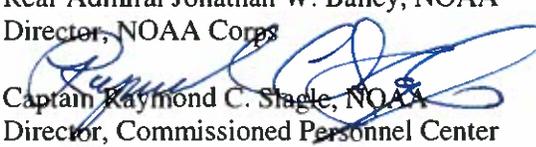




**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
**OFFICE OF MARINE AND AVIATION OPERATIONS**  
 COMMISSIONED PERSONNEL CENTER  
 Silver Spring, Maryland 20910-3282

**FEB 22 2011**

MEMORANDUM FOR: Rear Admiral Jonathan W. Bailey, NOAA  
 Director, NOAA Corps

FROM:   
 Captain Raymond C. Slagle, NOAA  
 Director, Commissioned Personnel Center

SUBJECT: Fiscal Year 2011 Officer Corps Management Plan

**PURPOSE**

The Officer Corps Management Plan (OCMP) is developed to present the current state of the NOAA Corps workforce and provide recommendations for promotion zones for the Fiscal Year (FY) 2011 through the beginning of the second quarter of FY2012. The OCMP serves as an execution plan based on the needs of the Service, FY 2011 budget environment, and properly managing the Corps promotion process to ensure officers within the promotion zones have the appropriate opportunity to gain experience to be eligible for the next grade.

**OVERVIEW**

Annually the Commissioned Personnel Center (CPC) develops the OCMP by analyzing billet levels, workforce strength, attrition trends and forecasts, promotion decisions from the prior fiscal year, and accession needs for the commissioned officer workforce. The decisions made in this memorandum establish the direction that best enables the NOAA Corp to meet NOAA's workforce requirement.

There are three steps to the officer promotion process: eligibility, selection, and promotion. Laws, regulations, and administrative procedures control each step. Eligibility for promotion to each grade is based on the parameters described in the NOAA Corps Directives Chapter 4, Part 3. The *critical* elements considered in determining promotion eligibility are: 1) experience and training, 2) years of service (YOS), 3) time in grade (TIG), and 4) completion of periodic medical examinations. The requirements for TIG are listed in the following table:

Captain (O-6)	Four years in the permanent grade of commander
Commander (O-5)	Four years in the permanent grade of lieutenant commander
Lieutenant Commander (O-4)	Three years in the permanent grade of lieutenant
Lieutenant (O-3)	Two years in the permanent grade of lieutenant (junior grade)
Lieutenant (junior grade) (O-2)	One year in the permanent grade of ensign (O-1)

Table 1 Time In Grade Requirement for Promotion

The selection process is dependent on the authorized strength, the timing to move packages from selection to promotion, the needs of the Service, and budgetary constraints. These elements are taken into consideration when determining the zone size and opportunity of selection (OOS) percentage. Once officers have been selected for promotion, the clearance process can take from two to twelve months. The variance in timing is dependent on: the processes and calendars of NOAA, DoC, and Congress; the selection grade; or other extenuating circumstances. With the extensive processing time, CPC



recommends promotion zones and Board dates occur approximately one year prior to the estimated promotion date.

CPC's recommendations for promotion zones balance short-term and long term impacts on NOAA and the NOAA Corps. The recommendations in Table 2 below are made to identify and address the impact of fiscal constraints on the NOAA Corps, the long-term workforce requirements, and challenges faced by the changing environment.

To Be Grade	Board Date (on or about)	Average YOS for Zone	Average TIG for Zone (years)	Zone Size	OOS Percentage	Select (up to)
O-6	18 April 2011	22.5	3.9	10	50%	5
O-5	18 April 2011	16.6	4.6	9	80%	7
O-4	18 April 2011	8.9	4.3	9	80%	7
O-3	01 Oct. 2011	6.4	2.4	13	90%	11
O-2	18 April 2011	2.2	1.8	10	100% (FQ)	10

Table 2 Proposed Promotion Zones for FY 2011

## **DEFINITIONS**

**Workforce Strength.** In the FY 2008 Omnibus Bill, the authorized NOAA Corps annual average strength was increased to 321 officers (plus to flag officers). In October 2008, the Hydrographic Services Improvement Act (HSIA) was passed. This bill may increase the authorized NOAA Corps annual average strength to 379 officers in FY 2011, after submitting the Ship and Aircraft Recapitalization Plans and the NOAA Corps Workforce Plan to Congress. The draft NOAA Corps Workforce Plan is requirements based and describes a steady increase in strength from 321 to 478 starting in FY 2013 through FY 2021.

