

Puget Sound Pilots' 2013 Tariff Request and Financial Report

October 11, 2012



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One advantage of an annual tariff hearing is that everyone pretty much knows the facts. Financial data changes from year to year but many of the important considerations do not:

- 1. The two main building blocks of the tariff are expenses and pilot income;
- 2. Expenses tend to increase each year, some years more than others;
- 2013 will see large expense increases due to the need for new PPUs, and higher training, comp day, retirement and pilot boat expenses;¹
- The board raised the number of pilots and we will have 53 pilots in 2013 compared to 52 in 2012;
- Ship size continues to increase and cargo volumes in Puget Sound ports are approaching record highs;
- 6. Pilotage rates in Puget Sound are low compared to other ports;²
- Recent tariff increases here have been very modest. The real cost of pilots to industry has dropped 3.2% in the last 4 ½ years (one 3% increase compared to a 6.2% increase in CPI);
- 8. Pilot net earnings around the country averaged \$407,000 in 2011;
- Net earnings here have fallen from their 2007 peak of \$351,000 to \$342,000 in 2011 – 16% below the national average;³
- 10. Applications for the 2012 Puget Sound pilotage exam have decreased even more than earnings 22% from the 2008 high (41 to 32).

¹ The latest available financial information and 2013 budget are attached as Tab 1. The exact amount of tariff increase needed to meet these increased expenses and restore pilot earnings is not yet known. We expect it to be between 12% and 15%. We will know more as the rate hearing approaches. PSP also suggests the board use the VEC and a table showing data for use in calculating VEC charges based on 2011 and 2012 ship traffic and the 2013 budget is attached as **Tab 4**.

² Comparison charts showing rates today and with a 15% increase in Puget Sound are attached as Tab 2.

³ A table showing this decrease in earnings is attached as Tab 3.



The Nature of Pilotage in the Twenty First Century

Pilotage is different things to different people. To the environmentalists, it is the first line of defense protecting Puget Sound from ecological disaster. To the ship captain, it is a welcome relief from the pressures of moving a ship in confined spaces. To the Coast Guard it is the primary means of safely moving thousands of ships in a large and busy district. To the ship operator, it is an expense necessary to get a ship to the dock safely. To the ship agent, it is a crucial element of smooth operations. To the Legislature, it is a mechanism for balancing the economic advantages of vessel commerce with the risks these ships present to our people, environment and economy. In the tariff process, our legislature acts through this board to tell the foreign shipping industry how much it must pay to protect the local population against these risks. To Washingtonians (who may not understand the intricacies of pilotage and depend on this "obscure" board for protection), pilotage is a safety net protecting the state's most important physical and economic asset – the waters of Puget Sound.

The stakes are high. One bad tanker or transit (there were 2,114 tanker moves in our waters last year) could cripple the economy of the state for many years, perhaps decades. As we have seen, even a container ship accident can cause quite a bit of damage. The method chosen to deliver pilotage in this district (and most others in the US) is a fully regulated compulsory pilotage system executed by a private pilot association and its members working under a pilotage board's authority and regulation.

The Tariff is Designed to Put the Cost of the Pilotage System on the Ships using our Ports

This safety net costs money. In directing the board to set tariffs for foreign vessels, the legislature is asking it to determine how much the foreign shipping community – mostly made up of large international conglomerates, many of whom are owned, affiliated with



or subsidized by their home state governments – must pay for this safety net. The carriers using our ports are some of the largest and most sophisticated companies in the world, but they do not have the same stake in the protection of Puget Sound as the citizens of the State of Washington. In 1789 Congress recognized this basic fact by giving the states the right to regulate pilotage on foreign ships. In accepting Congress' invitation, our legislature embraced the principle that piloting is intensely local and local representatives and states care much more about what happens on their own waters than the foreign ship operators and governments using our ports for commercial advantage.

These laws set up an adversarial economic relationship between the shipping carriers and the pilotage board. First, the carriers are required to pay for pilotage. Second, the strength of our system is the independence of the pilots which causes the carriers to lose a certain amount of control over operations. Occasionally, this adversarial relationship spills over into actions such as PMSA's actions killing the California Pilot Commission's 2011 tariff recommendations, PMSA's attempts to sunset the California Pilot Commission and PMSA's current lawsuit against that commission in <u>PMSA v.</u> <u>Board of Pilot Commissioners</u> (Case No. CPF-12 512320 CA Superior Court, San Francisco - 2012).

Our Pilotage Act recognizes that Puget Sound belongs to the people of the state of Washington and it is theirs to protect or lose. The pilotage system is a crucial part of that protection and the board and the pilots are joint stewards of that system. We sometimes forget that the board does not exist to protect pilots or carriers – it was created to protect the people of the State of Washington. When the board sets a tariff, it is not just setting a charge for sending a pilot out to move a ship. It is setting a charge for that ship's share of the overall cost of providing the entire pilotage system safety net. This includes costs incurred by the board, the pilot association and the individual pilots.



It is understandable that economic trade groups representing these large carriers try to define these costs narrowly and relate them specifically to the direct costs of moving ships. After all, moving ships is their business. However, the statute is concerned with public safety and takes a much broader view of the role of the tariff.

The Role of the Pilot Association

In a safe and well managed port, a proactive pilot association is essential. Internally, a well-run association is needed to offer membership support, a dispatch service, billing for jobs, purchasing, maintaining and running pilot boats and conducting overall operations. Externally, a well-run association is needed to bring its members' experiences and expertise to bear whenever safety or port operations are being discussed. Any discussion of ship operations will result in a safer solution if there is an independent pilot association presence.

Internally, PSP runs a \$30,000,000 financial operation. As with any business, it has employees and assets to manage so that it can operate effectively. It is run by a board of directors with a committee structure. It deals with the issues and expenses faced by any \$30 million enterprise – employees, management, accounting, budgets, communications, legal, compliance, real estate, taxes, planning, purchasing, etc. It hires lawyers, architects, data base experts, researchers, communication specialists, strategic planners, accountants, consultants, computer specialists and the normal array of service providers used by companies today. These business activities – and the expenses that go with them - are part and parcel of maintaining the staff, equipment and infrastructure necessary for our pilots to meet your mandate and continue to serve industry with one of the most responsive pilotage services in the world.

PSP's expenses are relatively fixed and the great majority of those expenses cannot be reduced without also reducing the reliability, safety, efficiency or predictability of the service provided. We know that these expenses will increase approximately \$1.3 million in 2013 and that we will have one more additional pilot. These two increases



alone represent a 5.6% increase in the tariff. See Tab 1. (The amount of expenses could vary depending on what decision the board makes about PPUs.

Just moving ships is not the only mission of PSP's pilots. More important is the mandate to move ships safely and to foster the safety net that exists on our waters. This involves the external outreach efforts of the pilots coordinated and delivered by PSP. We try to make sure that if there is a discussion of marine safety taking place, we are in the room and participating. This takes a tremendous amount of time and effort. Given the overall mission of pilotage as a protector of Puget Sound this is arguably PSP's most important function. Moving ships alone is not enough. In fact, trying to move ships without the broader safety environment fostered by PSP would likely be disastrous. The people of the state care more about the protection of Puget Sound from an environmental disaster than they do about whether the pilot boat is available for duty at 0100 on a given morning. PSP and the board care about both but can never take their eyes off their larger responsibility to the people of the state.

