May 6, 2019

Sheri Tonn, Chair
Board of Pilotage Commissioners
2901 Third Avenue, Suite 500
Seattle, WA 98121

RE: PMSA Comments on Setting the Number of Pilot Licenses

Dear Chair Tonn,

Thank you for the opportunity to comment in advance of the Board’s consideration of the Puget Sound Pilots’ request to increase the number of pilots licensed and regulated by the Board. PMSA member companies, both foreign and US flagged, depend on the Board of Pilotage Commissioners to ensure that state-licensed pilots are safe, efficient, and operate in a fiscally responsible manner.

The Pacific Merchant Shipping Association (PMSA) is pleased to submit these comments consistently and in conjunction with submission of several data requests and comments leading up to this submission date to assist the Board of Pilotage Commissioners (BPC) in making an informed decision.

We would note that while PMSA has not yet seen the formal submission by the Puget Sound Pilots (PSP) to increase the number of pilot licenses, we are pleased to continue to work with the Board and appreciate the Board’s request for our participation in this process. As a practical matter, while this means that these comments cannot be responsive to any specific claims by the PSP, and PMSA reserves the right, consistent with our understanding of the process set forth by the Chair, to amend and revise our comments upon actual receipt and analysis of the PSP submission. Please find below our recommendations and observations regarding the setting the number of pilot licenses and the current state of pilot licensure in general.

In addition, we refer the Board to many past PMSA submissions which include similar questions, observations and analysis relevant to the discussion of the number of pilots licensed today. We have enclosed just two of those past submissions with this comment letter for easy review and hereby incorporate those comments by reference (See enclosure 1).

PMSA looks forward to further participation in this process.
Optimize and Efficiency Mandates

RCW 88.16.035(1)(d) mandates the BPC to:

"determine from time to time the number of pilots necessary to be licensed in each district of the state to optimize the operation of a safe, fully regulated, efficient, and competent pilotage service in each district".

We include the above RCW language to emphasize that optimize and efficiency are mandated. This sets a high bar but points out that many aspects of the current delivery of pilotage services require efficiency reviews to identify and implement improvements. Clearly, the "optimize" and "efficient" mandates shall not undermine the safety mandate but rather these RCW mandates shall all be implemented simultaneously.

When all data requests and analysis are addressed and all questions are answered by PSP, we and others can provide more comprehensive recommendations as to how the BPC can better address these mandates. Absent a bona fide emergency, the number of pilots should not be reset without addressing all related statutory requirements.

There Is Sufficient Time to Take Measured Approach

With more BPC discussion and interest than in the past there is an opportunity to address these mandates in a more specific and meaningful fashion. Without completing an analysis of all relevant data it is difficult to make a fully informed decision. We recommend the BPC take enough time to allow this to happen.

Based on discussions as BPC meetings, it is likely that trainees can’t be licensed fast enough this year to fill the 4 current openings in addition to the openings created by expected pilot retirements over the next year or so. There is clearly no urgency to increase the "targeted number" of pilot licenses anytime soon. Indeed, if there is an area to address with a sense of urgency it is the pace of licensing and upgrades.

Individual Pilot Utilization is Extremely Uneven and Inefficient

Pilot utilization is extremely uneven, with some working much more than others. The most productive pilot in 2018 safely completed 223 annual assignments and 25 assignments in one month without violating rest rules. 15 pilots completed 165 or more assignments in 2018 with many completing more than 20 assignments in a single month.¹

Conversely, at the low end, one fully available fit for duty pilot performed only 90 assignments in 2018 and a low of 2 assignments in one month. In 2019, this same pilot performed only 3 assignments in first two months of the year. For context, the 30 most productive pilots in 2018

¹ All assignment data references are to BPC Staff Reports unless otherwise noted.
averaged 167.5 assignments each. The remaining pilots averaged only 104 assignments. Adjusting for things like medical and comp day burning, the remaining less productive, healthy non-retiring pilots averaged only 127 assignments.

We have been assured that no pilot, even the busiest, has violated any rest rules. A commissioner’s question as to whether there was any set minimum or maximum number of assignments per pilot and any corresponding incentives remains unanswered. Regardless of whether a pilot works 223 assignments or just 90, they are reportedly paid the same. We don’t know why the distribution of assignments is so uneven, particularly amongst healthy ready for duty pilots.

The BPC could establish objective benchmarks for efficiency and optimization. One way in which this could be done is by setting a target assignment level (TAL) by the most productive or the mid-range average in order to calculate the number of pilot licenses needed at those productivity levels.

<table>
<thead>
<tr>
<th>2018</th>
<th>Number of Assignments</th>
<th>Number of Pilots Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Productive Pilot</td>
<td>223</td>
<td>32.8</td>
</tr>
<tr>
<td>Average of Top 30</td>
<td>167.5</td>
<td>43.7</td>
</tr>
<tr>
<td>TAL</td>
<td>145</td>
<td>50.4</td>
</tr>
</tbody>
</table>

As the above chart shows, such a simple objective analysis would suggest that the target assignment level could be increased and number of pilot licenses decreased.

