

## Incident Review Process Discussion

Robert Carr, Commissioner

There are several reasons the Incident Review Process has been included on our agenda for today. I respect the work the Incident Review Committee (IRC) performs in producing a thorough report with reasoned arguments for conclusions. I suggest there are ways for the IRC to improve their reports and make them more meaningful and to serve the purpose the process was intended for.

The following bullets are statements I intend to outline and argue in this document. All of them are actionable and all interrelate to one another.

- The IR process does not need to find pilot negligence in every case.
- The reports are routinely past the statutory time to completion and take too long to complete.
- The IRC is two persons. Neither of whom are subject matter experts (SME).
- The reports discussion on fatigue is incomplete and misleading.
- The report style, inclusion of historical background and use of cross-referenced law are unnecessary and are not serving the purpose of the Incident Review Committee.
- The IRC is not trained to conduct the type of investigation it is attempting to fulfill.

The Board of Pilot Commissioners for the Bays of San Francisco, San Pablo, and Suisun (BOPC) IRC reports are viewed by mariners, politicians, lawyers, scientists and environmental advocates. The reports need to be timely, clear, determinative and accurate.

### **The composition of the IRC prevents a proper review of a report.**

The IRC is established under HNC 1180.3(a) "...which shall be composed of one public member of the board and the executive director (ED)." The legislated aim of the IRC (1180.3(b)) is to investigate an incident, reports of misconduct, or other matters and prepare a written report. 1180.3(b) also instructs the IRC to not discuss any investigation with the board or any member of the board until the matter has been finally disposed of by the IRC.

This admonishment binds the IRC and puts it at a disadvantage. The potential exists for submitting incomplete and report with errors. The last few reports the committee has submitted have errors and questionable conclusions. Over time the committee has moved away from a report stating only facts and circumstances. Instead expanding into an in-depth review of decision making by the pilot. The two-person committee is then making judgement calls based upon their conclusions. The reports have become difficult to read and contain errors which need correcting.

I do not feel the report conclusions are based upon an independent field investigators input. The qualified investigator engaged to investigate on behalf of the board is utilized to immediately (or as soon as practical) collect evidence and statements.

I ask board members to understand that the current makeup of the IRC is not an effective investigative and reporting team. The executive director is not necessarily an experienced mariner, let alone one exposed to the situation of a pilot on duty. The second member, a public board member, is not expected to be familiar with piloting and may not be familiar with work on the water at all. The investigator is not utilized to help develop conclusions. I do not think this administrative team is sufficient to produce accurate reports.

HNC 1180.3 b "...shall not discuss any investigation with the board or any member of the board until the matter has been finally disposed of by the incident review committee..." has been interpreted by the ED to mean the report gets publicly published before any review is performed. I suggest this interpretation is incorrect. The statute purpose surely is to address undue influence and not prevent a proper review.

I suggest the following:

- Seek legislative change and add an additional member to the committee. A licensed pilot from this jurisdiction is my suggestion, preferably an appointed and sworn pilot commissioner. This member would be part of the committee and would be involved in the investigation and the forming of conclusions. This commissioner is held to the same ethical standards that the state holds all commissioners and shall not exhibit favoritism in the execution of their duties.
- And/Or appoint a current licensed pilot from this jurisdiction to be a reviewer of the completed reports. The purpose of this remedy is, in the absence of a SME member of the IRC, to still have a SME review PRIOR to publication of the report. This individual would not be part of the IRC nor be involved with the investigation. The review may question conclusions of the investigation and help reveal errors in the reports but is not in a role to revise the report beyond the advice given.

**The Incident Review Committee does not complete the reports in a timely manner.**

‘The IRC shall submit a report to the Board within 90 days of the date of the incident, misconduct, or other matter investigated.’ HNC1180.3 b(11)(C).

Since becoming a commissioner in 2019, I cannot recall a report being submitted within the statutory timeline of 90 days. This has been a constant source of frustration for me. The process allows for extensions, but that should be the exception – not the norm.

The lengthy process that has crept into the way the Incident Reviews are performed should be questioned. It is not fair and is stressful to a pilot waiting to hear the IRC’s determination. This process drags on beyond three months, maybe even a year or longer. The pilot may have engaged legal counsel and is incurring expenses greater than necessary due to our inaction. A ship owner or a marine facility who may be impacted are also awaiting the conclusions are grow frustrated in the repeated extensions. The public should be assured if a suspension of a license is necessary it is done so in a timely manner.

I have keyed on this aspect of the process a number of times over the last 6 years. To support the IRC I have suggested a change to regulation. I was correctly reminded that legislative involvement would be required to extend the time frame. I wonder instead “why are we months late in producing these reports?”