The outreach undertaken by PSP and its members is critical and has made PSP an important link between the board and the various maritime stakeholders. It is a public resource fully available to any party interested in safe navigation. PSP's efforts include:

- Attending any number of conferences (some here, some elsewhere) convened by government, educational and industry groups such as:
 - Coast Guard meetings on security;
 - Coast Guard meetings on safe operations;
 - Port and other industry meetings on operations;
 - Pilot commission meetings such as the biennial regional pilot commission meeting;
 - Industry conferences on broader shipping issues and economic factors;
 - Legislative meetings and task forces when requested;
 - DOE meetings on environmental protection;



- Cross border environmental and regulatory meetings with DOE, the Coast Guard and Canadian equivalents;
- Numerous ad hoc committees and panels put together from time to time in need of maritime navigation expertise.
- Attending professional pilot conferences hosted by West Coast and national pilot groups to learn the best practices being used by pilots across the country and to insure that this district does not fall behind. The American Pilots' Association convention this fall will have a major presentation by its Navigation Technology Committee (of which Capt. Ed Marmol is a member) to discuss the latest pilot technology available and in use around the world;
- Attending and supporting Puget Sound maritime business, civic, and educational
 organizations such as the Seattle and Tacoma Propeller Clubs, Catholic
 Seafarer's Club; Seattle Maritime Festival; Coast Guard Foundation; Northwest
 Maritime Center in Port Townsend; YMTA; Cal Maritime, Tacoma Chamber of
 Commerce and various maritime charity events held throughout the year. These
 organizations benefit the board and all users of our ports and are an important
 part of a successful maritime community. PSP works to make sure that pilotage
 interests are represented as a responsible member of that community;
- Conducting outreach to various marine groups interested in safety and environmental protection including recreational boater groups, yacht clubs, DOE, local politicians and government boards;
- Informing the public through speeches, presentations, and our website and Facebook page about pilotage and the importance of marine commerce to our region and the fact that it can be done safely;
- Special projects such as the current Piloting Opportunities in Puget Sound
 Committee (POPS) which has undertaken outreach to women mariners to attract them to piloting in Puget Sound;
- Outreach to the Legislature. Much of this involves our lobbyist who works on various bills of interest and concern to the board, PSP, the ports and industry.



These include the recent bill on yacht exemptions, the board's bill on public disclosure, the board's earlier major legislation on qualifications and exams, BC Surcharge, housekeeping issues, etc. Our lobbyist has been instrumental in the passage of all of the board's agency request bills that have been adopted as well as lending support to ports and industry on certain bills that would affect commerce, such as recently proposed tax measures that would have had a very negative impact on container movements in our ports;

The list goes on. All of these efforts contribute to the safety net enjoyed by those who care about the health and safety of Puget Sound.

A Properly Functioning PSP is Essential to Help the Board Achieve its Goals

No pilotage board could meet its mandate without the services of an effective pilot association. The pilots are the board's eyes and ears on the water and the association is a valuable partner in helping the board do its job. PSP has initiated programs on a myriad of safety and efficiency issues that are squarely within the board's mission. It is difficult to dictate safe ship handling techniques and practices by regulation. Pilotage systems work better without micro-management by WAC but it takes an effective pilot association to make sure the board's mission is being fulfilled in the absence of such WACs. Here are some examples of what PSP does to advance the board's mission:

 Safety Clearinghouse. PSP continually collects input from its members on specific ships, waterways and conditions and distills them into Guidelines.
 Publication of these Guidelines lets operators know what safety measures pilots are likely to require for a given job. They cover tug usage, tidal conditions, visibility constraints, obstructions and other safety considerations. PSP, through its various committees, acts as the clearinghouse for this safety information and



makes sure that it gets to the right audience – ship agents, the Coast Guard, the board, DOE, the Harbor Safety Committee, the ports, etc. This collection and dispersal of first hand safety information is a cornerstone of safe port operations. The government bodies responsible for safety – this board, the Coast Guard and DOE – depend on this process to flag and raise issues before something goes wrong. All of the regulation in the world will not prevent an accident if it doesn't address the actual threats faced by the ship while moving in close quarters. In the world of safe ship handling, piloting is where the rubber meets the road and PSP is the conduit for essential safety information about what is needed to do it safely;

- Fatigue Prevention. Fatigue is the single biggest safety factor in marine accidents. The practices and rules that protect against fatigue in this district were developed almost entirely by PSP. Except for the statutory 7 hour rest rule (which could allow up to 14 hours of work without meaningful rest) the board has not been required to regulate pilot rest. PSP's extensive rest rules are regularly submitted to the board. Those rules, and the board's oversight and monitoring of them, were outlined with approval in Governor Gregoire's recent letter to the NTSB describing the fatigue protection measures in place in Puget Sound (Letter attached under Tab 5) PSP's rest rules and the board's oversight were subsequently endorsed by the NTSB;
- Continuing Pilot Education. Here again, we start with a minimal statutory
 requirement of simulator training in a pilot's first year, and every five years
 thereafter. PSP, with the full knowledge and consent of the board, has gone
 beyond this and designed a much more extensive education program:
 - Manned model training for all pilots on a five year cycle, which now includes a session during the pilot's first year;
- PSP and PMI jointly developed a Risk Resource Management simulator class taken by every pilot. This class is designed to push pilots beyond the limits of what can be done and focuses on error chain recognition;



- PSP, Crowley and Alaska Tanker Company jointly developed a tanker escort class at PMI for pilots and tug and tanker captains to hone teamwork and escort skills;
- PSP sends all of its 4th year pilots to Azipod and Kamewa training before they become license qualified to handle large cruise ships and tankers;
- Electronic Navigation class at PMI;
- PSP also facilitates ad hoc exercises as required for particular situations, such as the simulator exercise we are now designing for the Blair
 Waterway and the live tanker escort drills that have occurred in the past.
- Retirement Plan Administration. PSP administers the retirement plans for
 Puget Sound and Grays Harbor districts developed jointly by PSP, the board and
 industry (PSSOA). These programs are an important part of the board's effort to
 remain competitive in attracting pilot candidates (almost all of whom are focused
 on retirement security at this point in their career);
- Comp Day Program Administration. PSP administers the district's comp day
 program that is a crucial element in keeping ships moving on schedule with as
 small a pilot corps as is safe, despite the extremely uneven traffic patterns in this
 district. This program has kept ships moving and saved industry millions of
 dollars over the years by trimming the size of the pilot corps;
- Improvements to Dispatch System to Respond to Seasonal Demands. Our traffic has become seasonal over the last 10 years and PSP has responded with changes to its dispatch system:
 - Adding three extra pilots to the roster on summer weekends to handle the three cruise ships that arrive and depart simultaneously each Friday, Saturday and Sunday;
 - Providing for round trip assignments on inbound cruise ships if the ship will provide quiet sleeping quarters for pilot rest while in port;
 - Providing shorter turnaround times in Port Angeles for rested, off duty pilots on faster ships so that they can do two jobs in one comp day;



- Scheduling training and meetings for the off season;
 - Increasing efficiency by assigning multiple harbors shifts to a "local area pilot" (a pilot assigned to a port rather than a ship).
- . Designing Safe Solutions to New Challenges. Bigger ships continually present new challenges and PSP makes sure that the navigation solutions designed are safe. Commercial advocates - port districts, foreign carriers and trade groups - are not always in agreement and do not always want to pay for these safety measures. It is left to PSP to advocate on behalf of the safety interests of the board and ultimately the people of the state. A good example is the recent resistance by the Port of Tacoma, PMSA and the Grand Alliance carriers to long-established protective measures in place to move large ships in the Blair Waterway. PSP is the body that articulates the need for these safety measures despite this economic pressure. PSP goes even further. Because of the new ships, cranes and traffic volumes now using the Blair, PSP is designing Blair Waterway simulations at PMI. Pilots will be going to the simulator on various nights this fall to try different ship handling techniques under a variety of conditions. The board's use of the tariff process to support these types of safety improvements - in this case a \$50,000 unbudgeted charge for simulator design and time - helps guarantee that they will continue;
 - Technology Advances. Our LLC's technology committee worked extensively to select, acquire and deploy the first generation of PPUs in 2009. They are now examining what the next generation of equipment should be when deployed in 2013. Staying abreast of issues in this field is a time consuming and expensive task. Unlike other districts whose pilotage boards have mandated PPU use, this equipment has been voluntarily adopted here. This committee has been making regular reports and recommendations to the board to assist it in deciding how it wants to handle this in the tariff process.
 - Smooth Port Operations. PSP has taken the lead in finding ways to safely meet the commercial needs of the ports and operators in our districts.