**Pilot Utilization Rates and Call Backs**

At a recent board meeting, several commissioners expressed confusion as to why low work level months resulted in more call backs and accumulation of Comp Days. PSP answers were largely anecdotal listing possible reasons why it could be this or that. One commissioner rightfully stated the need for data and specific answers rather than a list of “could be” possibilities from PSP. At the time of this submission, we still don’t have the answers.

The facts are that PSP reported that March 2019 had 530 assignments ranging from a low of 8 to a high of 23 assignments in any one day. June of 2018 involved an astounding 140 call backs or nearly five call backs every day. October 2018 was a low workload month yet it involved call backs for a whopping 21.5% of all assignments. Call backs grew 53% in 2018 over 2017.

These statistics raise many questions: With half the pilot corps reportedly “on duty”, why would 78 call backs be required in March 2019? What created all the call backs even in low workload months? Do comp days, lifestyle pilots, vacations and meetings create call backs? Where are the on duty pilots during call backs? How much of this is due to lack of on duty pilot availability, unfilled pilot licenses, and/or changes around the “straight rotation” policies of PSP. Would eliminating efficiencies like round trip cruise assignments, reducing multiple assignment day opportunities, minimizing repos and travel lead to fewer call backs?
It seems impossible to either ensure PSP optimization or efficiency without first addressing these basic facts and questions regarding Call Backs.

**What is a Pilot Duty Day? What if Pilots All Stood Duty Half the Year?**

According to a BPC staff communication on May 3rd, there is currently no validated data on how many total duty days are stood in a year or each day or per pilot. Without this key data, the BPC can't make an informed decision about watch-standing or the number of pilots.

We acknowledge there is a difference between being on call/duty somewhere in the area waiting for an assignment (with lead time) versus being at the pilot station, traveling, piloting or resting. The pilots on average pilot fewer days than the average number of assignments per year. Why? Because of cancelations and multiple assignment days.

The BPC has adopted the following Policy Statement:

"It is the policy of the Board that one day of duty time equates to one day of sea service…".

That means duty time is the equivalent of being on a ship. PSP describes duty as two weeks on call and two weeks off with two weeks of vacation that can be taken on “duty days”. However, the facts demonstrate that a day “on call” not performing an assignment is not equal to a day performing an assignment “at sea”.

The average number of annual assignments per pilot is 145 meaning there are many “duty days” without an assignment or “sea service”. Recall that cancelation assignments (no sea service) are included in this - 162 cancelations in 2018 per BPC staff reports which represents more than one pilot worth of assignments. In addition, the 145 number includes multiple assignment days such as the 5 assignment day in Tacoma example due to second pilot zone one jobs. The second pilot assignments are short (one hour). The most recent three-year-average included 552 second pilot assignments (PSP activity reports). This alone represents 3.8 full time pilots per the TAL but only involves 552 hours of bridge time which is less than one pilot.

PSP lists 365 duty/service on their financials going back decades. In recent BPC meetings, PSP states they stand 182 (sometimes 181) days of duty each year as an equivalent to the maritime tradition of half time on and half time off. That means that half the pilot corps should be available on any given day.

However, data summarized in BPC staff spreadsheets indicates that is not the case. If all BPC authorized slots were filled, then half the pilot corps would be 25.5 on duty each day at the current level set by the BPC. The number of pilots on duty each day should exceed the average number of daily 20 assignments by 27% thus providing a big cushion to cover the demand with minimal call backs. And, per BPC staff reports, 16.5% of assignments are cancelations or short
intra-harbor shifts which allow for multiple assignment days therefore requiring fewer daily pilots. This analysis reveals little need for the number of call backs being reported and highlights an area for BPC focus in order to meet the “optimize” and “efficient” mandates pointed out earlier.

<table>
<thead>
<tr>
<th>Pilots on Duty Each Day at Authorized BPC Level</th>
<th>Average Daily Assignment Level</th>
<th>Average Daily Call Backs</th>
</tr>
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<tbody>
<tr>
<td>25.5</td>
<td>20</td>
<td>3.2</td>
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**Average Length of an Assignment:**

Bridge time is logically the time that pilot service is provided. There is a difference between piloting and transportation time to and from the assignment. If the total is to be considered in setting the number of pilots, then the data needs to be accurate and validated. PSP is the collector and reporter of this data however there has not been a third-party analysis or validation of this data, including by the BPC.

PSP’s reported numbers span a rather large range:

- **PSP: Jan - June, 2015 Submission (see enclosure 2)**
  - 5.06 bridge hrs + 1.97 travel hrs = **7.03 hrs**
- **PSP Hearing Presentation Nov 2016 (see enclosure 3)**
  - 5.14 bridge hrs + 2.6 travel hrs = **7.76 hrs**
- **PSP March 2019 BPC meeting – PSP President**
  - 9.5 hrs (this would represent a huge increase in travel time over 2015)

Given the importance of the rest rule, the recent statutory changes to the rest rules, and the reliance of the rest rule on determining the length of the assignment as defined by the BPC, it is important to have accurate information. We have checked the Washington State Department of Transportation (WSDOT) and Puget Sound Regional Council (PSRC) for changes in travel time and find no justification for a reported doubling of travel time since 2015. PSP has stated numerous times their assignments run through the 24-hour clock and most of that is off peak where travel times remain the same.