**Officer Grades Established by Law.** 33 U.S.C. 3004 specifies the number of NOAA Corps officers at each grade level by percentage of the total number of active duty officers onboard. In addition to two Flag officers, Section 214 of the code states the following percentages for each grade, as shown in Table 3 below. The number of officers in each grade is, therefore, dependent on the overall strength of the NOAA Corps.

Grade	Established Percentages	Authorized Number of Officers
O-6	8%	26
O-5	14%	45
O-4	19%	61
O-3	23%	74
O-2	18%	58
O-1	18%	57*
<b>Total Authorized</b>		<b>321</b>

Table 3 Control Grade Distribution by Law, \*NOTE: The number of officers in each grade is rounded to the nearest whole number. The number of ensigns is decreased by one to account for this in order to keep the total at the proper end strength count.

## **WORKFORCE DRIVING FACTORS**

**Attrition.** Attrition is any retirement, resignation or separation. Attrition creates vacancies in the respective grade and has a cascading effect on the overall number of NOAA Corps promotions allowable per year. Grade attrition rate is calculated as a percentage of the overall attrition for the year. The overall

attrition rate is a calculated percentage of the number of officers separated, retired and resigned in the year divided by the annual average strength. Table 4 shows the attrition rate for the previous five years.

	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	Three Year Average
<b>Grade</b>	<b>Attrition Rate by Grade</b>					
O-1	24.1%	11.5%	14.3%	17.4%	11.1%	14.3%
O-2	10.3%	11.5%	17.9%	13.0%	27.8%	19.6%
O-3	17.2%	15.4%	17.8%	26.1%	27.8%	23.9%
O-4	6.9%	11.5%	10.7%	13.0%	16.7%	13.5%
O-5	10.3%	26.9%	17.9%	8.7%	11.1%	12.6%
O-6	31.0%	19.2%	17.8%	21.7%	5.6%	15.0%
O-7	0%	3.9%	0%	0%	0%	0%
O-8	0%	0%	3.6%	0%	0%	1.2%
<b>Overall</b>						
Attrition for Year	28	26	28	23	18	23
Average Annual Strength	283	294	289	294	316	
Overall Percentage Attrition	9.89%	8.84%	9.76%	7.88%	5.7%	7.78%

Table 4 Attrition Rates by Grade and Overall

The forecasted grade and overall vacancies are based on the average attrition rate over the three prior years. Typically, two BOTC classes of approximately 16 officers are held each FY. As the finalized FY 2011 budget is not yet known, the accession plan for new officer candidates is targeted between 12 and 20 selections, yielding an end of year annual average of 315 to 318 officers (plus two Flag officers). Appendix A shows the calculations for forecasting vacancies, and projects the future impacts of bringing on 12 and 20 new officers in FY 2011 into FY 2012 and FY 2013. Table 5 below is the summary of the vacancy forecasts for each grade with the following assumptions: the average grade attrition rate is accurate, promotions and selections approved to date are executed by the end of the following FY, the recommended zones are used in FY 2011, and accession of 20 officer candidates in FY 2011 and FY 2012.

<b>Grade</b>	<b>O-1</b>	<b>O-2</b>	<b>O-3</b>	<b>O-4</b>	<b>O-5</b>	<b>O-6</b>	<b>O-7</b>	<b>O-8</b>
Authorized Grade Strength (Average FY 2011 strength 318)	57	57	72	60	44	25	1	1
Current Grade Strength (as of 25 January 2011)	71	55	65	52	44	26	1	1
Current Vacancies for Authorized Grade Strength	-14	2	7	8	0	-1	0	0
Vacancies for FY 2011 (Assuming Accession of 20 Officer Candidates, and all FY 2010 promotion Selectees Promoted)	-23	0	24	1	4	1	0	0
Vacancies for FY 2011 (Assuming Accession of 20 Officer Candidates, and all FY 2010 promotion Selectees Promoted)	17	-6	12	4	5	1	0	0