Sometimes this is done with guidelines, sometimes in the almost daily conversations with port districts, ship operators and terminal operators on conditions in the waterways. Sometimes it is coordinating with the port, agent and pilot to find a way to take a ship to the dock with only 25 feet of clearance on either end, rather than making the ship go to anchor. Pilots cannot always move ships when and where the operators and ports want, but the PSP apparatus helps insure that they will be moved if there is any way it can be done safely.

- Legislative and Regulatory Initiatives. PSP has initiated various regulatory changes that have resulted in important improvements in this district. A good example is the landmark change in qualifications and examination procedures suggested by PSP in 2004 and adopted by the board and legislature with modifications in 2005. These changes include broadening the field of potential applicants by delaying the requirement for federal pilotage, establishing a two pronged examination process with a simulator evaluation component and establishing a robust training program that makes sure that applicants show the requisite judgment and ship handling skills before they are licensed. PSP provides ongoing assistance to the board in its legislative initiatives and uses its lobbyist to make sure the board's agency request bills are passed;
- Organizing Volunteer Pilot Labor Needed by the Board. Pilot labor and input are essential to the board's ability to monitor, regulate, investigate and license and train new pilots. Pilots spend countless volunteer hours on the TEC, developing examination questions, validating tests, and training so that the board can successfully qualify and train pilots. All of this is coordinated by PSP. Unfortunately, the related lawsuits and comp days have a cost. For example, just this year the pilots have devoted over 1,000 hours of volunteer time to the 2012 exam. Attached behind Tab 6 is an Acknowledgement of the pilots contribution drafted by Dr. Hertz for his report to the board on this year's examination;



• Augmenting the Board's Outreach Efforts. For financial and legal reasons, the board is often constrained in its ability to do things that benefit pilotage and ports in this district. PSP is able to promote diversity in the pilot corps by taking steps such as forming the Piloting Opportunities in Puget Sound Committee (POPS) whose goal is to reach out to women mariners. Other examples include being active members of the waterfront community and supporting the volunteer and maritime groups that make Puget Sound a good place for foreign carriers to do business and help keep our ports competitive. PSP is also involved in liaison with environmental and public interest groups to help bridge the gap that some of them have with the marine industry.

Why Pilot Commissions Make Sure they have Well-paid Pilots in their Districts

Last year, in response to the expressed desire of some board members the prior year, we commissioned a comprehensive study showing that pilot earnings averaged \$407,000 across the country. At first, this seems like an extraordinary amount of money. Why have pilotage commissions around the country set earnings so high? There are three main reasons: skill, risk and responsibility.

As Capt. George Quick of the MM&P wrote in his 2007 submission to this board:

There are few people in the world who are given the degree of direct responsibility for life, property or for the environment that is entrusted to a maritime pilot. The decisions of pilots, based on their experience and judgment – if wrong – can result in maritime casualties and loses in the tens, if not hundreds, of millions of dollars.

The overwhelming majority of ship masters qualified to be pilots do not want the job.

When an exam is announced, pilot commissions get applications from a very small



percentage of those qualified by license and experience to apply. Why? Again, it is high skill, high risk and high responsibility. Recruitment is a problem for almost all pilotage districts. The board's sister agency in British Columbia – the Pacific Pilotage Authority did a risk analysis recently of the risks posing a threat to their mission. Recruitment challenges were Number 2 on the list of 19 threats. (Criminalization of piloting was Number 1). A copy of the Risk Summary is behind **Tab 7**.

The higher the skill level a pilot has, the lower the risk. A master needs two scarce qualities to become a pilot:

- The skill level to bring risk down to an acceptable level; and
- The appetite to handle the considerable risk and responsibility that cannot be eliminated.

Senior masters who are potential candidates recognize that a piloting career presents them with a whole new level of required expertise and risk. Piloting requires a different skill set and experience level than being the captain of a deep sea vessel or a ferry or tug boat. The jobs are not comparable. Every pilot can be a master, but (as we have seen in the training program) not every master can be a pilot. Experience as a master is only a start.

Many of these senior officers - and their spouses - are simply not willing to undertake the risks of being a pilot. They are successful professionals and prefer to stay within the safety net enjoyed by most employees who are good at their jobs working in a profitable business. As one Puget Sound pilot who recently came from the deep sea industry put it:

"By the time one becomes rated as master you are seriously vested with your employer and it is more comfortable and secure to stay put until retirement instead of taking a chance on a major career change that may or may not work out due to exams, training and delays, etc.".



Here is a short list of the risks introduced when a master decides to change careers to piloting:

- Skill Level Required. Pilots in Puget Sound are being asked to perform assignments that are right on the border of what can be done safely. They are pushing the envelope of risk tolerance. We have had two recent mishaps in Tacoma and Seattle involving such jobs. As the ships get bigger and the waterways get more congested which they promise to do the safety margins will get smaller and smaller. Demands will be made of Puget Sound pilots over the next 10 years that were never contemplated when the waterways in this district were designed and built. All involved will have to take full advantage of every opportunity to develop the pilot corps that we need to perform under these conditions. The line between an accident and a near miss is only a matter of degree and the subtlest of factors can turn a near miss into an accident.
- Criminal liability. Theoretically, any ship captain who spills oil could be subjected to criminal prosecution, but the risk is highly manageable for masters not navigating in close quarters. The pilot faces a much higher likelihood of a mishap. Any significant oil spill is now a criminal offense and when the Coast Guard officer first comes on board, he or she is starting a criminal investigation. As pointed out above, the PPA rates this as the single biggest threat to the successful completion of its mission. See Tab 7.
- Financial ruin. A pilot involved in a major incident is likely facing financial ruin for his or her family. It has happened. Adequate insurance is not available to pilots as it is to other professionals and every job presents the possibility of damages that cannot be paid. Masters are better protected against this because they deal with less risky ship movements and have an employer who stands between them and any plaintiffs. A pilot does not have that cover and faces plaintiffs alone.
- Medical disqualification and early career termination. When considering being a pilot, senior, middle aged masters and their spouses must weigh the very



real risk of premature career termination due to medical issues. We have seen two pilots in this district forced into early retirement by the Coast Guard in the last year. This is happening all around the country. One of our pilots was near the end of his career, but the other was not. A pilot forced to retire has nowhere to go. He or she may have disability insurance and whatever benefits are accrued under the district's retirement/disability plan, but no real means of restoring the type of income that an employed master can expect to preserve under the same circumstances by moving to a desk job. Medical scrutiny of pilots is much more intense than it is for masters and occurs on both the state and federal level. Because pilots climb a ladder to get to work their disability threshold is much lower – a shoulder injury can end a career. Unlike their master counterparts, if they become disabled, there is no American with Disabilities Act compelling an employer to find them another position.

- Economic security. An employee is in a much more secure financial
 environment than an independent pilot. Such a master typically has a funded
 retirement plan as opposed to an unfunded plan. This disadvantage is magnified
 in this district where the unfunded plan that does exist is under continual attack
 by the carriers' economic advocates. In addition, many masters have stock
 options and other benefits that are not available to pilots.
- Fear of Failure. On a more personal level, masters contemplating becoming
 pilots know that they might fail. They might not pass the written exam, they might
 embarrass themselves in the simulator or they might not be able to pass the
 training program. Fear of professional failure, even if not justified, can be a
 powerful disincentive. When contemplating making a move, the masters know
 there is no certainty.