Furthermore, assignment zone is directly correlated to bridge time. A significant number of total assignments are cancelations and short zone one assignments particularly since the introduction of second pilot assignments. That means less piloting, less workload and thus fewer pilots, not more.

**Vacations**

Every other Tuesday the entire pilot corps claim a full day of duty (24 hours), yet pilots report they stand 15 days of duty followed by 13 days of respite. A review of transition day assignments reveals that pilots average 14 days on and 14 days off. When tracked by the hour it becomes
clear that this is in addition to PSP reporting that pilots take two weeks of vacation each year mostly on duty days meaning duty days stood would be 168 and not 182. By extrapolation, 50 pilot’s times two weeks equals 100 weeks or 700 lost duty days. This represents another 3.8 pilot’s worth of duty days. Once again, this points more to a reduction of pilot licenses rather than an increase and we recommend that the BPC review the impact of PSP vacation policy on its rotation.

Repositionings Are Not ‘New News’ to the BPC and Are Not Equal to Assignments

PMSA has only seen one year of repositioning data. We do know that were 2,559 arrivals in 2018 and 2,559 departures accounting for 5,118 assignments. In a perfect world, pilots would get to Port Angeles by completing a departure assignment at the start of their duty cycle and end a duty shift leaving Port Angeles on an arrival assignment. A perfect match would result in zero repositionings. Obviously, this cannot be done 100% of the time but there is insufficient data to identify dispatch changes which would minimize repositionings.

PSP has stated that bridge time plus transportation runs from just over seven hours (2015) to 9.5 hours (2019) plus required rest periods. These numbers are inconsistent and have not been reconciled or validated, and in any case greatly differ from repositioning.

A repositioning is not an assignment and has never been considered equal to an assignment. It is important to note that the BPC was informed about and has known about repositionings, meetings, and training along with numerous other non-piloting activities of PSP when setting the number of pilot licenses in the past. They are already factored into the current licensing baseline. Since the 145 TAL adjustment decision included consideration of repositionings, travel, meetings and training they should not be treated differently now.

Meetings, Delays, Call Backs and Reduction of Pilot Availability

Years ago, PSP declared the suspension of discretionary meetings during cruise ship season.

*PSP 2009: during the shortage they stopped training and discretionary meetings during the summer of 2005.*

PSP acknowledged they attended discretionary meetings. The PSP President typically does not pilot and neither does the Executive Director. With only four to five office employees to supervise, there should be plenty of PSP representation from these two positions at non-discretionary external meetings in addition to their lobbyists and lawyers. Yet, we continue to see a large number of pilots listed attending a variety of meetings potentially causing shortages and call backs. Example: Monthly reports indicate that a highly compensated licensed pilot(s) is skipping assignments to presumably work on spreadsheets. This activity, if essential, should be completed in a different way and not by reducing licensed pilot(s) utilization.
"Lifestyle Pilots" – No Call Backs?

In the past year a new term has emerged: a “lifestyle pilot.” Apparently, a “lifestyle pilot” doesn’t want to or chooses not to take call backs. The inefficiencies of the PSP two-watch system does not require everyone on duty to be available for dispatch. This new dynamic is a troublesome issue. It is imperative that the BPC addresses the “lifestyle pilots” phenomenon within the context of setting of the number of pilot licenses.

Even PSP stated at an Fatigue Management Committee (FMC) meeting that their intent is not to staff to the peak. However, the outcome of allowing lifestyle pilots to push part of their annual workload onto other pilots would further undermine effective and efficient pilot utilization. be the creation of more and more lifestyle pilots.

The BPC might want to compare workload management of Washington State Ferries (WSF) masters/pilots that includes many more duty days at sea. WSF operates 20 hours out of every 24. Tugs and deep draft vessels typically use six months at sea rotations. In addition there are other modes (air, rail etc.) to analyze for relevancy to the BPC.

Annual Workloads

At the most recent BPC meeting, a PSP legal representative presented slides on watch-standing, including an overview and some metrics from other pilot grounds. We note there are significant difference between these pilot grounds, here are some examples:

- BC pilots fly 930 miles to get to their northern most assignment a much larger area than Cherry Point to Tacoma;
- Fraser River piloting area is more comparable to Long Beach JPS pilots who average 36.7 assignments per month (LB Port Commission Presentation) and peaked at over 40 assignments each per month averaging 2 hours each;
- Columbia River involves two pilot groups, a bar crossing and long river piloting assignments considered different than open steaming transits like some areas like the Great Lakes;
- SF piloting includes a lawsuit to gain transparency over actual assignment data – we can provide an overview of that if the BPC is interested.