Table 5 Vacancy Projections by Grade for FY 2011 and Forecasting Into FY 2012

**Accession.** Accession is the increase in strength, which mainly occurs by bringing new officers into the Service via BOTC or through Inter-Service Transfer (IST). In order to achieve an average authorized strength of 321 officers (plus two Flag officers), the NOAA Corps needs to access an additional 22 officers in FY 2011 by holding on session of BOTC and gaining a few select ISTs. In FY 2011, budget constraints led to an analysis of the potential accession contingencies that range from 12 to 20 officer

candidates, versus the 22 officer candidates that would be required to obtain the authorized average annual strength of 321 plus two Flag officers. The impacts of smaller accessions include the following:

- Reduce the annual average strength from 321 to:
  - 315 in FY 2011, 302 in FY 2012 and 290 in FY 2013 with only 12 accessions per year
  - 318 in FY 2011, 313 in FY 2012 and 309 in FY 2013 with only 20 accessions per year
- Require an accession of 36 to 54 officer candidates in FY 2014 to regain the average annual strength of 321, or risk a reduce average annual strength below 290, effectively slowing promotions to an extremely slow rate in the out years.
- Continue large fluctuations in annual promotion zone sizes, versus seeking to maintain consistent zone sizes from year-to-year.

Opportunity of Selection (OOS) and Promotion Zone Size. The NOAA Corps’ ability to adjust the OOS is based on Service needs, by plus or minus 10 percent of the recommended OOS percentage listed in the NOAA Corps Directive 04204. The OOS (promotion percentage) model is shown in Table 6.

To Grade	Percent Opportunity (+ or - 10%)
O-6	50% (40-60%)
O-5	70% (60-80%)
O-4	80% (70-90%)
O-3	Determined annually (typically 90%)
O-2	100% of qualified

Table 6 Opportunity of Selection Percentages by Grade

Per NOAA Corps Directives, the number of NOAA Corps officers in a promotion zone (the zone size) shall not be less than the number of selections planned, divided by the applicable opportunity of selection shown in the table above. For example, if four O-6 vacancies are predicted, and 50% is the OOS, the zone size will be  $4/.5=8$ . In cases where the results contain a fraction of 0.5 or above, the minimum zone size will be rounded to the next higher number, and an additional officer will be added to the zone.

## DISCUSSION

The “juniorosity” issue for the NOAA Corps is the result of both the hiring freeze of the mid-1990’s and the accelerated growth of the Corps since 2008. In the past few years while increasing the strength of the Corps to meet the 321 authorized strength level, the promotion flow rate at the mid-grade levels has been accelerated. Table 7 below shows the Defense Officer Personnel Management Act’s (DOPMA) desired promotion timing for officers by grade. The DOPMA timing is based on YOS for those who compete for promotion to the next higher grade. Table 7, shows the recommended YOS from DOPMA compared with the NOAA Corps’ average YOS within the recommended zones.

It is important to note that within the recommended zones all officers have, or will be within a reasonable waiver time of the required TIG. However, in comparison to the DOPMA (see Table 7), there is significant variation between the NOAA Corps and the recommended YOS. The accelerated NOAA Corps rate is evident for promotion to the grade of O-5. Without including ISTs, officers with Prior Service (enlisted or commissioned) and one time passovers (IXPO) for the O-4 zone, the average YOS is significantly less due to prior accelerated promotions when compared to the DOPMA recommended YOS. In addition, there is a significant slowing for promotion to O-3. The O-2 and O-6 zones are relatively on par with the DOPMA recommendations. The recommended zones for FY 2011 take into consideration this variation, and minimize the impact of continuing with an accelerated promotion flow rate, while maintaining a sustainable promotion flow that will satisfy the needs of the Service.

TO GRADE	DoD PROMOTION OPPORTUNITY	DoD TIMING	NOAA Corps TIMING	NOAA Corps TIMING	NOAA Corps TIMING
		Primary Zone YOS	Primary Zone YOS without IST/Prior Service & 1XPO	Primary YOS IST/Prior Service Only	Recommended Zone YOS
O-2	100 % (FQ)	2	1.7***	6.8	2.2
O-3**	95%	3.5/4	5.1	13.5	6.4
O-4	80%	10 ± 1	8.1	9.8	8.9
O-5	70%	16 ± 1	12.3	20.2	16.6
O-6	50%	22 ± 1	21.4	21.3	22.5

Table 7 Department of Defense (DoD) DOPMA Up-or-Out Promotion System for “Due Course” Officer compared to NOAA Corps Recommended Zone averages—NOAA Corps columns are: primary zones without IST/Prior Service and 1XPO, primary zone for IST/Prior Service only, and lastly the entire Recommended Zone. The YOS are based on Recommended Board Dates. Primary zone is the first time an officer competes for promotion to the next grade.