It is not just skill, risk and responsibility that compel pilot commissions to make sure that its pilots are adequately paid. There are other disincentives that commissions must overcome:



- Lifestyle. By the time a deck officer becomes a senior master, he or she has
 developed family and personal lifestyles compatible with their sailing schedule.
 Change may not be welcome or easy. The prospect of an all-night piloting
 assignment, climbing aboard a tanker in the howling wind, or transiting a heavily
 congested waterway with minimal clearances may not be an attractive one.
- Cost. It is expensive to become a pilot, especially in a large district such as ours. It takes time to prepare for and take the exam, but more importantly, it takes time to go through the training program earning the stipend. Deep sea masters are making \$228,000 plus benefits under current MM&P contracts. A 2 ½ year training program will cost them \$570,000 in lost earnings. The stipend pays about \$112,500 for that same time period (\$60,000 minus \$15,000 per year for medical insurance that the trainee now has to pay out of his or her own pocket⁴). The candidate will lose \$460,000 of earnings during this program. After the training program, at current pilot earning levels, it will take another four years to recover these losses. Many masters in their 40s are looking at college expenses, mortgages, living expenses and retirement and simply cannot afford this reduction in pay during these crucial years. They and their families are analyzing their return on investment, in this case time and money. If they cannot justify the return they won't make the investment.
 - Retention of Pilots. We have reached the point where a number of pilots are
 now retiring as soon as they can because the risk/reward curve has become
 prohibitive. It is almost irresponsible for a pilot who can afford to retire not to do
 so. The money to be earned by continuing to work is simply not worth the risk.
 The need to increase pilot earnings to retain pilots was heavily relied upon by the
 California Pilotage Commission in making its 2011 recommendation for a tariff
 increase.

⁴ The current MM&P insurance that these masters have costs closer to \$22,000 per year. This example assumes that they cut back coverage out of financial necessity during the training period and only spend \$15,000. This, in and of itself, is a substantial deterrent to making a career change.



Productivity. Pilots in this district are more productive and contribute more value to the shipping industry than ever before. For very good economic reasons, the foreign container companies calling on our ports are now using much larger vessels. The economies of scale and profit margins presented to carriers by these larger ships are enormous. However, these same ships put disproportionate demands on the pilots. A pilot safely moving a 1,140 by 140 foot ship with \$200 million of cargo on board is giving much more economic benefit – and undertaking much more risk – than a pilot moving the 600 foot log ship that used to be common in these waters. Last year, the average ship size in this district was 48,122 gross tons compared to 35,555 in 2000 and 20,848 in 1984.

Below is a picture of the fully loaded *Arnold Maersk* in Elliott Bay taken last week. The ship is 1,157 feet long and 140 feet wide drawing 43' and has just received an additional tug at the pilot's request before attempting to go into the East Waterway. There is a tank barge moored at the waterway's west entrance and a ship at the dock with lowered cranes at the east entrance. Gillnets are deployed in the waterway. A northwest wind is gusting to 20 knots. This puts force on the starboard quarter pushing the vessel across the waterway toward the shallows while twisting it at an angle away from the dock.





States that do Not Protect Competitive Pilot Earnings are at a Disadvantage

Pilot boards recognize the value of pilots and are also keenly aware that they have to ensure competitive earnings if they want to attract and retain the best candidates. As shipping increases, there are increasing demands for more pilots from the relatively small pool of applicants who are qualified on paper. The highly sought after best candidates make up only a small percentage of this pool. In an effort to meet their mandate, boards know that if compensation is not commensurate with the required skill, risk and responsibility, they have little chance of attracting the best candidates.

The real question isn't why boards provide high earnings to pilots: its why would any pilot commission want to pay its pilots less than they earn in other comparable ports? Why would they risk discouraging the very best candidates from their districts by paying non-competitive earnings? Why would they risk damaging the morale of their pilot corps by paying them less than the documented earnings of their peers elsewhere?

Unfortunately, this district is not attracting candidates as it could. The number of exam applicants this year is down, with only 33 masters applying for the Puget Sound and Grays Harbor district. One of these is not interested in Puget Sound and 17 are interested in both districts. The 31 remaining for Puget Sound represent a decrease of 22% from 2008 when 41 signed up. This corresponds to a similar drop in pilot earnings over this same time period from their 2007 peak. See Tab 3. Puget Sound earnings are no longer competitive and this district is not as attractive as it was in 2008. The attractiveness of a job is directly related to its compensation.

The number of applicants does not tell the whole story. In almost every district, pilot pay is high enough to attract candidates. But who is being attracted? Which districts are getting the best candidates? More importantly, who is not being attracted? Pilot



boards can tell who they are attracting, but they have no idea who they are not attracting. There is always room for improvement in the pilot corps, and most commissions try to remove income as a barrier to recruitment by insisting that the ships using a port pay a tariff that will support competitive earnings.

We know that in Puget Sound we attract only a small number of those sailing locally who are qualified to apply. In 2011 there were 63 different US vessels who called in our ports. There are at least 126 masters sailing on those ships. Of those 126, only three applied for this year's exam.

Ultimately, a pilot corps that is not paid a comparable wage will deteriorate in quality, morale and motivation. American businesses are very familiar with this principle. They know that if they offer a competitive wage they will at least get the chance to look at the top tier of candidates for a job. The more candidates they attract, the better the quality of the person they can hire. A larger pool of applicants can only increase the quality of the person finally chosen: an exam taken by 50 applicants will produce higher test scores than an exam taken by 31.

PSP asks the Board to Recognize the Contributions Made by PSP and Its Members by Setting a Tariff that will Fully Fund PSP's Activities and Provide Appropriate Pilot Earnings

PSP and its members have demonstrated an unfailing commitment to providing a system of safe and efficient pilotage on behalf of the board and the people of this state. We have met and responded to every challenge and accepted the duty and responsibility of being joint stewards with the board of the pilotage system in this state.



Now we ask the board to use the tariff power given it by the legislature to continue to fund PSP and ensure that pilots in this state are compensated at a level commensurate with the skill, risk and responsibility undertaken each time we board a vessel.

Discussions of pilot pay are about the future. The issue is not only who we need to pilot today – but who will we need tomorrow. Tomorrow will bring more and bigger ships operating under increasing scrutiny. The safety margins will decrease and the stakes will increase. An accident in our waters – even one without environmental catastrophe - would have an enormous impact on the competitiveness of our ports and our economy. An accident with environmental consequences would be devastating.

Nothing is more central to the board's mission than making sure that it properly supports its existing pilot corps and its pilot association. By doing so it ensures that this state will continue to enjoy the safety net of which pilotage is such an important part. It also ensures that the board will be able to attract the preeminent ship handlers and masters from around the country and put them to work for the people of the State of Washington.

Thank you for your time and attention.

Respectfully Submitted

October 11, 2012

Capt. Frantz A. Coe, President

Puget Sound Pilots



PSP's October 11, 2012 Submission of YTD Financial Information

What follows is PSP's submission of YTD financial information that is being included with its tariff request.

Page 2 shows 2012 Revenue and Income data and projections based on financial information available as of October 11. This is actual (unaudited) revenue data through September 30. Actual data is in black and projected data is in red.

Pages 3 through 5 show expense data broken down as follows:

- 2011 Expenses from the audited financial statement;
- September 30, 2012 YTD actual expenses;
- 2012 Projected Expenses;
- The difference between the 2012 budget and 2011 actual expenses;
- The 2013 budget; and
- The difference between the 2013 budget and the 2012 budget.

2012 Projected Expenses have been increased to reflect the newly added cost of the Blair Waterway simulations that will occur this fall in connection with the Grand Alliance move to Tacoma.

