

BOARD OF PILOTAGE COMMISSIONERS

Fatigue Management Committee - COLLECTIVE QUESTIONS FOR NASA

Comment/Question:	Submitted By:	Date:
1. How important is assignment time predicatibility for pilots in managing fatigue?	Eric vonBrandenfels, PSP	2/25/2019
2. In SF, the State hired NASA and scope of work was transparent to stakeholders; as a public agency, is the scope of work still confidential between NASA and PSP? Is PSP as an interested party the sole financier of this work? If ship paid pilotage revenues are being used, can the shipping community participate beyond reading a report?	Phil Morrell, BPC	2/26/2019
3. Will you provide methodology, assumptions and limitations of your analysis?	Phil Morrell, BPC	2/26/2019
4. Is this going to be peer reviewed?	Phil Morrell, BPC	2/26/2019
5. Given that the SF RFP was issued in2016 and not finished until 2018, why is this work taking so much less time if the system is more complicated with more data? Is the scope of work different? You mentioned it was a lot more complicated in Puget Sound so is there more data here? Is it different than the types of data used in SF? Please explain and document.	Phil Morrell, BPC	2/26/2019
6. Did the scope of work include a deep dive into assessing various watchstanding and dispatch options? Did you receive input from those using pilotage services regarding pilot ordering, lead times and so on? Did you compare with other organizations that operate in an environment where demand is uneven or not fully predictable? Please explain.	Phil Morrell, BPC	2/26/2019
7. Did you include input from the Coast Guard, the Marine Exchange of Alaska and Puget Sound and the Pacific Pilotage Authority (BC Pilots coming from Canada to U.S. involves lead time and predictability and scheduling).	Phil Morrell, BPC	2/26/2019
8. Did you evaluate the ordering rules for pilots (there is always lead time in ordering – see agents, pilot ordering rules, etc.)? Did you compare actual ordering timeline vs actual piloting timelines to determine the range of lead time available to pilots to make preparations, personal responsibility expectations and to manage rest and so on?	Phil Morrell, BPC	2/26/2019
9. Scheduling was mentioned as a fatigue management option at the meeting singling out the predictability of cruise ships and how dispatch/rest could be better planned in such circumstances. Did you analyze other vessel calls here for predictability, required advance notice of arrivals (able to be shared from the Coast Guard and Marine Exchange) all in conjunction with pilot ordering lead times? If not, would you consider improvements in predictability of assignments to be a potentially significant factor in planning rest and fatigue management?	Phil Morrell, BPC	2/26/2019
10. Couldn't technological advancements enable software applications including tracking, reporting and status updates to improve predictability and thus pilot assignment lead times and thus fatigue management? Did you measure the pilot assignment lead time from the data? If not, would you consider this to be a potentially key factor to improved fatigue management?	Phil Morrell, BPC	2/26/2019
11. If you were asked to come up with an optimal number of pilots, don't you first have to optimize the use of ship schedules, pilot ordering, watchstanding dispatch and all pilot policies on vacation, medical, trading of duty days, training time frames during lulls not peaks, essential meetings vs discretionary, maximum use of non-working pilot (president) and executive director for external affairs and meetings to minimize use of working pilots and so on? If so, do you plan on doing that and including recommendations for all these elements including watchstanding and dispatch changes? If not, please explain. If this was not in the scope of work, should it have been? If not, please explain.	Phil Morrell, BPC	2/26/2019
12. Will you include recommendations to address relevant pilot association by-laws or rules regarding vacation, training conflicts, call back policies (some don't, some do and could be a BPC expectation/standard), duty day trading, equal shares for unequal work etc.? If not, why not?	Phil Morrell, BPC	2/26/2019
13. You mentioned that salaries or equal shares might be better for fatigue management but if there is full compliance with strong fatigue management rules and a minimum level of work necessary to get a share with opportunities for pilots to safely take additional assignments (as is the case now with a pilot completing 223 assignments in 2018) for a larger share, how is that incentive and safe assignment completion a problem? On average pilots are actually piloting on about 140 days of the year on average (cancelations, multiple short assignment days) leaving 220 days (minus fatigue management mandatory rest days) during which some amount of assignments can be safely completed in more than full compliance with fatigue management (and cumulative fatigue) rules.	Phil Morrell, BPC	2/26/2019

