships with Fleet Up COs.

## Fleet Up and command quality: Enlisted attrition (4)

Marginal effects of CO status on the percentage of a ship's crew that left the ship at least 6 months before the PRD, by ship type and paygrade

Ship type and enlisted paygrade	Marginal effect <sup>1</sup>	Standard Error	P-value	Predicted average attrition <sup>2</sup>	
				Traditional	Fleet Up
<b>FFGs</b>					
E1 to E3	-0.030**	0.007	0.000	6.2%	3.2%
E4 and E5	-0.020**	0.006	0.001	3.9%	1.9%
E6 to E9	-0.012	0.007	0.070		
E1 to E9	-0.018**	0.007	0.014	4.4%	2.6%
<b>LSDs</b>					
E1 to E3	-0.038**	0.008	0.000	6.7%	2.9%
E4 and E5	-0.029**	0.013	0.026	4.7%	1.8%
E6 to E9	-0.027**	0.007	0.000	4.2%	1.5%
E1 to E9	-0.031**	0.010	0.003	5.3%	2.2%

Notes: (1) Effects that are significant at the 5-percent level are indicated with "\*\*". (2) Only reported for significant effects.



The table above shows the results for early rotation from the ship, by ship type and paygrade. The structure of the table is the same as that of the table on the previous slide. Note, however, that there are no data for DDGs. This is because none of the results for DDGs were statistically significant.

These data show that, for FFGs and LSDs, Sailors in all paygrades who served on ships with Fleet Up COs were less likely to leave their assignments early (i.e., at least 6 months before the PRD) than Sailors who served on ships with traditional COs.

Overall, the results of the attrition analysis suggest that the extra leadership stability that results from the Fleet Up model may have a positive effect on command climate as indicated by Navy attrition rates and early rotations from ships' crews. These results are, however, only suggestive. First, as noted earlier, attrition and early rotation are only indirect indicators of command climate. Second, there are many potential determinants of both outcomes that are not included in the model.

## O5 responses: Combined tour and own performance (1)

Fleeting up to CO immediately after my XO tour made me a more effective CO than I would have been if I had had shore time between my XO and CO tours.

Disagree	3
Neutral	2
Agree	14
Total	19

Serving as XO and fleeting up to CO made me a more effective CO than I would have been if I had done my XO tour on a different ship.

Disagree	2
Neutral	2
Agree	15
Total	19



The next several slides show the O5 survey responses to questions about the Fleet Up command model and their own command experiences. These responses are organized by Fleet Up feature, starting with the combined tour. This slide shows responses to statements about the impact of fleeting up on the respondents' performance as CO.

The statement in the left-hand chart addresses the impact of beginning the CO tour immediately after completing the XO tour, and the statement in the right-hand chart addresses the impact of serving as CO on the same ship.

The responses in both charts indicate that nearly all respondents agreed that these two key features of the Fleet Up command model had a positive impact on their command performance.

O5 responses: Combined tour and own performance (2)

Knowing that I would fleet up to CO made me take a longer-term view of the decisions I made as XO than if I had not been expecting to fleet up.

Disagree	4
Neutral	1
Agree	14
Total	19

As a Fleet Up CO, I was able to reap the benefits of the actions and policies I instituted as XO.

Disagree	2
Neutral	1
Agree	16
Total	19

Familiarity with the material condition and combat readiness of the ship based on my XO tour helped me make the right decisions and set the right policies as CO.

Disagree	1
Neutral	0
Agree	18
Total	19

Familiarity with the ship's crew based on my XO tour helped me make the right decisions and set the right policies as CO.

Disagree	0
Neutral	1
Agree	18
Total	19



The survey responses on this slide address statements regarding the mechanisms by which the Fleet Up model is expected to improve XO and CO performance: having a long-term view as XO and being familiar with the ship and the crew upon taking command as CO.

The responses in all four charts indicate that the respondents generally agree that the mechanisms that made the Fleet Up model work for them were as theoretically expected.

## O5 responses: Combined tour and burnout

The XO/CO Fleet Up tour should be longer than 36 months to allow for more command time.

Disagree	11
Neutral	3
Agree	5
Total	18

The XO/CO Fleet Up tour should be shorter than 36 months to avoid burnout.

Disagree	8
Neutral	7
Agree	4
Total	19

The 36-month XO/CO Fleet Up tour length is the right length to allow for both effective and sustained high performance in two demanding jobs.

Disagree	5
Neutral	3
Agree	11
Total	19

In terms of my performance as CO, I would have benefited from a break between the XO and CO tours.

Disagree	2
Neutral	7
Agree	10
Total	19



As Fleet Up was being implemented, some concerns developed regarding the length of the tour: was it too long to maintain strong performance and was it causing severe burnout? The responses on this slide address statements designed to get at these concerns.