PSP Revenue and Income Projections

Actual YTD Sept 30 Revenue and Expenses

Oct to Dec Projected

Grays Incom Trans Pilots assign 5 Associate BE @ pilots	rage Revenue* ys Harbor Pension me asportation Paid to as @\$121 per gnment** ociation Expenses	\$18,140,313 \$28,001 \$540,431		\$3,920	Oct. Projected \$2,465,334 \$4,000	Nov Projected \$2,211,098 \$4,000	Dec Projected \$2,384,331 \$4,000	**Total Projected 2012 \$31,445,844
Grays Incom Trans Pilots assign 5 Associate BE @ pilots	ys Harbor Pension me hsportation Paid to its @\$121 per gnment**	\$28,001	\$3,080	\$3,920		Commence of the commence of th	ANT MORE DUBLE A	100 CO 1/2 AND AND CO.
Trans Pilots assign 5 Associ	me nsportation Paid to ts @\$121 per gnment**				\$4,000	\$4,000	\$4,000	\$47,001
Pilots assign 5 Associ IBE @ pilots	ts @\$121 per gnment**	\$540,431	\$95,707	\$99.417				
IBE @	ociation Evnenses			\$88,417	\$71,874	\$71,874	\$77,440	\$945,744
₆ pilots	Dolation Expenses	\$6,646,141						\$11,714,809
	@\$12,468 for 52 s	\$378,196						\$648,336
Total Rever	al Pooled Net enue	\$10,603,546						\$18,183,956
10.00	Earnings Per Pilot 2 pilots							\$349,691
A CONTRACTOR OF THE PARTY OF TH	ignments (1% ease over 2011 for -Dec)	4,526	721	661	594	594	640	7,736
10								

Expense Portion of October 11, 2012 Financial Report to BOPC

	A	В	С	D	F	G	н	1	J	
	Location	Expense	2011 Expense From Financial Statement (Adjusted for PPUs)*	September 30, 2012 YTD	2012 Projected Expenses	2012 Projection Difference with 2011 Actual	2013 Projected Expenses	Projected Change in 2013 from 2012	Note as to Changes	
2	Seattle	ATTORNEY FEES	\$8,396	\$27,388	\$37,880	\$29,484	\$16,000	(\$21,880)	BOPC Lawsuit expenses incurred in 2012 reduced in 2013	
	Seattle	COMP DAY EXPENSE	\$290,385	\$442,061	\$573,413	\$283,028	\$715,447	\$142,034	Capts Petke, Mendenhall and Engstrom	
	Seattle	COMPUTER SYSTEM	\$209,281	\$157,231	\$192,546	(\$16,735)	\$250,000	\$57,454	System alteration will add to 2013 cost but save ongoing future expenses.	
5	Seattle	CONFERENCES	\$2,946	\$0	\$2,946	\$0	\$10,000	\$7,054	PSP will host 2013 West Coast Conference	
6	Seattle	CONSULTING FEES	\$149,231	\$65,557	\$109,018	(\$40,213)	\$113,379	\$4,361	CPI	
7	Seattle	CPA	\$76,440	\$67,596	\$79,182	\$2,742	\$82,349	\$3,167	CPI	
8	Seattle	DEPRECIATION (no PPUs)	\$149,452	\$112,622	\$162,383	\$12,931	\$57,910	(\$104,473)	From 5 Year Plan (less PPUs of \$84,168 in 2011; \$21,043 in 2012 and \$310,950 in 2013)	
9	Seattle	DRUG TESTING	\$5,434	\$5,385	\$5,719	\$285	\$5,948	\$229	CPI	
10	Seattle	DUES	\$138,425	\$104,835	\$153,020	\$14,595	\$159,141	\$6,121	CPI	
11	Seattle	EMPLOYEE BENEFITS	\$243,396	\$221,923	\$287,289	\$43,893	\$298,781	\$11,492	Collective Bargaining Agreement Escalators	
12	Seattle	EMPLOYEE SALARIES	\$750,043	\$551,265	\$718,222	(\$31,821)	\$746,951	\$28,729	Collective Bargaining Agreement Escalators	
13	Seattle	EQUIPMENT LEASES	\$1,496	\$811	\$1,632	\$136	\$1,064	(\$568)	CPI	
14	Seattle	INSURANCE	\$194,355	\$159,337	\$210,014	\$15,659	\$219,047	\$9,033	Based on policies in effect.	
15	Seattle	INSURANCE, MEDICAL	\$1,455,769	\$1,162,787	\$1,592,657	\$136,888	\$1,592,657	\$0	No Change	
16	Seattle	INTEREST (no PPUs)	\$17,154	\$7,696	\$5,991	(\$11,163)	\$3,815	(\$2,176)	From 5 Yr. Plan. Radios in 2013 (less PPUs of \$4,227 in 2011; \$570 in 2012 and \$66,077 in 2013)	
17	Seattle	LICENSE FEES	\$346,138	\$266,500	\$344,500	(\$1,638)	\$351,000	\$6,500	Assumes one more pilot and no fee increase by BOD	
18	Seattle	LOBBYIST	\$109,159	\$87,572	\$113,374	\$4,215	\$117,909	\$4,535	CPI	
19	Seattle	OFFICE MAINTENANCE & REPAIR	\$8,633	\$5,426	\$7,274	(\$1,359)	\$7,565	\$291	CPI	
20	Seattle	OFFICE SUPPLIES	\$41,388	\$24,948	\$32,703	(\$8,685)	\$34,011	\$1,308	CPI	
21	Seattle	PILOT TRAINING	\$220,644	\$220,248	\$323,766	\$103,122	\$525,239	\$201,473	2012 includes unexpended amounts for scheduled training and \$45,000 for Blair Waterway simulations. 2013 includes: 12 Enav; 6 Azipod; 12 Pt. Revel; 1 Pt. Ash; 12 Escort Simulator; 18 Risk Resource. Management; 60 PPU. Budget Attached. Reference to Blair added Oct 5, 2012.	
22	Seattle	POLITICAL DONATIONS	\$2,200	\$0	\$0	(\$2,200)	\$0	\$0	No change	
23	Seattle	PPU-EQUIPMENT & SVC TO LLC	\$125,392	\$47,417	\$54,948	(\$70,444)	\$389,027	\$334,079	Includes for 2013 depreciation and interest from new PPUs shown in Five Year Plan and Misc costs (\$12,000). Does not include PPU Training.	
-	Seattle	PRINTING & PUBLICATION	\$33,258	\$3,909	\$26,000	(\$7,258)	\$27,040	\$1,040	CPI	

