NRMS

Quick Overview of Metrics
For CCC and Fleet Users
Quick Overview of the Metrics

• For each zone, common metrics are:
  – **Reenlistment Rate** = (Reenlistments + Long Term Extensions) divided by (Reenlistments + LTEs + EAOS Losses)
  – **Reenlistment Rate with RA** (reserve affiliation) = (Reenlistments + Long Term Extensions + RAs) divided by (Reenlistments + LTEs + EAOS Losses)
  – **RA Rate** = number affiliating within 180 days of detaching divided by number eligible to affiliate (based on RE Codes)
  – **Attrition Rate** = (Before EAOS losses) (losses more than 90 days from EAOS) divided by (the Before EAOS inventory) [the number of people that are more than 90 days from the Hard EAOS]
  – Note on RAs: All affiliations are counted (codes on transaction report are RAF (if Sailor diaries in within 180 days of separation) and RAO (if Sailor diaries in outside 180 days)…only those occurring within 180 days are credited toward Reenlistment Rate with RA

• Running a report for the last 12 months is good, it gives reenlistment and attrition rates that are the same as the 12-month average metric that is commonly reported

The next few slides show the current 12-Month All Navy RET/ATT, and how the percentages are calculated
The next slide shows how we compute the stats for Zone A.
15560 Reenlistments divided by 29774 At EAOS losses = 52.3% Reenlistment Rate
How to compute Reenlistment Rate \( w \) RA

\[
\frac{(15560 + 168) \text{ (Reenlistments + RA)}}{29774 \text{ At EAOS losses}} = 52.8\% \text{ Reenlistment Rate with RA (where a Reserve Affiliation (RA) is counted if the Sailor diaries in within 180 days of detaching counts)}
\]
RA Rate = those affiliating within 180 days of detaching divided by those eligible to affiliate (based on eligible Reentry Codes (RE Codes)). The numerator is 168, but we don’t show the denominator (no room, may find a place to add it). If you are curious, just divide the # of RAs by the RA Rate to get the number eligible to affiliate (i.e. 168/.10=1680).
How to compute Attrition Rate

12262 Before EAOS losses divided by 161459
Average Non EAOS Inventory = 7.6% Cross Section Attrition Rate
Now a Quick Look at the Bottom of the Report

Following are marked up portions of the All Navy RET/ATT Report showing the At and Before EAOS Loss sections (the bottom of page one and page two)
Note: 12262 = 9434 + 2265 (the sum of before EAOS ineligible losses)

The losses listed here are AT EAOS (within 90 days of EAOS), so they do not count toward attrition (recall, an attrite is a loss more than 90 days from EAOS)
These losses are BEFORE EAOS, so they do count toward attrition (recall, an attrite is a loss more than 90 days from EAOS).
Ok, you ran a report for the last quarter, and can't seem to get the math to work. In short, the Non EAOS Inventory shown on the RET/ATT Report is an average of the previous 12 months. This is done intentionally. If it were shown for the period of time the report was run, it would be all over the map. By showing the average inventory, you get a constant feel for the number of people before EAOS.

Confused? Look to the next slide to see how the math works for a report that is <12 months.
3210 Before EAOS losses divided by 159000
Average Non EAOS Inventory = 2.0%

NOT 8.1% as shown OH NO!!!
BUT, \( \frac{3210}{159000/4} = \frac{3210}{39750} \)

and \( \frac{3210}{39750} = 8.1\% \), phew it does work!
Non EAOS inventory and cross-section attrition rates are annualized. Hence, if asked how the calculations work for a period less than 12 months, understand that you must adjust the average inventory.

The easiest way is to divide the average inventory by $12/\text{(# of months of the report)}$.

For example, for a 3 month report:

$$12 / 3 = 4$$

So divide Average Non EAOS Inventory by 4, and use that to check the calculation.
Can You Make This Any Easier?

Try this: Use this table for the number to divide Average Non EAOS Inventory by, based on the number of months for the report you ran.
(i.e. 3 month report, divide by 4)

<table>
<thead>
<tr>
<th># of Months for Report Period</th>
<th># to divide Average Non EAOS Inventory by (= 12 / # of months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>2.4</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>1.71</td>
</tr>
<tr>
<td>8</td>
<td>1.5</td>
</tr>
<tr>
<td>9</td>
<td>1.33</td>
</tr>
<tr>
<td>10</td>
<td>1.2</td>
</tr>
<tr>
<td>11</td>
<td>1.09</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
</tr>
</tbody>
</table>
Ok, I understand the drill with cross-section attrition for periods less than 12 months.

**Why don’t I need to adjust the calculation for Reenlistment Rate on a period less than 12 Months?**

Great question. Reenlistment Rate is a ratio of RE + LTE divided by RE + LTE + at EAOS Losses. This means it is a ratio of (stayers) vs (stayers and at EAOS leavers), not a ratio of stayers to inventory. So, the reenlistment rate calculations need no adjustment for periods less than 12 months. But, if you run a report for less than 12 months, the reenlistment rate is for that period (not a 12-month rolling average, which is a commonly reported metric)
Putting It All Together

These metrics are probably familiar to all of you, but we do have some new ones (like cross-section attrition, Reenlistment Rate with RA, and RA Rate) I just wanted to put out a few screen shots of one of the ‘bread and butter’ reports, so you can comfortably explain what is what, and how the metrics are calculated.

If we can’t explain them, we can sometimes be accused of ‘pulling rabbits out of a hat’