Three of the charts show the extent to which respondents agreed with specific statements about the 36-month tour length. Although opinions were somewhat mixed across the three questions, the overall indication is that the 36-month tour length is about right for good performance.

The responses in the bottom-right chart, however, indicate a desire for some break before taking command. Open-ended comments on tour length indicate that at least two weeks is needed, but a month would be better.

Overall, however, neither the responses to these rating questions nor the responses to the open-ended questions indicate that burnout is a big problem.

O5 responses: Combined tour and the combined pipeline (1)

The PCO course provided good preparation for the XO portion of the Fleet Up tour.	
Disagree	12
Neutral	3
Agree	4
Total	19

The PCO course provided good preparation for the CO portion of the Fleet Up tour.	
Disagree	0
Neutral	4
Agree	15
Total	19

The PCO course prepared me equally well for the XO and CO jobs.	
Disagree	12
Neutral	1
Agree	6
Total	19



Another concern that emerged during the initial implementation of Fleet Up related to merging the XO and CO PL courses into one PCO course. Specifically, there were some concerns that the new PCO course might be too focused on CO rather than XO content and that it was not coming at the right time for those fleeting up to command. The charts on the next two slides show that these concerns may have been valid.

First, the charts on this slide show responses to statements about the value of the PCO course for the XO and CO portions of the Fleet Up tour. The responses indicate that, for most respondents, the course provided better preparation for the CO portion.

It should be noted, however, that because surveys were sent only to officers who had completed Fleet Up tours, these respondents came from the first two Fleet Up cohorts. This means that their experiences pertain to the early versions of the combined PCO course. In response to open-ended questions about the course, several respondents acknowledged that improvements have been made to address the lack of XO content in the initial version of the course.

O5 responses: Combined tour and the combined pipeline (2)

The PCO course happened at the right time for the XO portion of the Fleet Up tour.

Disagree	5
Neutral	6
Agree	8
Total	19

The PCO course happened at the right time for the CO portion of the Fleet Up tour.

Disagree	2
Neutral	8
Agree	9
Total	19



The charts on this slide show responses to statements about the timing of the PCO course. These responses indicate that the timing may not be optimal for CO preparation.

In response to open-ended questions about the pipeline course, some respondents indicated that a refresher on Command Leadership just before fleeting up would be valuable and would provide a good break.

Overall, the responses reported on this and the previous slide indicate that the changes that have been made to the PCO course were necessary and in the right direction, but there may still be some issues regarding timing for optimal CO preparation.

## O5 responses: Combined tour and tour timing

From a performance perspective, the shore time between the DH and XO/CO Fleet Up tours is too long to be "away from the waterfront."

Disagree	5
Neutral	5
Agree	8
Total	18



Finally, the chart on this slide shows responses to a statement regarding the potential negative effect of the later XO tour start under Fleet Up. Specifically, respondents indicated the extent to which they agreed that the extended time between the second DH tour and the XO/CO Fleet Up tour was too long to be away from the waterfront.

The respondents had mixed opinions about the effect of the extra time between the DH and XO tours, but they were more likely to agree that it was too long than to disagree.

Thus, these responses indicate some concern about time away from the waterfront, which is especially problematic given the rightward shift in tour start dates. According to reference [16], the SW community has begun to address this issue with the introduction of "SWO clock" tours, which add a post-DH requirement to serve in a sea duty or waterfront/production job to retain SWO currency and a connection to the Fleet.

## O5 responses: Screen status and teamwork (1)

Knowing that I would fleet up to CO enhanced the working relationship between me and my CO.	
Disagree	4
Neutral	4
Agree	11
Total	19

The fact that my CO and I were "near peers" in terms of rank and years of commissioned service enhanced our working relationship.	
Disagree	4
Neutral	7
Agree	8
Total	19

My CO and I worked effectively as a team.	
Disagree	1
Neutral	2
Agree	16
Total	19



We turn now to a different feature of the Fleet Up command model. The survey responses presented on the next two slides show respondents' opinions about effects that were expected to follow from the fact that, under Fleet Up, the XO and CO are both Commanders who have been screened for command. These effects are related to XO/CO communication and teamwork and were expected to depend on the quality of the XO/CO match.

The charts on this slide show responses from the XO perspective, and the charts on the next slide show responses from the CO perspective.

The responses in the charts above indicate that most respondents worked effectively with their COs and found that the near-peer aspect of the relationship was either positive or neutral. Additionally, most respondents agreed that the fact that they would ultimately fleet up to command had a positive effect on the working relationship with their COs.

Thus, these responses indicate that, from an XO perspective, the Fleet Up model does not harm the XO/CO relationship.