Expense Portion of October 11, 2012 Financial Report to BOPC

	A	В	C	D	F	G	н		J	1
	Location	Expense	2011 Expense From Financial Statement (Adjusted for PPUs)*	September 30, 2012 YTD	2012 Projected Expenses	2012 Projection Difference with 2011 Actual	2013 Projected Expenses	Projected Change in 2013 from 2012	Note as to Changes	
5	Seattle	RENT	\$145,097	\$82,953	\$109,000	(\$36,097)	\$134,000	\$25,000	Renewed lease had 2 months of free rent in 2012 and reduced rent thereafter.	
26	Seattle	RETIREMENT PUGET SOUND	\$2,610,203	\$2,071,633	\$2,775,603	\$165,400	\$3,075,505	\$299,902	Retirements expected in Dec 2012, Jan 2013 and July 2013	
27	Seattle	RETIREMENT, GRAYS HARBOR	\$109,739	\$82,304	\$109,739	(\$0)	\$109,739	\$0	Fixed Payments, assumes no changes.	
28	Seattle	TAXES, OTHER	\$1,500	\$580	\$1,695	\$195	\$1,763	\$68	CPI	
29	Seattle	TAXES, PAYROLL	\$51,968	\$40,168	\$59,038	\$7,070	\$61,400	\$2,362	CPI	
30	Seattle	TAXES, REVENUE	\$586,721	\$463,368	\$599,328	\$12,607	\$623,301	\$23,973	CPI (actual increase, if any, depends on revenue.)	
31	Seattle	TELEPHONE & COMM.	\$41,713	\$31,400	\$42,413	\$700	\$44,110	\$1,697	CPI	
32	Seattle	TRAVEL, ENT. & PROMO	\$146,462	\$134,464	\$152,027.56	\$5,566	\$158,109	\$6,081	CPI	
33	Seattle	UNRECEIVABLE A/R	\$11,000	\$0	\$2,575	(\$8,425)	\$0	(\$2,575)	Delinquent Coast Guard vessel (Polar Sea) in 2012. None expected in 2013	
34	Pilot Station	DEPRECIATION	\$86,767	\$39,919	\$53,471	(\$33,296)	\$53,276	(\$195)	5 Year Plan	
35	Pilot Station	EDUCATION	\$0	\$240	\$0	\$0	\$0	\$0	None expected	
36	Pilot Station	FOOD	\$85,270	\$73,488	\$88,177	\$2,907	\$91,704	\$3,527	CPI	
37	Pilot Station	INSURANCE	\$14,664	\$15,303	\$14,000	(\$664)	\$14,560	\$560	CPI	
38	Pilot Station	INTEREST	\$7,473	\$202	\$1,814	(\$5,659)	\$0	(\$1,814)	CPI	
39	Pilot Station	LODGING PA	\$12,001	\$0	\$0	(\$12,001)	\$0	\$0	Expense at hotel in 2011 while station was repaired.	
40	Pilot Station	MAINTENANCE & REPAIR	\$96,027	\$31,280	\$58,000	(\$38,027)	\$60,320	\$2,320	СРІ	
41	Pilot Station	RENT, TIDELAND LEASE	\$3,681	\$3,893	\$4,016	\$335	\$4,177	\$161	New Lease Rate expected in 2013	
42	Pilot Station	REPOSITION PILOTS	\$242,870	\$183,375	\$244,251	\$1,381	\$254,021	\$9,770	СРІ	
43	Pilot Station	SUPPLIES	\$27,878	\$17,964	\$28,739	\$861	\$29,889	\$1,150	CPI	
44	Pilot Station	TAXES, PROPERTY	\$11,581	\$6,291	\$11,986	\$405	\$12,465	\$479	CPI	
45	Pilot Station	TELEPHONE & COMM.	\$8,462	\$7,147	\$8,816	\$354	\$9,169	\$353	CPI	
46	Pilot Station	UTILITIES	\$19,113	\$15,714	\$19,909	\$796	\$20,705	\$796	CPI	
47	Pilot Boats	DEPRECIATION	\$285,834	\$28	\$28	(\$285,806)	\$28	\$0	5 year Plan	
48	Pilot Boats	EMPLOYEE BENEFITS	\$203,067	\$176,332	\$258,000	\$54,933	\$268,320	\$10,320	Collective Bargaining Agreement (Raise to Industry Std)	
49	Pilot Boats	EMPLOYEE SALARIES	\$795,317	\$595,549	\$796,952	\$1,635	\$828,830	\$31,878	Collective Bargaining Agreement	
50	Pilot Boats	FUEL - JUAN DE FUCA	\$209,130	\$175,061	\$237,626	\$28,496	\$253,913	\$16,287	Fuel projected at \$3.90 with a 1% increase in traffic. Sept 6, 2012 price = \$3.78	
51	Pilot Boats	FUEL - PUGET SOUND	\$222,646	\$176,142	\$237,626	\$14,980	\$253,913	\$16,287	Fuel projected at \$3.90 with a 1% increase in traffic. Sept 6, 2012 price = \$3.78	

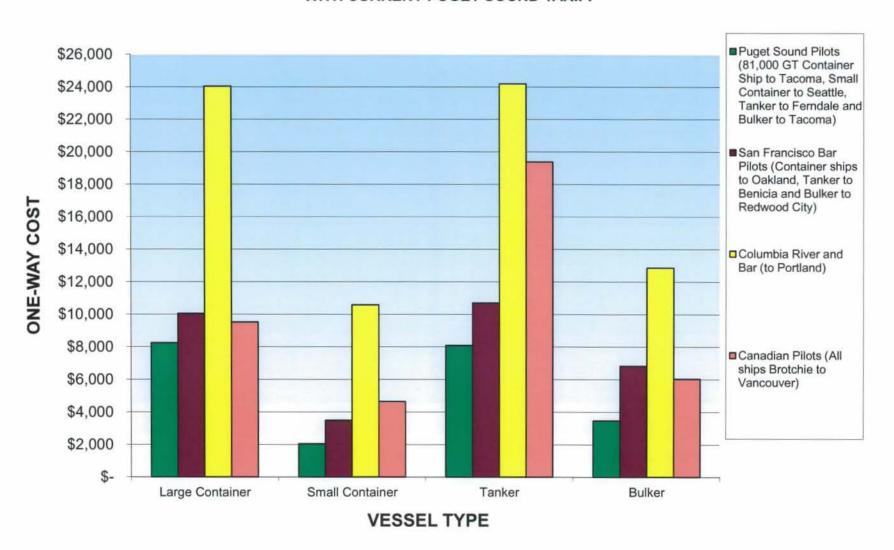
Expense Portion of October 11, 2012 Financial Report to BOPC

	A	В	C	D	F	G	Н	1	j i
1	Location	l l	2011 Expense From Financial Statement (Adjusted for PPUs)*	September 30, 2012 YTD	2012 Projected	2012 Projection Difference with 2011 Actual	Projection 2013 Difference Projected with 2011 Expenses	Projected Change in 2013 from 2012	Note as to Changes
52	Pilot Boats	INSURANCE	\$128,222	\$64,224	\$127,000	(\$1,222)	\$132,080	\$5,080	Based on policies in effect and expected
3	Pilot Boats	INTEREST	\$11,977	\$324	\$2,907	(\$9,070)	\$0	(\$2,907)	CPI
54	Pilot Boats	MAINENANCE & OPERJUAN DE FUCA	\$69,844	\$172,469	\$336,000	\$266,156	\$182,000	(\$154,000)	2011 costs understated by \$67,000 due to insurance reimbursement received in 2011 for 2010 engine destruction. Pilot house will be painted in 2012 at a cost of approximately \$100,000. Boat budget attached.
55	Pilot Boats	MAINENANCE & OPER,-PUGET SOUND	\$241,516	\$110,708	\$219,300	(\$22,216)	\$434,000	\$214.700	Major engine rebuild scheduled for early 2013. Pilot house was painted in 2011. Boat budget attached.
56	Pilot Boats	TAXES, PAYROLL	\$64,666	\$47,345	\$74,097	\$9,431	\$77,061	\$2,964	CPI
57	Pilot Boats	TAXES, PROPERTY	\$6,162	\$5,725	\$6,200	\$38	\$6,448	\$248	CPI
58		PPU Adjustment to Financial Statement Report to reflect auditor's year end consolidation*	(\$41,997)						Deducts PPU depreciation and interest from amount shown in Line 23 above.
59									
60									
51		Total Expense from Financial Statement (Adjusted for PPU)	\$11,095,590	\$8,568,109	\$11,714,809	\$577,223	\$12,919,084	\$1,204,275	
52		Assumed CPI for 2012	4%	\$1					

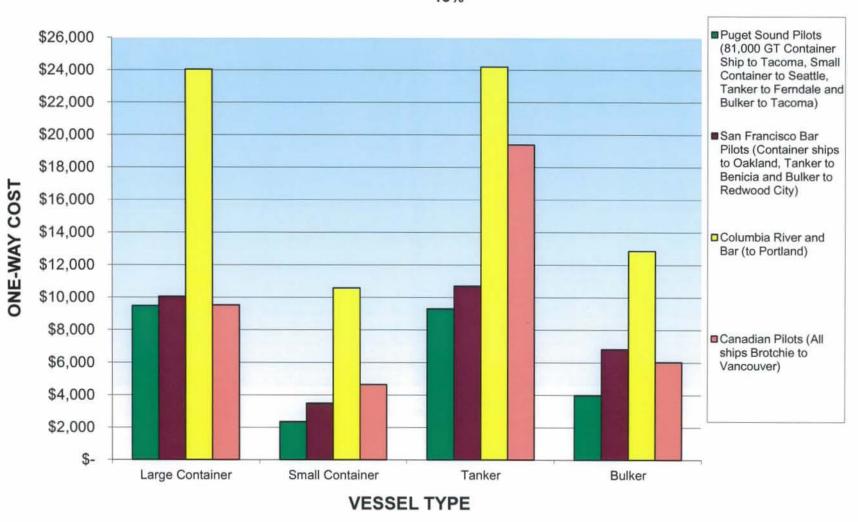
The audited financial statement consolidates PPU expenses incurred by the LLC into PSP's depreciation and interest expenses at year end.