PSP is on record stating there are no problems staffing to the peak:

"Except during the pilot shortage of 2004 to 2008 caused by an inadequate number of pilots being licensed, there have not been problems staffing to the peaks."
(PSP March 9, 2009)

Now, suddenly PSP can’t staff to the peaks with the introduction of things like lifestyle pilots rejecting call backs. We would also point out to the BPC that PSP acknowledged in 2009 that during the shortage of pilots in the summer of 2005 they stopped training and discretionary meetings. PSP can make other internal adjustments as well, such as they take by scheduling their
internal Board of Directors meeting every month on Tuesday when the need for comp day pilots is very low.

**The 10-hour Rest Rule Does Not Increase Assignment Workload**

PSP reports successful implementation of the three and out rule over the past couple of years. In October of 2018, the 10-hour rest rule/policy was implemented per the BPC. These have both been formalized in the RCW per this just completed legislative session.

PSP has previously estimated that 500 assignments would be impacted by the 10-hour rule (Captain Carlson at BPC meeting). He explained this often can be just a few minutes. A pilot would therefore average less than one assignment per month where they would need to rest an additional one minute to one hour 59 minutes in order to take an assignment. PSP explained in these cases that the next pilot up gets the assignment or there can be a short delay for a grain ship shift but not a cruise ship assignment.

The annual assignment workload (currently targeting 12.1 assignments/month) does not change with this rest hour rule. That means pilots will have the same workload over a year or month as they do now. There is no data to support the need to add more pilots due to this rule.

**Long Term Shipping Trends**

Ship calls have been decreasing over the last three decades with the loss of over 900 cargo ship calls annually. Overall cargo ship calls in 2018 represented one of the lowest years in that timeframe. The introduction and growth of cruise ship calls softened the overall loss by 200 plus per year. This chart from the Marine Exchange described at a Harbor Safety Committee meeting tells the story:

The main reason 2018 and 2017 assignment totals weren’t the absolute lowest level over this time period thus requiring fewer pilots is due to the introduction of second pilot assignments and an increase in cancelation assignments – both of these assignment types reduce the average bridge time and piloting workload.
Shipping trends and announcements are provided monthly by the NW Seaport Alliance and PMSA. The trends indicate fewer but larger vessels and a fairly slow growth in overall cargo. Oil tankers continue to decrease in numbers with the introduction of crude by rail and increased pipeline flows as well as the pending completion of the Vancouver airport fueling facility.

Given these realities, piloting work has been decreasing yet the BPC is being pressed to increase the number of pilots – why?

**PSP Statement That They Are “Piloting on Demand” Does Not Match Industry Procedures**

PSP continues to assert that they “pilot on demand”. This is an undefined term that would imply that piloting requests from vessels occur without warning or advance notice, but such an implication is untrue. Ship calls and movements require planning by many parties. PSP has handled over 5,000 assignments per year with excellent predictability: all arrivals, cruise, coastwise cargo, containers, two pilot transits, tidal sailings, Coast Guard advance notice, published schedules, Marine Exchange, AIS real time tracking, ship agents, longshore shift hours, berth availability changes.

PMSA has used a survey asking a number of questions regarding pilot ordering and schedules in order to validate that ship movement planning is more the norm than the exception (see enclosures 4, 5, 6). In addition, the NWSA publishes the ship schedule ETA’s and ETD’s which can be updated in the day(s) leading to the ship movements (schedules available on line to the public).

The result paints a picture of a far more organized and predictable system than has been described by the pilots for a good majority of the vessel moves. The system can and does provide planning lead times for all involved and lead times can be as long as weeks, months or in the case of cruise a year or more. This predictability means opportunity for more planning, more efficient dispatch and more lead time for personal choices in preparation for an assignment and fewer pilot licenses.

**Setting the Number of Pilots is Separate from Ratesetting**

Despite the lack of urgency, less shipping activity and fewer pilot assignments, we are concerned that PSP is pushing an artificially aggressive timetable to try and increase the number of pilot licenses in order to increase the tariff. The purpose should be to provide for safety and efficiency with an optimal number of pilots. All of the trends point to less bridge time, lower workloads and a long-term decline of ship calls. The mandate to identify inefficiencies in pilot utilization requires addressing at a minimum: call backs, comp days, dispatch, watch-standing, vacation, repositionings, transportation policies and procedures. This should be allowed to occur on a proper timetable.
Conclusion

In closing, we see no need to increase the BPC authorized number of pilot licenses at this time. In fact, many trends point to a need to reduce the number of licenses.

Before granting PSP’s request to consider increasing the number of pilot licenses, it would seem rational for the Board to first focus on filling empty license slots while reviewing all mandates and relevant data to ensure that every state licensed pilot is piloting at a safe, efficient and optimal workload. If all licensed and healthy pilots completed a minimum number of assignments closer to the average of the most productive pilots, the workload would be more evenly distributed minimizing the need for call backs.

As stated earlier, we continue to have concerns that PSP is calling out an emergency as part of a larger strategy that has less to do with workload, safety or efficiency and more to do with tariff. We therefore urge the BPC to first get answers to commissioner and stakeholder questions and data requests.

Thank you for your attention to this request.

Sincerely,

[Signature]

Captain Mike Moore
Vice President

Enclosures
May 10, 2017

Chair Sheri Tonn
Washington State Board of Pilotage Commissioners
2901 Third Ave., Ste. 500
Seattle, WA 98121

Dear Chair Tonn:

The Washington State Board of Pilotage Commissioners responsibility to set the number of pilots “from time to time,” presents an excellent opportunity to review a number of important factors. First, we should summarize the decrease in assignments.