## O5 responses: Screen status and teamwork (2)

Knowing that my XO would fleet up to CO enhanced our working relationship.

Disagree	1
Neutral	2
Agree	14
Total	17

The fact that my XO and I were "near peers" in terms of rank and years of commissioned service enhanced our working relationship.

Disagree	2
Neutral	3
Agree	14
Total	19



The charts on this slide show responses to similar statements about the XO/CO relationship, but from the CO, rather than the XO, perspective.

These responses show that for most respondents the “near-peer” relationship between the XO and CO under the Fleet Up model was positive for the working relationship, as was the knowledge that their XOs would ultimately succeed them in command.

Responses to open-ended questions about Fleet Up and XO/CO teamwork indicate that the XO/CO relationship is personality-specific, regardless of the command model.

Overall, the responses to the questions presented on this slide and the previous one suggest that the Fleet Up model does not harm XO/CO teamwork or communication.

## O5 responses: Screen timing and command quality

My DH performance was a good indicator of my eventual CO performance; right after the DH tour is the right time to screen for command.

Disagree	2
Neutral	6
Agree	11
Total	19



Finally, the responses on this chart show respondents' opinions about the effect of the new screening process on the quality of command screening decisions.

The respondents generally do not disagree that DH performance is a good indicator of future command performance.

The responses to open-ended questions reiterated this result. Thus, overall, the survey responses raised no red flags regarding the new screening process.

## O6 responses: Command quality (1)

On average, the Fleet Up COs in my squadron were more effective than the COs who did not fleet up.

Disagree	2
Neutral	2
Agree	7
Total	11

On average, the Fleet Up COs in my squadron needed more mentoring and guidance than the COs who did not fleet up.

Disagree	7
Neutral	3
Agree	1
Total	11



The analysis in this section concludes with two slides that report Squadron Commanders' perceptions about performance differences between the traditional and Fleet Up COs in their squadrons.

The chart on the left-hand side shows responses to a statement about the overall performance of Fleet Up COs compared with traditional COs. The data show that nearly all Squadron Commander respondents agreed that their Fleet Up COs were as effective as or more effective than traditional COs.

The chart on the right-hand side shows responses to a statement about the mentoring and guidance needed by Fleet Up COs compared with traditional COs. The data show that only one Squadron Commander thought that his Fleet Up COs needed more attention than his traditional COs.

## O6 responses: Command quality (2)

On average, Fleet Up COs had a better understanding of the material condition and combat readiness of their ships than the COs who did not fleet up.

Disagree	1
Neutral	2
Agree	8
Total	11

Familiarity with the material condition and combat readiness of their ships, based on their XO tours, helped the Fleet Up COs in my squadron make better decisions and set better policies than the COs who did not fleet up.

Disagree	0
Neutral	3
Agree	8
Total	11

On average, Fleet Up COs were more familiar with and had a better understanding of their ships' crews than the COs who did not fleet up.

Disagree	1
Neutral	1
Agree	9
Total	11

Familiarity with their ships' crews, based on their XO tours, helped the Fleet Up COs in my squadron make better decisions and set better policies than the COs who did not fleet up.

Disagree	1
Neutral	3
Agree	7
Total	11



The charts on this slide show responses to statements about how the Fleet Up command model improves command quality.

Most of the respondents agreed that their Fleet Up COs made better decisions and set better policies than their traditional COs because of the ship-specific experiences and knowledge they gained as XOs on the same ship.

Considering the responses on this slide and the previous slide, these responses do not indicate that Fleet Up systematically harms CO quality.

## Summary: Quantitative analyses

- Operational readiness
  - Ships that had a Fleet Up CO for the entire CEA-relevant calendar year were significantly more likely to win any type of CEA than ships that had a traditional CO for the whole year
  - Within each command model, ships that had the same CO for the whole year were more likely to win awards than ships that experienced CO turnover during the year
  - The impact of Fleet Up may be different across performance areas: Compared to ships that had the same traditional CO for the whole year, Fleet Up ships were more likely to win awards in ship safety and logistics management than in maritime warfare
- Material readiness
  - In no case was the estimated effect of the CO status variable statistically significant
  - Overall, the results of this analysis suggest that Fleet Up has had little effect on material readiness as measured by INSURV inspection results
- Enlisted attrition
  - Sailors of all paygrades were less likely to leave early from FFGs and LSDs commanded by Fleet Up COs
  - Junior Sailors were less likely to attrite from the Navy after serving on DDGs and LSDs commanded by Fleet Up COs



This slide summarizes the results of the quantitative analyses of the effects of Fleet Up on command quality as measured by indicators of operational and material readiness and enlisted attrition.