I contend the IRC is over developing these reports and encounters the following delay causing issues.

1. The committee is engaging in unnecessary report writing and is therefore taking significant time away from the Executive Director’s already overbooked schedule.
2. The committee chooses to work reports in sequential order instead of simultaneously working incidents concurrently.
3. The committee is unnecessarily waiting for USCG FOIA process for reports with little additional relevant information. This also extends to subpoenas for privately held VDR data.

The Executive Director, as committee chair, loves the process and is intrigued by the law affected by each case. It is obvious he takes great pride and job satisfaction in performing this duty. I do believe it is solely his interpretation of how a report should be constructed that influences how the reports are written and to what degree the root causes are found. A careful read of HNC 1180.3 b (1-10) and CA Code of Regulations title 7 (210 c) do not specify the elements we are currently seeing emphasized in the IRC reports. Both statute and regulation do give the caveat that additional information may be included in these reports. It is this sweeping catch that has allowed the committee to spend a great deal of energy and time delving into these ideas that have alarmingly become a second

guessing of the pilot's actions and proposes alternative decisions the pilot could have or should have made. This is adding burden to the committee. We the Board can tell our committee these are not necessary to draw proper conclusions.

The Executive Director has expressed on a number of occasions that he chooses to handle these reports sequentially and will not give reports significant development until the one ahead of it is complete, or nearly complete. I ask that we the Board request the ED and the committee to cease this practice and develop a means of concurrently addressing investigations so that they can be completed within the statutory deadline. I am concerned with any delay for an incident investigation that could be concluded quickly but is awaiting its turn in a queue. I am distressed when I hear a committee requesting a witness statement from a tug operator or other party months after an incident occurred. Not only is this delay improper investigation technique, but it is bothersome the delay was because we weren't working on that incident yet.

I am pleased my request for the committee to review the easily available PPU data that the pilot holds is being honored. This information is better than anything the ship's equipment is capturing or exhibiting. It is significantly better than any information gleaned from the Marine Exchange and/or USCG VTS. The process of accessing this data will also be quicker than subpoenas and FOIA requests.

Utilizing these suggestions, the IRC could significantly reduce the time it takes to produce reports and would again make extensions the exception rather than the norm.

### **The IRC treatment of Fatigue as a factor is incomplete and leads to misunderstanding.**

It is no secret to anyone that I have issue with the committee's treatment of fatigue as a causal factor and the conclusions that have been drawn from the reports. I want to reinforce that the committee *must evaluate* fatigue in their investigation. I am concerned the committee, after extensive data gathering, cannot report that fatigue was not a significant factor in the incident it is covering. The last few reports the IRC has concluded "we cannot rule out fatigue as a contributing factor." This statement is leaving the reader with an inaccurate conclusion the IRC feels fatigue has influenced the pilot's actions in some manner.

There are few pilot groups worldwide that manage fatigue to the level at which the San Francisco Bar Pilot do. The focus on fatigue management and the results of the fatigue study commissioned by this Board are very important for the State of California and the safe operations of vessels on the Bays within our jurisdiction.

The Board's significant efforts to manage fatigue has roots in a 2011 recommendation by the National Transportation Safety Board's (NTSB) in their investigation of the January 2010 incident involving a collision in Port Arthur, Texas between the vessels *Eagle Otome*, *Gull Arrow* and *Dixie Vengeance*. The NTSB recommended that Governors "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."<sup>1</sup>

The Board, acting on legislation added to statute in 2012 (HNC 1196.5), commissioned a study on fatigue in 2016. The *San Francisco Bar Pilot Fatigue Study* was completed in 2018 by San Jose State in conjunction with NASA Ames Research Center. This study made 19 recommendations for the Board to consider. The Board with extensive and significant work by the Fitness Committee incorporated the results of this study and the recommendations into the regulations (effective April 2024) that are now in place and which are used effectively to manage fatigue by the pilots which we license.

When the IRC concludes "we cannot rule out fatigue as a contributing factor" they are doing the Board a disservice and diminishing the decade plus of effort to mitigate fatigue. I have pointed out to this Board the IRC could choose to cover fatigue differently in the reports it produces. At the very least, I have suggested the IRC take a lesson from the USCG in their reports and state "there is no positive evidence that fatigue was contributory to this accident."<sup>2</sup> In this manner the reader understands the report looked into fatigue even though no evidence points to it being a cause of the incident. If desired to propound on the topic, the report should cover how the regulatory mitigations influenced the pilot's routine and hours of rest or work landed either inside or outside the Fatigue Risk Management System.

Here are a few specific examples of exasperating fatigue conclusions of the IRC.

