STATE OF WASHINGTON
BOARD OF PILOTAGE COMMISSIONERS
2901 Third Avenue, Suite 500 | Seattle, Washington 98121 | (206) 515-3904 | www.pilotage.wa.gov

May 29, 2019

Captain Eric vonBrandenfels, President
Puget Sound Pilots
101 Stewart Street, Suite 900
Seattle, WA 98101
via email: president@pspilots.org

Re: Continuation of Q&A Concerning the Number of Pilots in the PS Pilotage District

Dear Captain vonBrandenfels,

As you know, the Q&A session regarding the "number of pilots" submittals between the Board members and PMSA was cut short due to time constraints at the May 16, 2019 meeting. At that time, I informed the Board to provide their additional questions for both PMSA and PSP to help inform the next step of the process, which on the BPC-approved timeline is response by interested parties to written submissions, due by EOB June 12, 2019.

For the sake of the process, please try to provide answers to the following Board member's questions as soon as is feasible, and preferably by June 3, 2019:

REGARDING REPORT BY BLAIR FASSBURG, WILLIAMS KASTNER GIBBS, PLLC obo PUGET SOUND PILOTS (PSP)

1. Page 5) Though a very important point, it's deemphasized in a parenthetical "no rest rule violations were identified in a review of data for 2018 and 2019". **Please explain** then the graph on p34 of the NASA report that shows approximately 200 instances of <=8 hrs rest which would have been noncompliant starting in 2018 and the additional approximately 640 instances of 8 to 10 hrs rest which would have been noncompliant in 2019. **Are these possibly all harbor shifts?**

2. Page 7) Are the 161 cancelled movements in 2018 included in the 7324 assignments for the year?

3. Page 9) 2 Efficiency, port competitiveness and reducing delays) iii Illustrations of delay causation)
   Watch* = Pilots scheduled to be on-watch, including pilots on major medical

Does that also include the President?

4. There were 21 or 22 pilots scheduled to be on-watch, including pilots on major medical, in the four examples of days with a delay or delays. I understand this should be 5 of the 11 groups on watch. With 51 pilots and 11 groups, an average group size is 4.6. Indeed, we are told each group is 4 to 5 pilots. 5x4.6 = 23.2. **But why then mostly only 21? Are groups arranged together such that you could get 4 of 5 groups only have 4, not 5 pilots? Are there groups with less than 4 pilots?**

5. Examples 1 and 2 show that more than 1 assignment can be done per day by a single pilot. On July 7, ten (10) Call back jobs were done by 8 pilots. On July 20, eleven (11) call back jobs were done by 6 pilots. Presumably, that's 5 pilots who did 2 jobs and 1 pilots who did 1. This ties to the estimate of duty day utilization rate.

   Page 12) i. Duty day utilization rate

   An assignment ≠ repo ≠ meeting ≠ training ≠ 1 day ?

6. NASA p30 "average… 9.4 hrs per work period" from call time (Start) to check-in time (end). Add 10 hours to rest, and then can round up to a day per assignment. **Do we have data to account for repositions, meetings, and trainings as also each a day?**

7. Supposition… If roughly counted, a reposition was 1/3 a day, a meeting was ¼ a day, and training was still a full day; then by the summed "work days" in 2018 would be 7742 (less than the 9206 when added all weighted equal to a day). Then proceeding with the same calculations to divide by average No. of Pilots and Duty Days, the utilization rate is 89%.

   Supposition… Given the approximation that an assignment equates a day, the TAL of 145 means a utilization rate of 145 / 181 duty days = 80% (noting that excludes meetings, trainings, and repos)

   Question… how should travel time, repo time, meeting time, and training time each be counted – in recognition of different levels of effort/ attention/ fatigue inducement and risk compared to bridge time?

8. Is it only ten hours after the check-in time that a pilot can be called for either a repo or an assignment?

9. When a pilot gets repo'd, does it basically equate to their call–in time for the next job?

10. Does repo-time not count at all currently towards "assignment time"?
11. Page 19) Watch systems

    1 cycle = 2 weeks = 14 days

    "After 10 cycles of this watch system, a pilot will have worked 150 days on-duty and 130 off-duty". Understood that it should instead read:

    "After 10 cycles…worked 75 days on-duty and 65 days off-duty"

    Is a pilot on ETO available for a call-back?

12. Can a pilot designate any ETO time or off-duty time as "vacation" (like listed in the activity report) such that they are not available for a call-back? And, if not designated as "vacation", is the pilot available to be called and asked to take an optional call-back?

REGARDING NASA REPORT

13. P25) In the "as worked" watch rotation on the right hand side of Figure 7, in week 16, should the two grey boxes on Th and S also be black boxes, like the one on W, indicating that these two vessel moves were actually call-backs?
14. P36) Earned Time Off and Compensation Time

    Please explain why here a group is estimated at between 2 and 3 pilots, not 4 to 5, like it was by PSP p9

15. Please explain the derivation of 0.055 as the multiplier needed to account for pilots on ETO. After doubling the daily estimate, 1/11 (0.091) seems more like the right multiplier to account for an additional (an eleventh) group?