Ship Calls and Assignments Decreasing:

- Pilotage assignments down 73 YTD through April
  - This trend represents a projected 219 per year reduction
  - Excluding Hanjin (captured below), this represents a reduction of 0.7 pilots

- Container Assignments Reducing at the rate of 323/year = reduction of 2.2 pilots
  - The Northwest Seaport Alliance recorded 24 Hanjin vessel calls from April 2016 to August 2016 resulting in 48 Assignments (over a period of 5 months). This equated to approximately 115 Assignments/year (about 10 per month so
  - Now, with the various service changes resulting from the new alliances, the Alliance anticipates a further reduction of approximately 208 Assignments per year. These combine for an estimated reduction (for the international container trade) of approximately 323 Assignments/year

- Cruise ships calls will be increased by 14 in 2017 (Plus 28 Assignments or 0.2 pilots)

- The oil industry is struggling and tanker calls are decreasing.
  - Sector experts do not expect a rebound this year and this depressed activity level is expected to continue well into 2018.
  - Vessels are being taken out of service

- Bulkers/Grain Ships have increased. Bulkers increases this year are not enough to make up the other lost assignments or the announced assignment reductions (see above).

Recommendation: These realities indicate a decrease of 2.7 pilots at the current TAL of 145. We recommend the Commission reduce the number of pilots to 51 (50 plus the president). This incremental and conservative decision represents a reduction of one pilot until further study can
be done on workload levels and dispatch optimization. This reduction will not have a significant impact on the training pipeline given the pending retirements.

As we move forward through study efforts and reform, we offer the following:

Commission Staff Analysis: In reviewing factors set forth in the WAC, PMSA has reached the conclusion that an in-depth analysis of dispatch, workload and assignment type/mix by Commission staff will be helpful in reviewing the TAL for possible adjustment. It is preferable that staff conduct this analysis instead of stakeholders. We strongly recommend the Commission direct staff to do this. The Commission can still set the number of pilots without the completion of this analysis based on decreasing ship arrivals and pilotage assignments as already articulated. Commission staff efforts can be completed either independently or in conjunction with the JTC study required by recent legislation.

Target Assignment Level (TAL) Assessment: It has been 7 years since the TAL was set. Discussion and review of that decision making process and outcome would serve as a basis for reviewing the TAL again. We recommend that the Commission direct staff to pull up the history of this decision and to identify and track key trends since that decision including bridge hours.

For example, PSP reported at one point that the average bridge time per assignment was over 5.3 hours and then years later reported it had dropped to 4.91 hours. This represents an 8% reduction in bridge hours yet the TAL was not adjusted. Then larger vessels began calling in Tacoma and short second pilot assignments were added further reducing average bridge hours. As we have seen in other pilotage districts, this is a key factor in describing pilot workload in addition to total assignments.

Workload and Fatigue Management: History can help to inform this discussion. Pilots used to average over 190 assignments per year in the 70’s. That workload was reduced to just over 170 per pilot in the following decade before a negotiated agreement process settled on 149 in the 90’s. Then in 2010, PSP recommended a reduction to 133 assignments and the Commission reduced the number to 145. There was no discussion of how to count cancelations or shifts or second pilot assignments.

Rest Periods and Optimized Dispatch: For context purposes, the 145 assignments at an average of about 5 hours per assignment on the bridge means that for every 5 hours piloting, there are 55 hours not piloting. This period of time provides more than enough time quality rest (fatigue management). An “optimized” duty and dispatch system can increase opportunities for safe rest and help the Commission ensure a properly sized pilot corps. Such a system would fully assess and potentially leverage advance notice of arrival data, long range vessel tracking, ship schedules/updates and predictive software in addition to smartphone technology used in other sectors to deal with surge demands. We realize staff does not have a definition or day to day knowledge of how the current dispatch system operates so this will take coordination and cooperation of PSP.
Past PMSA Submissions: Some time has passed since the Commission last set the number of pilots. As a refresher and due to new Board membership, we provide “some past materials” for a quick review (see attached).

In conclusion, we recommend the Commission:

1. Take timely action to reduce the number of pilots to better match the decreasing workload.
2. Continue to review monthly activity levels and vessel call announcements to make further adjustments going forward.
3. Direct staff to conduct an in-depth analysis of dispatch, workload and assignment type/mix relevant to reviewing the TAL for possible adjustment.

As always, we stand ready to answer questions or provide additional information.

Sincerely,

[Signature]

Captain Mike Moore
Vice President

Encl (1) August 20, 2010, Setting the Number of Pilots Submittal
(2) February 18, 2014, Setting the Number of Pilots Letter to Chair Dudley
(3) May 12, 2014 Letter to Chair Dudley on Setting the Number of Pilots
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February 18, 2014

Captain Harry Dudley
Chair, Washington State Board of Pilotage Commissioners
2901 Third Ave., Ste. 500
Seattle, WA 98121

Dear Chair Dudley:

The Washington State Board of Pilotage Commissioners sets the number of pilots “from time to time”. Such pilot licensing evaluations present both the responsibility and an excellent opportunity to review many important factors essential to providing a safe pilotage system.