\*FQ= if fully qualified for promotion, meeting all medical and training requirements. \*\*O-3 zone selection boards will be held first quarter FY 2012. \*\*\*O2 zone in April 2011 is composed of only 1XPO from November 2010, the average 1.8 TIG.

The consequences of continuing the accelerated promotion rate could result in exacerbating the “juniorosity” of the Corps. For example, if the predicted vacancies within the O-5 grade were calculated at the 321 strength and CPC were to fill all vacancies, the zone would include two officers without the required TIG and six officers with less than 15 YOS. Additionally, three of these individuals would have just over 12 YOS, and possibly pinning on their new rank at approximately 13 YOS. Comparatively, the DOPMA provides four additional years before the recommended promotion timing of 16 years +/- 1 year. The officers would theoretically be eligible for promotion to O-6 at 17 YOS, which is five years junior than the DoD.

Problems have and could continue to arise with respect to retention at the senior ranks. If this situation were continued, these officers would, theoretically, be: eligible to retire at full seniority as O-6's at only 20 YOS; eligible for promotion to Flag officer positions at less than 20 years; or, forced to retire if these officers were passed over twice for O-6 at 20 YOS or less. The zones and opportunity of selection proposed in Table 8 are recommended to avoid this outcome, while still fulfilling the needs of the Corps.

As another example, within the FY 2011 recommended zone for O-5, all officers are eligible based on TIG. However, there are four officers with YOS less than 15 years, versus the six officers at the continued accelerated promotion rate. The opportunity for selection is also slightly higher than the desired average. This gives the Officer Personnel Board the flexibility to maximize selection potential, while allowing the Board to select the best qualified candidates.

The accelerated rate will naturally be slowed, as the Corps has reached its maximum authorized strength of 321. In addition, the current budget must be taken into consideration. This will help address the “juniorosity” of the Corps, allowing mid-grade officers to gain vital experiences, and to mature at a rate that will better prepare them for higher grades.

If fiscal constraints are maintained through subsequent fiscal years, the NOAA Corps' workforce strength may annually decline. Deviations from the OCMP, such as canceling BOTC, will exacerbate the difference between the planned and actual personnel strength of the Corps in the out years. Additionally, any reductions in out-year funding for officers will impact strength by decreasing the number of BOTCs and operational functions within CPC.

## **CONCLUSION**

In the short-term, promotions will naturally be slowed as the strength of the Corps is sustained or decreases. The long-term impacts of reduced resources and minimal accessions include: 1) a yo-yo effect on promotion zone size; 2) accelerated promotions for officers, extending the “juniorosity” issues into the future for the mid to senior grades, resulting in less experienced senior officers and further variation from the DOPMA recommendations; 3) gaps in experience levels within the grades, creating significant challenges to the Corps’ ability to Command the fleet, similar to the impacts of the 1996-1998 hiring freeze. The Federal government is currently operating in a fiscally constrained environment. This plan takes these limitations into account, projects future impacts, and balances the needs of NOAA and the Service. Implementing this plan as recommended, and accessing approximately 20 officer candidates, will minimize and/or prevent these impacts from occurring, and allows the Corps to accomplish its mission into the future.

## **RECOMMENDATIONS**

### **Number to Select/Zone Size**

Based on the analysis of the lineal list, and taking into consideration CPC recommends the following zones:

<b>To Be Grade</b>	<b>Board Date</b>	<b>Average YOS for Zone</b>	<b>Average TIG for Zone (years)</b>	<b>Zone Size</b>	<b>OOS Percentage</b>	<b>Select (up to)</b>
O-6	18 April 2011	22.5	3.9	10	50%	5
O-5	18 April 2011	16.6	4.6	9	80%	7
O-4	18 April 2011	8.9	4.3	9	80%	7
O-3	01 Oct 2011	6.4	2.4	13	90%	11
O-2	18 April 2011	2.2	1.8	10	100% (FQ)	10

Table 8 Proposed Promotions Zones for FY 2011

These recommended zones take into account:

- The November 2010 O-2 and O-3 Boards
- The needs of the Service and the next higher grade
- The average YOS and TIG,
- Reasonable waivers for TIG of officers
- Vacancies in the grade for FY 2011 and projected into FY 2012.