REGARDING LINEAR REGRESSION MODELS

16. Are these models (Tables 2, 5, 6, 7) based on the baseline data with ~47 active pilots? p38) "there were only the equivalent of 47 pilots available for work throughout the year (i.e. 23.41 *2)." Where 23.41 is the total predicted in Table 4, the baseline case… 23.41 x 2 ≈ 47.
17. P37) If 4 additional pilots, then bank of net comp days would stabilize after about 2 years. Is that an appropriate interpretation? Was 2 years determined as a goal period of time to substantially reduce the bank of accrued days? If so – how? why? Why not 4, 6, or more years? Is the light gray line the scenario, with 4 extra pilots, the one selected for the final Model (Tables 6 and 7)?

REGARDING MODELING REST RESTRICTIONS

18. Tables 4 – 7, above the Total, show three (3) rows understood to be reflective of rest restrictions:

    • > 60 h work/week

    • < 60 h rest 30 days

• MHS > 13 h

In the two Final Models (Tables 6 and 7) these rows are zeroed out, presumably indicating no violations of the rest rules**. Is that correct? Was it the overall objective (or one of the objectives) of the modelling to find the configuration of variables (call backs and comp days) that achieved these zeros? Is that how you knew you were done? Had reached a "final" model?**

19. Please define these rules. How is "work" defined"? How is "rest" defined? Please also give their current standing as implemented by PSP? For instance, I understand MHS = multiple harbor shifts, and these work periods, as per the latest updated WAC, are not to exceed 13 hours in duration. This rule has already been implemented, as of October, 2018, correct?
20. Why were these three (3) rules the ones predicted?
21. Why was the minimum rest rule not modeled? I didn't quite follow the explanation on the bottom of p41.
22. On P5 of PSP report, it says "no rest rule violations were identified in a review of data for 2018 and 2019". On p34 of the NASA report, in Figure 16 on Rest period duration, it looks like there are about ~200 instances of <= 8 and ~~640 instances of between 8 and <= 10 hours. On p41 of the NASA report, it says "There were 1386 instances where pilots received less than 10 hours off following an assignment (including back-to-back callback assignments)." **Please explain how these numbers (no violations, ~200+640 ≈ 840, and 1386) all relate – as they sort of seem to describe the same value, but are all very different quantities.**
23. Are Table 6 and 7 not directly comparable to see the effect of the implementation of the rest rules in October 2018 (after the trailing 12 dataset ended and with three months (thru Dec) left to go on the CY dataset), bc the number of call backs set was also different, from 0.5 in Table 6 to 1.0 in Table 7?
24. Intuitively, one might expect the number of predicted pilots to go UP (like by 2??) based on more restrictions for rest. BUT, Table 7 predicts slightly less pilots (26.33 in Table 7 vs 26.67 in Table 6). Is this likely due the additional 0.5 callbacks allowed per day (from 0.5 to 1.0)?

REGARDING FINAL MODEL

25. p40) In the caption for Table 6, these are referred to as "the expected per day values were set to reflect changes to pilot operations aimed at minimized fatigue". Are those changes just callbacks set to 0.5 and comp days set to 4.00?
26. p42) Besides for varying the number of callbacks and comp days, were there any other variables varied in the modeling? Asked another way - Besides for callbacks

and comp days, were there other "adjustments made based on fatigue risk management recommendations" as in from the excerpt copied below.

"The projected number of pilots needed to fulfill staffing requirements while also minimizing fatiguing work shifts is presented in Table 8. This projection includes the estimates from the linear regression model with adjustments made based on fatigue risk management recommendations. This model also includes the projected number of pilots needed to reduce the bank of compensation time accrued by the pilots and two pilots in rotation to cover future work hour restrictions that could not be modeled."

"projected number of pilots needed to reduce the bank of compensation time accrued by the pilots" – **was that 4?**

27. "This model also includes… future work hour restrictions that could not be modeled." = 2 … Sounds contradictory. **Do you mean that "This model Table 8 includes…"**
28. By "future work hour restrictions" do you mean the minimum rest rule?
29. How you say "recommendations" here – are those totally separate from the recommendations given the following section 6, pp42- 45?
30. Table 8)

    • Is the justification/reference for the 4 projected pilots for "compensation day coverage" the section back by on 37? And/or twice the additional ~2 that were modeled in the Final Model? In which case, aren't the 4 pilots for "compensation day coverage" already included in the Final Model? and then already included in the "Linear regression estimate" of 53 (26.33 x 2 ≈ 53)

    • What was "Additional work hour reduction coverage" that projected the 2 additional pilots? Where does this come from?

GENERAL

31. When a dispatcher is preparing to call in a pilot on respite, is there a system in place for who they call first and it what order after that initial call?
32. How can there be 15,000 change orders compared to 7,325 assignments in 2018?

It is likely that these or additional Board member questions may follow, either in writing or at the June and July meetings. Thank you for your assistance in this process.

Best regards,

Sheri J. Tonn, Chair