In the Kona Trader Report, the IRC created a scenario of fatigue by mischaracterizing the work period of the pilot involved. Instead of using the regulatory established framework for a work period of "ride to Bob,"<sup>3</sup> the IRC conjectured a time at which he must have woke up and started driving. This runs counter to the work of the Board to establish how fatigue was to be measured. Until corrected in the report addendum (after the erroneous conjecture was released to the public without an opportunity to proofread) the reader was misled on the extent of fatigue. The IRC should have been using the Board established measuring stick for hours worked to begin with.

In the Kona Trader Report the IRC made up an argument for fatigue in the afternoon by citing the preamble to the *San Francisco Bar Pilot Fatigue Study* and justifying fatigue as caused by “a post-lunch dip.” In the 19 recommendations put forth by San Jose State in the report, none of them addressed this “post-lunch dip” as being a fatigue factor for pilots. In fact the SAFTE-FAST model discussed in the fatigue study on pages 62-66 as part of section 6.4 show modelling graphs of various rest cycles that do not place this “dip” into an area of concern. Summarized nicely on page 68 of the study, the team concluded that a focus on modelling scores 70 or below warranted attention as areas of fatigue concern. The referenced “dip” was in the range of a 90 score, typically higher even than the first couple of hours of a workday. The IRC should not be creating arguments to fit their preconceived opinion on how an incident was fatigue related.

In the report on the Platanos the IRC posited with regards to the 0430 sailing “...disruption may have been sufficient to introduce fatigue...” This inclusion in the report is particularly bothersome to me. The fact the job occurred at 0430 conclusively meets the definition that it DID disrupt the pilot’s circadian rhythm. We do not have to characterize this with a “likely disrupted.” The report does not delve into how the pilot may have managed himself in this situation or has done so successfully for 30 years. Maybe the pilot does have a multi-layer approach. We don’t know because the IRC didn’t report on this. What was cited in the report was a work-rest schedule that was within the Board approved fatigue management system, though the report never makes this connection.

The IRC should not be engaging in what-if scenarios. We all acknowledge that fatigue is a part of any job. It is the management of this fatigue that was important to the legislature of California and the NTSB. It is through the extensive, years long, efforts of this Board that we have some of the strongest pilot fatigue mitigation measures in place nationwide. The NTSB lauded the efforts of the Board and in their remarks to Governor Brown closed their recommendation with “Closed – Exceeds Recommended Action.”<sup>4</sup>

IRC reports should be acknowledging this fatigue management system and concluding, when appropriate, no positive evidence suggests fatigue was contributory to this incident. I suggest the Board consider instructing the IRC to review the way they are viewing their responsibility to investigate fatigue, the conclusions they are developing as a result and give guidance to reference the regulation and FRMS when it is covered in a report.

**The Incident Review process does not need to find pilot negligence in every case.**

The IRC asserts with every report “The Board is very narrowly charged with deciding whether the licensed pilot involved was negligent and if that negligence leads to a finding of misconduct.”

I contend this is not necessarily accurate. I argue below that negligence does not need to be determined when investigating navigational incidents. It is possible that IRC investigations can be simplified to finding pilot error, minor pilot error or no error and do not need to create a case for or against negligent operation. This shift in focus may result in the IRC investigations being more succinct in their development and timely.

My reading of HNC 1180, 1180.3, 1180.6 and that contained in 1181 leads me to believe the IRC is drawing a straight line through all of them as if they are to be treated as one set of instructions. This is not an absolute. My contention is the IRC can convene to investigate a navigational incident but not be bound to an accusation of misconduct or determination of negligence.

HNC 1180 references “...pending hearing on charges of misconduct...” allowing for a fair hearing when charges of misconduct are leveled by the Board. This does lead to 1180.3 defining the IRC’s role to investigate these charges of misconduct.

However

HNC 1180.3 defines the IRC and when it is necessary for it to convene “...responsibility to review all reports of misconduct **or** navigational incidents...” I believe most of our IRCs are convened to investigate navigational incidents and NOT as a result of misconduct. Therefore, determining if misconduct is present is not necessarily a function of a navigational incident IRC. This is referenced several times as separate entities, including again in HNC 1180.6 “The Board, after full consideration... related to an **incident**, misconduct, or other matter...” (emphasis is mine).

Bear with me

The IRC’s frequent reference to 1181(g) “negligently, ignorantly, or willfully running a vessel...” in the report to support the assertion that negligence needs to be determined in every incident investigation is erroneous. That statement relates to 1181 which is in reference to suspension or revocation of a license for reasons of misconduct. Since we are not investigating misconduct, negligence does not need to be ascertained.