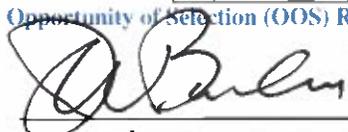
At the time of promotion, the average timing would be within range for desired time compared to the DOPMA. (Table 7)

**DECISIONS**

**A. Number to Select/Zone Size.** CPC recommends you approve the following zones and number of officers to be selected for promotion to the next higher grade. For each grade, the promotion selection Officer Personnel Board would be authorized to select up to the number of officers listed.

To Be Grade	Zone Size	OOS Percentage	Select Up To
O-6	10	50%	5
O-5	9	80%	7
O-4	9	80%	7
O-3	13	90%	11
O-2	9	100% (FQ)	9

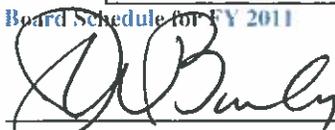
Table 9 Opportunity of Selection (OOS) Recommendation Summary by Grade for FY 2011


3/3/2011  
 Approved Date Do Not Concur Date

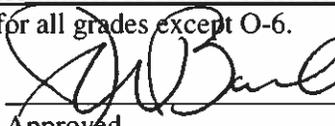
**B. Board Schedule.** Recommend approval of the following board schedule for announcing to the NOAA Corps.

Board Schedule	Convenes on or about
O-6 Selection	18 April 2011
O-5 Selection	18 April 2011
O-4 Selection	18 April 2011
O-3 Selection	01 October 2011
O-2 Selection	18 April 2011

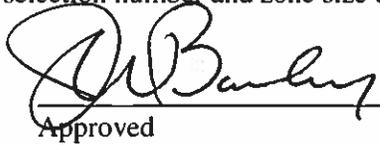
Table 10 Board Schedule for FY 2011


3/3/2011  
 Approved Date Do Not Concur Date

**C. Cancellation of Annual Review for all Grades except O6.** Recommend cancellation of review boards for all grades except O-6.

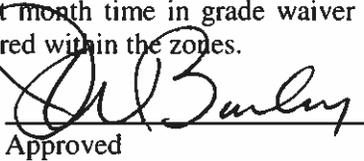

3/3/2011  
 Approved Date Do Not Concur Date

**D. Delegation of Zone Sizes.** Any unanticipated change in attrition (increase or decrease) between now and the Board dates will change the required number of selections. Recommend delegating to CPC the final selection number and zone size determination that coincide with your OOS decisions.

 3/3/2011  
Approved Date

\_\_\_\_\_  
Do Not Concur Date

**E. Eligibility for promotion consideration.** In accordance with NCD 04203B, when the needs of the NOAA Corps require, the Director may adjust length of time-in-grade requirements, to the extent that time-in-grade requirements are not otherwise fixed by statute. CPC recommends you approve implementation of this section of the NOAA Corps Directives for the April 2011 promotion selection Boards for the O-6 and O-3 zones, approving waivers of no more than eight months of time in grade. If an eight month time in grade waiver is approved, this will allow a sufficient number of officers to be considered within the zones.