Until that adjustment is made, PSP shows the expense as a line item payment to the LLC. The Column C amounts from the financial statement have been adjusted to reflect PSP's ongoing record keeping so that it can be tracked monthly as we approach year end.

PILOTAGE FEES COMPARISON OF WEST COAST PORTS WITH CURRENT PUGET SOUND TARIFF



PILOTAGE FEES COMPARISON OF WEST COAST PORTS WITH PROPOSED 2013 PUGET SOUND TARIFF INCREASE OF 15%



Average Pilot Fee Comparisons Among Ports with 15% Increase

PILOT GROUP	Large Container	Small Container	Tanker	Bulker	Average of All Fees	Percent Higher than Puget Sound
Puget Sound Pilots (81,000 GT Container Ship to Tacoma, Small Container to Seattle, Tanker to Ferndale and Bulker to Tacoma)	\$9,485	\$2,357	\$9,304	\$3,989	\$6,284	
San Francisco Bar Pilots (Container ships to Oakland, Tanker to Benicia and Bulker to Redwood City)		\$3,493	\$10,704	\$6,828	\$7,768	24%
Columbia River and Bar (to Portland)	\$24,035	\$10,582	\$24,189	\$12,864	\$17,917	185%
Canadian Pilots (All ships Brotchie to Vancouver)	\$9,530	\$4,651	\$19,387	\$6,028	\$9,899	58%



Chart Showing Puget Sound Pilot Net Income from its 2007 Peak Compared to Inflation

Year	Net Income	Income Change	СРІ	2007 Net Income Adjusted for CPI
2007	\$351,274		3.9%	
2008	\$346,240	-1.4%	4.2%	\$364,974
2009 \$313,195		-9.5%	0.6%	\$380,303
2010 \$305,323		-2.5%	0.3%	\$382,584
2011 \$342,890		12.3%	2.7%	\$383,732
2012	\$349,000	1.8%	3.0%	\$394,093

During this time, CPI has gone up 12% and pilot income has decreased.

Methods of Levying VEC Charge

			Charge per Unit Needed in VEC to cover Training and Tech Only	Needed to cover Full VEC of
If applied to All Jobs except Cancellations	2011	2012 Projections (1% increase over 2011)	\$914,566	\$5,323,084
Assignments	7,490	7,565	\$120.90	\$703.66
Total LOA footage of ships	5,762,092	5,819,713	\$0.1571	\$0.9147
Total Beam footage of all ships	838,550	846,935	\$1.0799	\$6.2851
Total Actual Draft of all vessels	234,028	236,368	\$3.8692	\$22.5203
Total Tonnage of all vessels	366,441,538	370,105,953	\$0.0025	\$0.0144

If applied to all Jobs except Harbor Shifts and Cancellations	2011	2012 Projections (1% increase over 2011)		
Assignments	6,449	6,513	\$140.41	\$817.24
Total LOA footage of ships	4,991,020	5,040,930	\$0.1814	\$1.0560
Total Beam footage of ships	722,437	729,662	\$1.2534	\$7.2953
Total Actual Draft of vessels	202,914	204,943	\$4.4625	\$25.9735
Total Tonnage of vessels	319,813,013	323,011,143	\$0.0028	\$0.0165

CHRISTINE O. GREGOIRE Governor



STATE OF WASHINGTON OFFICE OF THE GOVERNOR

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January 31, 2012

Deborah A.P. Hersman, Chair National Transportation Safety Board 490 L'Enfant Plaza, SW Washington, DC 20594

RE: National Transportation Safety Board Recommendations M-11-19 through -21

Dear Chair Hersman:

This is in response to your letter to me, and other governors of states and territories in which state and local pilots operate, dated November 04, 2011. You requested a response to three recommendations made by the National Transportation Safety Board (NTSB) as a result of the incident involving *Eagle Otome*, *Gulf Arrow*, *Kirby 30406*, and *Dixie Vengeance* on January 23, 2010.

My responses to your recommendations are as follows:

Recommendation M-11-19: Ensure that local pilot oversight organizations effectively monitor, and through their rules and regulations, oversee the practices of their pilots to promote and ensure the highest level of safety.

Response: The Washington State Board of Pilotage Commissioners (Board) is tasked by the Legislature (through The Pilotage Act – codified in the Revised Code of Washington as RCW 88.16) to maintain efficient and competent pilotage service in the "pilotage grounds" of our state which include the Washington waters inside the international boundary line east of 123° 24' west longitude and the inland waters of Grays Harbor and Willapa Harbor. Note that pilotage in the Washington waters of the Columbia River is under the control of the State of Oregon. The Pilotage Act mandates and empowers the Board to create and maintain rules under the Washington Administrative Code (WAC) to enforce and administer the Pilotage Act. These rules are codified in WAC 363-116 – Pilotage Rules.

The Board has specific rules (WAC 363-116-200) which require prompt reporting of marine incidents and near misses to the Board. If an incident involves pilot error, the Board has various remedial measures in its rules ranging from reprimand to license revocation. It has various disciplinary statutes and rules to implement this program, e.g. RCW 88.16.100, WAC 363-116-370 (specified corrective actions), and WAC 363-116-420 (emergency suspension of license). The reports submitted by pilots (or any other entity) are reviewed monthly (unless scheduling conflicts require cancellation of a monthly meeting) at an open meeting of the Board and are disseminated to pilots and shipping companies. The Board's analysis of these reports often results in Board action or communication with third parties to address issues that may have been a causal factor in a near miss or incident. The Board also makes sure that all other relevant regulatory bodies have been notified of such events.

resident

Deborah A.P. Hersman February 2, 2012 Page 2

The Board carefully monitors the effectiveness of both the law (RCW) and rules (WAC) by regularly reviewing input from a variety of sources regarding any circumstance that might indicate that there is a need for a change in law or rule to better prevent incidents that could lead to maritime casualties of any level of significance. Other actions the Board may take as a result of the analysis of feedback regarding situations that involve pilots include, but are not limited to:

- Working with the U.S. Coast Guard, the Harbor Safety Committee, local yacht clubs, Native American Tribes, other pilotage authorities including Canadian, shipping companies, etc. to improve communications or other aspects of safe navigation.
- Disciplinary sanctions against a pilot (including possible revocation of license) whose performance fails to meet the standards set in the RCW and associated WAC.
- · Changes to educational requirements for pilots.
- · The issuance of Safety Advisory Bulletins.
- · Development of Policy Statements.

Recommendation M-11-20: Require local pilot oversight organizations that have not already done so to implement fatigue mitigation and prevention programs that, (1) regularly inform mariners of the hazards of fatigue and effective strategies to prevent it, and (2) promulgate hours of service rules that prevent fatigue resulting from extended hours of service, insufficient rest within a 24-hour period, and disruption of circadian rhythms.

Response: The Board enforces those provisions of the RCW and WAC that specifically address fatigue issues (RCW 88.16.103 and WAC 363-116-081). It also works with the two entities that specifically manage pilot assignments - Puget Sound Pilots (PSP) and the Port of Grays Harbor (PGH) - to ensure that they make assignments so as not to violate either the RCW or WAC. Extensive review by the Board of pilot dispatch records is required by RCW 88.16.103. The Board's staff compiles monthly dispatch reports of specific pilot activity that are reviewed by the Board to insure that fatigue does not become an issue.

Washington statutes and Board rules provide that a pilot who completes a piloting job of 7 hours or more be given a rest period of at least 7 hours. It should be noted that PSP has established and monitors fatigue prevention rules that are actually stricter than those set in the RCW/WAC. A summary of the PSP Operating Rules regarding fatigue is attached (Enclosure 1). The pilot assignment rate in PGH rarely creates fatigue problems, but PGH monitors the assignments to ensure that fatigue issues are eliminated.