However, this issue was inserted in the January meeting agenda at the last minute, and given the full agenda at that meeting, there was not much discussion of this issue. For this reason alone, we believe resolution at the February meeting would be premature and that a more specific review of the WAC factors be the focus on the February meeting.

In general, we continue to encourage a more in-depth analysis of dispatch, workload and assignment type/mix data and envision future expansion of staff reports to help accomplish this while limiting the volume of input from stakeholders. For additional input within this current process and due to new Board makeup, we refer the Board to some of our past submittals which are still relevant and provide more additional treatment of this issue (see attached).

WAC 363-116-065 sets forth a number of factors to consider when setting the number of pilots, including a focus primarily on changes and trends in vessel traffic and impacts on workload factors. None of these factors involve the tariff and the setting of the number of pilots should be focused on safety and workload. Unfortunately, while it should not be a tariff issue, we have found the setting of pilots tied to tariff discussions because PSP requests more tariff every time a pilot is added. The process of adding a pilot or reducing a pilot can be done independent of the tariff, for example, if rate setting reforms required discussions around individual earnings to be normalized using Target Assignment Level (TAL) and Bridge Hour metrics. That has not yet happened.

Of course, the WAC listing of factors and past Board decisions demonstrate that the setting of the number of pilots is more than simply dividing past annual assignments by Target Assignment Level (TAL). Such an approach would disregard current trends and other listed factors and would be inconsistent with past Board actions.
Current trends do not support adding a pilot at this time. Individual pilot workload continues to decrease, ship calls continue to decrease and trends in ocean shipping are not favorable for the PNW. In addition, there are a number of factors listed in the WAC that have not been fully discussed and are almost certainly without common understanding between Board members. Let’s look at just one of those factors:

**WAC 363-116-065 (2)(d): Regional maritime economic outlook, including without limitation:** Current economic trends in the industry, fluctuations in the number of calls, the types of assignments, the size of vessels, the cyclical nature of the traffic and whether traffic is increasing or decreasing and the need to minimize shipping delays.

- Assignments are not equal and must be broken into types of assignments just as called out in this WAC factor. Data is more readily available now due to staff reports but the Board to our knowledge has not fully discussed the trends in assignment type (zones, shifts, cancellations, second pilot jobs). We recommend the Board have staff develop a trend analysis for different types of assignments and the impact on pilot workload like bridge hours.

- PMSA has provided accurate monthly updates on industry trends (See January 2014 submittal attached for easy reference). We continue to highlight the container sector trend towards larger vessels, mega alliances and fewer port calls. This trend is playing out now with fewer container vessel calls. We also include overall ship call data and trends of all major vessel types.

- Port competition continues to intensify. The trend in ocean shipping, Canadian port and market share growth, Panama Canal, Suez Canal, terminal consolidation and other factors have all contributed to the ongoing loss of container market share in the PNW. This reality is more likely to lead to less PNW gateway calls going forward.

- The FMC discussion approval between container terminal operators and the Port of Seattle will include options to address low container volume throughput including best use of existing terminals and has implications for port call activity.

- The Ports of Seattle and Tacoma have requested FMC approval to discuss issues related to gateway competitiveness and has implications for port call activity.

- October 2013: A container vessel weekly service was canceled involving 52 arrivals and 52 departures per year meaning 104 less assignments per year at about 5 hours per assignment (over 500 less bridge hours).

Note: October 2013: A remaining service was upsized in Tacoma meaning one more waterway job per week (already used a second pilot one way). This means the addition of 52 second pilot assignments about 1 hour each or about 52 bridge hours.
• Mega Alliances called the G6 and P3 are pending approval. A recent announcement indicates that the first approval may be made in March 2014 and the second approval likely a few months later. After approval, there are expectations of the loss of another weekly service here that may involve a double call meaning a call in both Tacoma and Seattle. That would mean the loss of 52 arrivals, 52 departures and 52 moves between Tacoma and Seattle for a total loss of 156 less assignments and a significant reduction in total annualized bridge hours.

• Cruise ships calls will be reduced in 2014 by 11 calls from the 2013 level. This means 11 less arrivals, 11 less departures and a total reduction of 22 assignments and the bridge hours associated with these Zone 4 moves.

• Tanker calls continue to trend downward. ATB activity has increased but there is no firm indication that the dramatic increase of 2013 will continue. The expectation is that this trend will significantly level off.

• Grain Ships: According to the ports and those in the grain sector, the expectation is for 2014 to pick up activity and look more like 2012 than 2013. It is early to tell exactly how many grain ship arrivals there will be in 2014 but some envision another 40 calls or so.