## Summary: Survey input

- O5 responses regarding the effects of the combined tour
  - Responses indicate that Fleet Up doesn't harm, and may improve, XO or CO leadership performance
  - Responses do not indicate that burnout is a big problem
  - Responses indicate that changes made to the PCO course were necessary and in the right direction, but there may still be issues regarding timing for optimal CO preparation
  - Tour timing: These responses indicate some concern about time away from the waterfront
- O5 responses regarding other features of Fleet Up
  - Screen status: These responses indicate that the Fleet Up model does not harm XO/CO teamwork or communication
  - Screening process: These responses raised no red flags regarding the screening process
- O6 responses regarding O5 command quality and readiness
  - Nothing in these responses suggests that Fleet Up harms XO or CO leadership quality
  - Responses to open-ended questions revealed mixed opinions regarding the screen timing and process

This slide summarizes the survey results regarding the impact of Fleet Up on command quality.

## References

- [1] Navy Personnel Command, PERS-41. "Surface Force XO/CO Fleet Up Proposal: CNSF Pre-Decision Brief." Jul. 25, 2005.
- [2] Navy Personnel Command, PERS-41. "Surface Force XO/CO Fleet Up: Community Brief." Jan. 2006.
- [3] Navy Personnel Command, PERS-41. XO/CO Fleet Up Frequently Asked Questions. n.d., last accessed Aug. 1, 2014, at <http://www.public.navy.mil/bupers-npc/officer/Detailing/surfacewarfare/detailers/Pages/411Post-DHthroughPCOs.aspx>.
- [4] Rear Admiral James A. Winnefeld, Sr., USN (Ret.). *Professional Naval Officer: A Course To Steer By*. Annapolis: U.S. Naval Institute Press, 2006.
- [5] Ann D. Parcell and David M. Rodney with Michael J. Moskowitz. *Officer Personnel Management Challenges*. CNA Annotated Briefing D0022539.A2/Final. Jul. 2010.
- [6] Navy Personnel Command, PERS-41. "Surface Warfare Officer Career Planning Seminar." Jun. 2011.
- [7] Navy Personnel Command, PERS-41. "Surface Warfare Officer Career Planning Seminar." Mar. 2012.
- [8] Captain John Nowell, Jr. "From the Bridge." PERS-41 Quarterly, 2nd Quarter FY 2012: 1.
- [9] Navy News Service. "Executive Officer to Commanding Officer 'Fleet Up' Program." Dec. 18, 2005, last accessed Jun. 13, 2014, at <http://usmilitary.about.com/od/navy/a/fleetup.htm>.
- [10] Thomas F. Lippiatt and J. Michael Polich. *Leadership Stability in Army Reserve Component Units*. RAND Corporation, MG1251, 2013.
- [11] David A. Harrison, Kenneth H. Price, and Myrtle P. Bell. "Beyond Relational Demography: Time and the Effects of Surface- and Deep-Level Diversity on Work Group Cohesion." *Academy of Management Journal* 41, no. 1, 1998: 96-107.
- [12] Donald J. Cymrot. *The Effect of Officer Characteristics on the Material Condition Index Scores of Surface Ships*. CNA Research Memorandum 86-0011. Jan. 8, 1986.
- [13] Aline Quester, Russell Beland, and William Mulligan. *Ship Material Readiness*. CNA Professional Paper 467 (revised). Feb. 1991.
- [14] Dana L. Samuelson et al. *Productivity Effects of Changes in the Size of the Enlisted Recruiter Force*. CNA Research Memorandum D0013975.A2/Final. May 2006.
- [15] Carol Newell, Kimberly Whittam, and Zannette Uriell. *CNP Quick Poll: SWO Community Continuation Intentions*. Navy Personnel, Research, Studies, & Technology (PERS-014). Jul. 29, 2004.
- [16] Navy Personnel Command, PERS-41. "Surface Warfare Officer Career Planning Seminar." Apr. 2013.
- [17] Navy Department, Board of Inspection and Survey. *INSURV Handbook: A Success Guide for Ships, Subs, and Carriers* (edition 1.0). 2013.
- [18] Heidi L. W. Golding. *Fleet Attrition: Characterizing the Causes*. CNA Memorandum D0008797.A1/Final. Aug. 2003.



## The CNA Corporation

This report was written by CNA Corporation's Resource Analysis Division (RAD).

RAD provides analytical services—through empirical research, modeling, and simulation—to help develop, evaluate, and implement policies, practices, and programs that make people, budgets, and assets more effective and efficient. Major areas of research include energy and environment; manpower management; acquisition and cost; infrastructure; and military readiness.





CNA Corporation is a not-for-profit research organization that serves the public interest by providing in-depth analysis and result-oriented solutions to help government leaders choose the best course of action in setting policy and managing operations.

*Nobody gets closer—  
to the people, to the data, to the problem.*