 3/3/2011  
Approved Date

\_\_\_\_\_  
Do Not Concur Date

APPENDIX A – Vacancy Calculation Table

<b>Vacancy Projection for FY 11 and Forecasting FY12 &amp; FY 13- Accessing 20 Officers/year</b>									
<b>Grade</b>		<b>O-1</b>	<b>O-2</b>	<b>O-3</b>	<b>O-4</b>	<b>O-5</b>	<b>O-6</b>	<b>O-7</b>	<b>O-8</b>
Authorized Grade Strength (average FY 2011 strength 315)	(+)	57	57	72	60	44	25	1	1
Current Grade Strength (25 January 2011)	(-)	71	55	65	52	44	26	1	1
Estimated Attrition by Grade	(+)	4	5	7	3	3	4	1	0
<b>Estimated Accession FY11</b>	(-)	<b>20</b>	0	1	0	0	0	1	0
Vacancies including estimated total attrition and accession	(=)	-30	7	13	11	3	3	0	0
Selectees waiting to be promoted from FY 2010 Boards	(-)	0	7	0	11	1	2	0	0
Vacancies created in lower grades caused by promotions	(+)	7	0	11	1	2			
<b>Remaining Vacancies for FY 2011 zones</b>	(=)	<b>-23</b>	<b>0</b>	<b>24</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>
November 2010 Board selectees	(-)		26	14					
Vacancies created in lower grade by November 2010 Boards	(+)	26	14						
Vacancies End of Year FY 2011 without April Boards	(=)	3	-12	10	1	4	1	0	0
<b>FY 2011 EOY Average Annual Strength</b>		<b>318</b>							
<b>FY 2011 EOY On Board Strength Estimate</b>		<b>324</b>							
Projected selections based on proposed additional FY 2011 zones	(-)		10	11	7	7	5		
Voids created additional FY 2011 Boards	(+)	10	11	7	7	5			
Estimated Total Attrition	(+)	4	5	6	3	3	5	0	0
<b>Vacancies End of Year FY 2012 without Accessions</b>	(=)	<b>17</b>	<b>-6</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>0</b>
Access 20 in FY 2012	(-)	20							
<b>FY 2012 EOY Average Annual Strength</b>		<b>313</b>							
<b>FY 2012 Potential Lowest On Board Strength Estimate</b>		<b>308</b>							
<b>Looking Forward FY 13</b>									
Estimated Total Attrition	(+)	4	5	6	3	3	4	0	1
Projected selections based on estimated FY 2012 promotion needs	(-)		28	11	9	7	4		1
Voids created FY 2012 Boards	(+)	28	11	9	7	4	1		
Vacancies End of Year FY 2013 without Accessions	(=)	29	-18	16	5	5	1	0	0
<b>FY 2012 EOY Average Annual Strength</b>		<b>309</b>							
<b>FY 2012 Potential Lowest On Board Strength Estimate</b>		<b>291</b>							

<b>Vacancy Projection for FY 11 and Forecasting FY12 &amp; FY 13- Accessing 12 Officers/year</b>									
<b>Grade</b>		<b>O-1</b>	<b>O-2</b>	<b>O-3</b>	<b>O-4</b>	<b>O-5</b>	<b>O-6</b>	<b>O-7</b>	<b>O-8</b>
Authorized Grade Strength (average FY 2011 strength 315)	(+)	57	57	72	60	44	25	1	1
Current Grade Strength (25 January 2011)	(-)	71	55	65	52	44	26	1	1
Estimated Attrition by Grade	(+)	4	5	7	3	3	4	1	0
<b>Estimated Accession FY11</b>	(-)	<b>12</b>	0	1	0	0	0	1	0
Vacancies including estimated total attrition and accession	(=)	-22	7	13	11	3	3	0	0
Selectees waiting to be promoted from FY 2010 Boards	(-)	0	7	0	11	1	2	0	0
Vacancies created in lower grades caused by promotions	(+)	7	0	11	1	2			
<b>Remaining Vacancies for FY 2011 zones</b>	(=)	<b>-15</b>	<b>0</b>	<b>24</b>	<b>1</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>0</b>
November 2010 Board selectees	(-)		26	14					
Vacancies created in lower grade by November 2010 Boards	(+)	26	14						
Vacancies End of Year FY 2011 without April Boards	(=)	11	-12	10	1	4	1	0	0
<b>FY 2011 EOY Average Annual Strength</b>		<b>315</b>							
<b>FY 2011 Lowest EOY On Board Strength Estimate</b>		<b>313</b>							
Projected selections based on proposed additional FY 2011 zones	(-)		10	11	7	7	5		
Voids created additional FY 2011 Boards	(+)	10	11	7	7	5			
Estimated Total Attrition	(+)	4	5	6	3	3	4	0	0
Access 20 in FY 2012	(-)	12							
<b>Vacancies End of Year FY 2012 without Accessions</b>	(=)	<b>14</b>	<b>-6</b>	<b>12</b>	<b>4</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>FY 2012 EOY Average Annual Strength</b>		<b>302</b>							
<b>FY 2012 Potential Lowest On Board Strength Estimate</b>		<b>289</b>							
<b>Looking Forward FY 13</b>									
Estimated Total Attrition	(+)	3	5	6	3	3	4	0	1
Projected selections based on estimated FY 2012 promotion needs	(-)		28	11	9	7	4		1
Voids created FY 2012 Boards	(+)	28	11	9	7	4	1		
Vacancies End of Year FY 2013 without Accessions	(=)	45	-18	16	5	5	1	0	0
<b>FY 2012 EOY Average Annual Strength</b>		<b>290</b>							
<b>FY 2012 Potential Lowest On Board Strength Estimate</b>		<b>278</b>							