• Cancellations continue to be counted with assignments. Staff reports show that annual cancelation invoices makeup nearly one pilots worth of monthly or annual assignments. We recommend the board acknowledge cancelations as a separate category of assignments just like a harbor shift is not a Zone 2, 3, 4, 5 or 6 move in terms of workload. When the TAL was set by the Board there was no specific mention of including cancelations in the TAL. If the Board treated cancelations as a partial assignment for workload purposes it would be an accuracy improvement over lumping them together with actual assignments. Even half assignment credit would represent 0.5 less pilots.

• Current YTD comparison shows a decrease of 23 assignments in January 2014 compared to 2013. This workload reduction represents a reduction in monthly workload of two pilots.

• The shortest pilot ship move is a Zone 1 harbor shift. Staff report shows that Zone 1 jobs have increased nearly 48% since 2011 in January to January comparisons. This trend continued this January compared to 2013. With less overall assignments and more short bridge hour Zone 1 moves, logic would dictate that this represents a reduction in piloting workload. A specific numerical answer could be provided via analysis of the type of assignment data.

• YTD information per staff report shows the pilot Manning level increased by 2 pilots in January 2014 compared to January 2013 yet pilot assignments in January 2014 are down 2 pilots worth from January 2013.
• Pilot manning increased by 1.42 pilots in 2013 over 2012 and will increase by another 0.7 pilots in 2014 at the current number of pilots with no further action by the Board.

The trends listed in the WAC factors all point to steady or reducing ship call activity with the exception of grain ships. Pending announcements are likely to reduce ship calls further.

In addition, the adoption of PSP’s current proposal would be inconsistent with PSP’s own proposals over the past several years and its own projections. Recall, PSP’s position documented in Board minutes where PSP claimed being short by 3 pilots based on TAL and assignment levels (when discussing income levels) but yet never made a request to increase manning by 3 or even 2. Specifically, PSP delayed requests to add one pilot for many months and then made a request to add one pilot, not three (see June 2013 Board minutes).

Lastly, we are aware of the unusual situation here that a former pilot is completing his training and is ready to be licensed. We also understand he is well-respected and there is some empathy for finding a spot for him sooner than later. PSP may want to accommodate him and use other arguments not related to the WAC to convince the Board to increase the number of pilots. We caution the Board on doing so at this time and to avoid setting the precedent that the Board may make such a decision for the benefit of one individual potential licensee without first going through the full factor analysis per the WAC.

We strongly recommend the Board fully assess all factors and exercise due diligence in reviewing those factors before making a decision on this issue. Specifically we urge the Board to not make a decision at the February 25th meeting but to evaluate the relevant factors and seek more understanding of the trends in shipping and workload. We also urge the Board to consider de-linking this issue from tariff setting.

Sincerely,

[Signature]

Captain Mike Moore
Vice President

Encl (1) PMSA Letter Dated April 26, 2012
(2) PMSA Letter Dated August 2, 2012
(3) PMSA Letter Dated March 8, 2013
(4) Industry Update January 2014
(5) Market Share Graph
Average Time per Assignment First Half 2015

1. All Assignments 5.18 hours bridge, 1.98 hours travel time
2. Non Shell Assignments 5.06 hours bridge, 1.97 hours travel time
3. Shell Assignments 6.92 hours bridge, 2.13 hours travel time
4. Combined Time All Assigns 7.16 hours
5. Combined Time Non Shell Assigns 7.03 hours
6. Combined Time Shell Assigns 9.05 hours
7. Difference Bridge Time 37%
8. Difference Bridge and Travel Time 29%

![Bridge Time Comparison](image)

Average Zones per Assignment First Half 2015

1. All Assignments 3.3
2. Non Shell Assignments 3.4
3. Shell Assignments 1.8
Analysis of Shell Related Movements: January 1, 2015 to June 30, 2015

244 Moves from Jan 1 to June 30 (Most in May and June)

Relationship to Workload and Comp Days (PSP is currently 157 assignments over the TAL):

![Shell Jobs and Comp Days Graph]

In 2014 PSP used 315 comp day pilots. In the first half of 2015, it used 340.

*Does not include days burned*

(over)
Monthly Averages per Assignment: LB vs. PS

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**Long Beach:** 1 port, 22 terminals

- 35 assignments
- \( \times 2 \text{ hours bridge time} \)
- = 70 hours per pilot

**When you factor in travel time:**
- + 0.75 hours travel time (max)
- = 96.25 hours per pilot/month

---

**PSPD:** 12 ports, 47 terminals

- 12.7 assignments
- \( \times 5.14 \text{ hours bridge time} \)
- = 65.28 hours per pilot

**When you factor in travel time:**
- + 2.6 hours travel time (ave)
- = 98.3 hours per pilot/month

---

“As you know, it is very hard to compare our piloting operations. “Your operation covers such an enormous area!”
From: Grant Stewart <Grant.Stewart@wsl.com>
Sent: Wednesday, May 1, 2019 2:41 PM
To: Mike Moore <mmoore@pmsaship.com>
Subject: FW: Pilot Ordering, Delays, Time Changes

Westwood has about 233 pilot assignments per year.

From sea, Port Angeles to Everett: 51
From sea, Port Angeles to Tacoma 1
Everett to Tacoma: 51
Tacoma to Vancouver via Port Angeles 52
Vancouver to Tacoma via Port Angeles: 39
From Tacoma to Port Angeles, to sea: 39

Our vessel schedule is published every weekday. This covers the vessels inbound to PNW from Asia, and vessels in PNW region.