The Board also manages the potential for fatigue, from time-to-time, by setting the number of pilots in each pilotage district as required by WAC 363-116-065. The factors that the Board considers in setting the number of pilots include such things as workload, assignment preparation and rest needs of pilots, time lost to injury and illness, administrative responsibilities, continuing education and training requirements, and travel time consumed by pilots getting to and from assignments.

Washington law specifically mandates that a pilot's license be terminated upon the pilot reaching the age of seventy (RCW 88.16.102), so potential fatigue issues related to increasing age are significantly reduced.

Deborah A.P. Hersman February 2, 2012 Page 4

I believe that the Board is highly proficient in carrying out the requirements of the Pilotage Act and as a result is already very effectively conforming to the recommendations in your letter. The Board fully understands that it can never "rest on it's laurels." Therefore, it diligently reviews what is happening in our pilotage grounds and others around the world in order to determine if there are any aspects of pilotage in Washington that can be improved.

One of the ways it does that is to participate in a biennial regional meeting of West Coast pilotage authorities (plus representatives from pilot associations and the shipping industry) from California, Oregon, Washington, British Columbia, and Alaska. Representatives from the American Pilots Association and other national organizations interested in safe navigation attend as well. Such meetings allow an exchange of information that helps all the participating pilotage authorities, pilots, and ship operators to improve maritime safety along the entire West Coast. The Washington Board plans to host the next regional meeting in the last quarter of 2012.

If any member of your staff desires to be invited to the regional meeting once it is scheduled, or if you have any questions about my responses to your recommendations or any other aspects of pilotage in the State of Washington, please contact Captain Harry Dudley, Chairman, Washington State Board of Pilotage Commissioners at (206) 515-3904.

Sincerely,

Christine O. Gregoire

Governor

Enclosure

Puget Sound Pilots Summary of Operating Rules and Dispatch Guidelines Regarding Fatigue Prevention

- The Operating Rules provide for mandatory rest periods of 6 hours at home after transits ending at a port and eight (8) hours after transits ending at the pilot station. These rules apply to all assignments except harbor shifts. A pilot can do more than one harbor shift without mandated rest under certain circumstances.
- 2. The Rules specifically delineate travel and job prep time and exclude it from the required rest period. The sequence is as follows starting with an outbound assignment:
 - After completing a rest period from an earlier job, the pilot may be called and assigned to another job.
 - b. The pilot is given a predetermined amount of time to prepare for the job and travel to it. This time varies with the distance of departing port from Seattle. It can be as short as 4 hours for a Seattle departure or six (6) hours for a Ferndale departure.
 - c. The pilot arrives on the bridge of the ship and completes the assignment when he disembarks at the pilot station.
 - d. The pilot is given eight (8) hours of rest at the station before starting another assignment on an inbound vessel.
 - e. The pilot boards the inbound vessel and completes the assignment when the vessel is all fast at the dock or put to anchor.
 - f. The pilot is accorded a predetermined amount of travel time to get home depending upon the port of arrival.
 - g. Pilots start the mandatory rest period of six (6) hours during which they are completely undisturbed. At the end of this rest period they can be called and given a new assignment.
- 3. The Rules treat pilot duties that are in addition to moving ships such as meetings, Presidential duties, training, pilot commission activities, etc in a way that prevents them from inducing fatigue. Basically, these events are treated the same as jobs to make sure for example that a Pilot Commissioner attending a meeting is not assigned a job until after an adequate post-meeting rest period has been completed.
- 4. On assignments expected to last over eight (8) hours, PSP practice provides that two pilots will be assigned. Sometimes this is accomplished by a mid-voyage disembarking/boarding and sometimes by putting two pilots on board the ship who work in sequence. These are primarily transits between Port Angeles and Olympia and lengthy escorted tanker assignments from the refineries to Tacoma.
- 5. The rules provide a two watch system of rotation in which pilots work a shift and then have an off-duty shift of approximately the same length. This off duty time is supplemented by pilots taking one "watch" off after completion of 10 watch rotations.

- To promote even better fatigue protection, PSP is considering a change to its operating rules that would cut the length of these vacations in half but increase their frequency to every five (5) watches.
- 6. The Rules further provide that when a pilot is needed and there is no properly rested pilot on duty, volunteer pilots will be requested to work from the off duty contingent. The pilot who works when off duty earns a comp day. The voluntary nature of this system helps protect against a fatigued off duty pilot working on a vessel.
- The Rules provide that a pilot who has Comp Days can use a comp day to remove himself/herself from rotation without financial penalty if fatigued.

Acknowledgement drafted by Dr. Hertz for inclusion in his report to the board.

ACKNOWLEDGEMENTS

We wish to acknowledge all of the Puget Sound Pilots who participated as subject matter experts and evaluators in the examination process. Working pilots were involved in every part of the process to ensure that the written examination and simulator evaluation were valid. A number of pilots were asked to identify the critical tasks performed by pilots and the knowledge required in order to perform the tasks safely and effectively. The information obtained from these interviews was used to develop the practice analysis survey, the results of which would serve as the foundation of the written examination and simulator evaluation. Virtually all of the pilots completed the survey from which the results were used to develop examination specifications for the written examination and simulation evaluation. Not only were the pilots involved in writing, reviewing, and vetting the written examination questions, they were involved in developing and administering the simulation examination.

The participation of Puget Sound Pilots contributed significantly to the development of a fair, job-related selection process to ensure that the pilot trainees will be selected according to their qualifications. The Puget Sound Pilots should be commended for their efforts in developing the written examination and simulator evaluation.

ENTERPRISE RISK MANAGEMENT

The Authority has endorsed an Enterprise Risk Management (ERM) Program.

ERM has been incorporated as part of the Authority's strategy with the intention of 'cultivating a culture of enterprise risk awareness'.

All areas have been incorporated into this Program, including entrepreneur and employee pilots, launches, dispatch and administration, along with the Board and management.

The ERM Committee is chaired by a Board member and includes representation from each of the areas mentioned above. The Committee reports to the Board, meets quarterly and re-evaluates the risk register with a view to identifying new risks and mitigation measures.

The focus for 2011 will continue to ensure the 'high' ranked risks have appropriate mitigation measures in place along with scenario planning, when appropriate.

The results of this Program are summarized in the grid below.

Priority	Risk Title	Risk Rating	Likelihood	Consequenc
1	Criminalization of Pilots	HIGH	MEDIUM	EXTREME
2	Recruitment - Coastal Pilots	HIGH	MEDIUM	VERYHIGH
3	Operational Issues Impacting Vessel Movements	нон	MEDIUM	VERYHIGH
4	Occupational Health and Safety Issues	HIGH	MEDIUM	VERYHIGH
5	Training - Coastal Pilots	MED	LDW	VERYHIGH
6	Economic and Financial Conditions	MED	LOW	VERYHIGH
7	Information Technology	MED	LOW	VERYHIGH
8	Recruitment and Training - Launch Crew	MED	LOW	HIGH
9	Vessel Under Pilot Conduct Involved in an Accident	MED	LOW	HIGH
10	Financial and Administrative Systems and Processes	MED	LOW	HIGH
11	PPA Launch Involved in an Accident	MED	LOW	HIGH
12	Recruitment and Training - River Pilots	MED	VERY LOW	VERY HIGH
13	Legal and Regulatory	10W	LOW	MEDIUM
14	Efficiency or Resource Usage	low	LOW	MEDIUM
15	Security of Physical Assets	(a))	LOW	MEDIUM
16	Disaster, Emergency and Special Events Planning	10W	VERYLOW	HIGH
17	Human Resource Management for the PPA	ION	VERYLOW	HIGH
18	Delay of Vessel due to the PPA	LOW	VERYLOW	MEDIUM
19	Emerging Risks			