14. Recently, the pilots mentioned a term called lifestyle pilots that do not want to take any call backs regardless of how many assignments they do or don't do during their duty days; if they all did that then more pilots would be needed doing less and less work. Did you analyze call backs as a relief valve for the watch system where peak days or lack of pilots due to sickness, vacation, meetings or other reasons were not available on their duty days?	Phil Morrell, BPC	2/26/2019
15. Do you consider being on call to get a scheduled assignment in advance of that actual assignment the same as actually piloting a vessel? Please explain.	Phil Morrell, BPC	2/26/2019
16. You mentioned overtime of police officers; were you referring to working a shift and then going to work some more after the actual work shift? Are you equating that to taking call backs in the middle of one of the 11 two week respite periods (not the day after a duty time assignment or the day before) to overtime? Please explain.	Phil Morrell, BPC	2/26/2019
17. Did you evaluate the varying lengths of actual on the bridge piloting/decision-making time in all the pilot assignment data? If so, did you find the total time or individual times involved to be of concern? Please explain.	Phil Morrell, BPC	2/26/2019
18. Pilots are paid for transportation to/from an assignment so they don't have to drive themselves. Do you consider being driven home after an assignment to be the same as actually piloting a vessel? Please explain.	Phil Morrell, BPC	2/26/2019
19. Do you recommend against a pilot driving themselves to an assignment if that trip is potentially fatiguing?	Phil Morrell, BPC	2/26/2019
20. How did you evaluate the range of assignment complexity and how does that impact fatigue? Example, a short shift from anchor to dock in calm weather versus a cruise ship arrival/departure where the master docks/undocks the ship versus a tethered tanker in limited visibility.	Phil Morrell, BPC	2/26/2019
21. You stated you compared to other modes of transportation, will you provide comparisons to trucking, airplane pilots, trains, shipping companies, towboat sector, etc.? Is the overall workload of driving a truck, plane or train comparable, less, more? Did you compare to on duty entities like the Coast Guard (on duty at station, on duty on call, on recall status or on the job doing the job...)? Given the uneven demand nature for so many jobs within the Coast Guard, in your view are there some potential lessons learned available there?	Phil Morrell, BPC	2/26/2019
22. Is the driving factor to set mandatory rest periods (based in part on maximum hours worked in a timeframe), addresses cumulative fatigue, circadian rhythm (3 and out) and ensures personal responsibility guidelines and training? If yes, then isn't the number of pilots then about other things (vacation, call back policies etc.)? Couldn't you have twice as many pilots but have a dispatch system that bunches assignments such that individual pilots would be exposed to unnecessary fatigue?	Phil Morrell, BPC	2/26/2019
23. Shouldn't concerns about fatigue lead to an adjustment in fatigue standards and guidelines on how a pilot spends off time and what lead times they get for various assignments. If there is full compliance with standards, and the pilots have reported full compliance for decades, then isn't that one of the indicators of having enough pilots?	Phil Morrell, BPC	2/26/2019
24. Did you assess delays to determine frequency, causes and length of delay in addition to all options to minimize delays and the length of delays?	Phil Morrell, BPC	2/26/2019
25. There is a wide range of call backs per pilot now with three and out and 10 hours rest standard in place. So, if in full compliance with fatigue management rules, then is setting a minimum number of call backs per pilot a problem? If so, why?	Phil Morrell, BPC	2/26/2019
26. What would be considered a safe utilization rate over a one year period for the number of assignments or hours per pilot	Phil Morrell, BPC	2/26/2019
27. Scope: The pilots referred to Chair Tonn's letter of August 10th as essentially the Scope of Work but that letter is not a scope of work. Instead it essentially asks for information for the recent 12 months in support of agency sponsored legislation to change mandatory rest periods, not the number of pilots as the change in rest hours would not change the amount of total piloting done per year per pilot (12.1 assignments and 58 bridge hours per month). Did you use that letter as a Scope of Work? Please explain.	Phil Morrell, BPC	2/26/2019
28. Did the Board of Pilotage Commissioners approve, direct or successfully change the scope of work?	Phil Morrell, BPC	2/26/2019
29. If not, how was the scope of work and timing determined? When was the contract finalized? Were there changes to the scope of work and if so what were they and why? Have (and will) pilots as the client see drafts and comment?	Phil Morrell, BPC	2/26/2019
30. What degree does the Board of Pilotage Commissioners oversee assignments dispatch and watchstanding?	Phil Morrell, BPC	2/26/2019
31. Has there been a change from PSP to NASA in scope of work following the briefing of the FMC and follow on submission of questions? If so, what was the change?	Phil Morrell, BPC	3/22/2019
32. Did you evaluate the degree to which the number of pilots on duty is less than the total number of pilots scheduled to be on duty and what impact that has? In follow up, do you make recommendations on how to maximize the number of pilots scheduled for duty to actually be on duty to better match a rested pilot with an assignment?	Phil Morrell, BPC	3/22/2019
33. Did you evaluate call back policies that can address peak days without placing pilots in violation of rest rules? If not, why not?	Phil Morrell, BPC	3/22/2019
34. Did you evaluate the range of lead times for a pilot before an assignment and how that impacts fatigue management?	Phil Morrell, BPC	3/22/2019