Also there is a long term, 3 month, schedule that is published weekly.

Our agent Norton Lilly orders the pilots. Norton Lilly will check with WSL about vessel schedules when needed.

Vessels report next port ETA at Pilot Station upon departing last port. Vessels also report ETA daily thereafter. Vessels coming from Canada will report if there is a delay there. Plus there is the 96 hour and 24 hour NOA’s required.

Our arrival times are based on longshore starting times, 0800 and 1800. Pilot times will be scheduled to all the vessel to arrive at the port with a couple of hours buffer.

Any delays are usually a result of extended longshore operations, and then maybe only a couple of hours. If this happens Norton Lilly will advise the Pilots to meet the five hour call out requirement. If it happens after the five hour call out, they will still notify pilots of delay. This doesn’t happen very often.

Grant Stewart
Vice President
Marine Operations & Vessel Safety

WESTWOOD SHIPPING LINES, INC.
1019 39th Ave SE
Suite 210
Puyallup, WA 98374
www.wsl.com
From: Grant Stewart <Grant.Stewart@ws1.com>
Sent: Thursday, May 2, 2019 10:04 AM
To: Mike Moore <mmoore@pmsaship.com>
Subject: RE: Pilot Ordering, Delays, Time Changes

Mike,

See below for pilot ordering process through our agent Norton Lilly. Eastbound means vessels coming from Asia. Westwood bound means going to Asia.

Grant

When ordering pilots for the Eastbound voyage arrival at Port Angeles, how far in advance are you ordering? Per pilot guidelines, all new orders must be made 24 hours in advance. I usually have all orders in 3-10 days in advance. I usually make new orders on Friday for next week’s vessels.

a. When do you finalize the order? Only in rare circumstances (vessel breakdowns, Coast Guard holds) do I place ‘tentative’ orders. 99% of orders made are firm orders that are adjusted as needed per the below pilot guidelines.

b. If changes are imminent, how much notice are you giving dispatch? For inbound vessels, advances to the pilot station are treated as new orders and must be given 24 hours’ notice. For Delays less than 2 hours, no notice required. 2-6 hours delay requires 6 hours’ notice before the ordered time, and delays greater than 6 hours require 12 hours’ notice before the ordered time.

1. When ordering pilots for the Westbound return from Vancouver to Tacoma, how far in advance are you ordering? I have been placing these orders the day after the vessel departs Tacoma on the eastbound voyage, after they have made berth in Vancouver, in case of any changes in schedule at CAVAN.

a. When do you finalize the order? Orders are ‘final’ at the time that they are placed, but may be delayed as needed per the guidelines.

b. If changes are imminent, how much notice are you giving dispatch? As much as notice possible within the guidelines- Whenever I am informed of changes.

Do you order the WB Tacoma to sea, Tacoma departure pilot at the same time as the inbound Vancouver to Tacoma WB pilot? I have been placing these orders the day after the vessel departs Tacoma on the eastbound voyage, after they have made berth in Vancouver, in case of any changes in schedule at CAVAN.

Grant Stewart
Vice President
Marine Operations & Vessel Safety
Matson overview of Pilot Ordering

Provided May 1, 2019 via e-mail to PMSA

Seattle:

- Our pro-forma schedule is one weekly vessel call
- 104 pilot assignments per year, give or take the odd omitted call or extra voyage.
- SOP is to place order Wednesday afternoon for Friday arrival, so 36 plus hours in advance of arrival.
- Preliminary departure order is placed at the same time.
- We do not often shift our vessels, but if we do our Seattle Ops team typically gives significant advanced notice (roughly a week)
- Adjustments to arrival departure times (if necessary) are usually made 3 to 4 hours before departure, and are typically adjustments of an hour or two.

Tacoma:

1. Total number of pilot assignments for Matson – 2 vessels a week. (Wednesday & Friday)
2. Arrivals and average ordering lead time – Vessel and SSAT sends the pilots a message 3 days in advance.
3. Departures and average ordering lead time - Given tentative departure during arrival order (2200 proforma). Pilots call to firm up by 3pm on sailing day.
4. Shifts and average ordering lead time – N/A
   DELTA: how often are pilot order modified less than hour, more than hour, more than two hours etc. – Pilots are rarely changed as they are firmed up by 3pm the day of sailing.
# Proforma Terminal Berth Schedule - As of 4/1/2019

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## Undergoing Modernization
- PNW4
- PNW1

## Six Times Monthly

### (1) WSL-EB Weekly Service
- APL, CMA CGM, COSCO Shipping, Evergreen, OOCL

### (2) WSL 1 China Vessel, Monthly Service
- Independent Services

### (3) WAN - Oceania: Fortnightly Service
- Hapag-Lloyd, Ocean Network Express (ONE), Yang Ming

### 2M
- Maersk, Mediterranean Shipping Co. (MSC)

### Wallenius
- Wilhelmshaven Logistics

### World Logistics Services

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*Encl. 6*