35. Did you compare and contrast the varying number of assignments done by individual pilots and what that means to number of pilots and workload management? Please explain.	Phil Morrell, BPC	3/22/2019
36. Did you determine a maximum number of assignments that could be safely completed in a year? In a duty cycle	Phil Morrell, BPC	3/22/2019
37. There have been no reports of rest rule violations yet BPC staff spreadsheets indicate a wide range of assignments completed by fully qualified, healthy pilots in 2018 with one full time full year pilot completing only 90 assignments at the low end and one pilot completing 223 assignments at the upper end. Do you consider this uneven allocation of pilot assignments to be problematic or acceptable from a fatigue management perspective? Please explain.	Phil Morrell, BPC	3/22/2019
38. Was, is or can a pilot that completes 223 assignments be safe from a fatigue management perspective? Please explain.	Phil Morrell, BPC	3/22/2019
39. At a BPC hearing in recent years, a former president of PSP presented a slide indicated that total bridge time plus total transportation time was under 100 hours per month per pilot. With an average of 730.5 hours in a month, isn't there a number of options to ensure sufficient rest, recovery and vacation time? Given this ratio, if there are scenarios that present fatigue management concerns, aren't there options beside adding pilots to address them? Please explain.	Phil Morrell, BPC	3/22/2019
40. Did you evaluate the change in minimum rest hours from 8 to 10? If so, please describe the impacts?	Phil Morrell, BPC	3/22/2019
41. The pilots reported that the new rest hour rule would impact approximately 500 assignments each year out of over 7,300 would mean a pilot would need additional rest of from 1 minute to 2 hours before another assignment. That means the next pilot up would get the assignment, the ship could change the order time, there could be a call back or there could be a delay. This change represents a minimum of 10 minutes per pilot per year or up to 20 hours additional rest per pilot per year. The pilot would do no more or less work over a year with this change yet the pilots claim this would require many more pilots. Do you agree with the pilots or disagree and why?	Phil Morrell, BPC	3/22/2019
42. Did you consider the total number of days and hours a pilot spends per year completing a pilot assignment? How does that compare with total hours spent in other occupations you have studied including airline pilots?	Phil Morrell, BPC	3/22/2019
43. Did you find violation of rest rules in the data review? Did you find violations of the three and out rule? If all pilots were in compliance, did you determine fatigue management circumstances that are unacceptable? If so, what were they?	Phil Morrell, BPC	3/22/2019
44. Can we see a graph of call backs against full available compliment of pilots over an extended timeframe?	Rik Krombeen, BPC	3/22/2019