A navigational incident investigation does not need to determine misconduct and by extension, does not need to determine negligence. The IRC is confusing the meaning of HNC1181 (revoking or suspending a license for misconduct) with the purpose of 1180.3

which clearly gives a range of options for when the IRC convenes – not all of them are for an accusation of misconduct.

Incident reports used to have varying degrees of conclusions. These allowed for “minor pilot error” in addition to “pilot error” and “no pilot error.” The Board should allow for “minor pilot error” as a possible conclusion. This alleviates the IRC recommending “no action” when there is a reason to conclude there was some degree of error and that should be noted in the report as well as the Board’s adoption of the IRC recommendations and the pilot’s record. This also alleviates the Board having to determine negligence – a major cause of the IRC spending an inordinate amount of time in completing a report on a navigational incident.

I suggest the Board ask counsel to review my argument and determine if this is a possible interpretation of the requirements of the IRC in performing an investigation into a navigational incident. If it passes muster, I ask the IRC to adopt this framework when developing investigations and reports. This goes a long way towards resolving a number of concerns with the content of these reports, the manner of which the IRC makes conclusions and the length of time it takes to complete a report.

I suggest the Board consider the use of “minor pilot error” as a conclusion.

**The IRC has not had training in investigations and is not appropriately qualified to conduct the current manner of reporting on navigational incidents.**

I have had reservations over the last 6 years on how investigations are conducted and see this an area of improvement we can make by giving the IRC better tools.

Although my own incident investigation training is dated, one item I recall being reinforced was the necessity of timely interviews and getting witness statements. When I hear we asked a witness to provide a statement months, not days!, after an incident I am incredulous (This has been the case several times). When I read some of the recent reports, I detect a desire of the committee to make an assertion and then try and support it by the evidence. Sometimes this works, sometimes it does not. In all cases, it is not a proper way to conduct an investigation. In addition to my previous discussion on adding a SME to the committee, I suggest the committee get specialized training in how to conduct an investigation, how to eliminate unconscious bias, what questions need to be asked of material witnesses and what evidence needs to be collected and by whom.

I ask the Board to consider a continuing education component for the IRC. Though, probably not the same training required of the teams of personnel at the NTSB.

**The reports style, inclusion of historical background and use of cross-referenced laws are unnecessary.**

This is the final point for me to discuss and although it is mostly a subjective observation it is just as important as the preceding suggested improvements and points to a systemic problem which we can correct.

The investigation reports have grown in size and the committee has taken creative license to determine what is to be included in the report and to what degree they wish to make a point. HNC 1180.3 and CCR 210 outline the content expected in the report. Though each allow for "...shall include but need not be limited to..." much of what I see in our reports is going beyond the expectation. We have allowed our reports to morph into a document it was not intended to be.

To an average reader, a BOPC IRC report gives the feel of a thorough accident investigation similarly performed by the NTSB, USCG or the UK's Marine Accident Investigation Branch (MAIB). What do these entities have that we do not? Purpose of report, outcome and people. I do enjoy accident investigation reports. There is much to understand, lessons to be learned and suggested corrective actions to improve a system. Each of these entities have a purpose to investigate an accident and determine root causes and develop solutions. They are **not** intended to be punitive in nature to the individuals involved. "The MAIB's purpose is to help prevent further avoidable accidents, it does not seek to apportion blame or establish liability."<sup>5</sup> The USCG reports are similarly formatted. In this manner, those reporting bureaus get maximum participation from witnesses and maximum benefit from accurate remediations. The reports do not include names, and when they do – redaction is common for the publicly released document.

I ask the Board to admonish the IRC by instructing the team to more closely adhere to the list of relevant items in HNC 1180.3 and move away from the root-cause analysis that is being employed. These reports are intended to investigate the actions of the pilot and not create a case study.

In past deliberations on IRC reports I have indicated my appreciation of the use of the report to improve the system of pilotage in our jurisdiction. Now with six years on the Board and having to vote on accepting the conclusions of many reports I have gained a better understanding of the purpose of the reports.

My fellow Board members have heard me recently object to the report's discussion on fatigue and Bridge Resource Management (BRM). My concerns are rooted in the approach the IRC is using in forming conclusions and sometimes the conclusions themselves. I already discussed fatigue so I will use BRM as my example.

My objection began very simply. Our reports do not need to spend a full page on the historical background of the BRM concept. This is wholly unnecessary and is an inappropriate discussion in the report. It is akin to a report on a vehicular incident going into the development of seatbelts. Additionally, the report is describing a system that has been in place for three decades now and is not a new concept to bridge teams or pilots. In fact, a component of the Board required curriculum is the Bridge Resource Management class designed explicitly for pilots. The IRC mentions its concurrence with the principles of this BRM-P course in the footnote of the last report, which; of course it should!

Although my objection continues by using the discussion on BRM principles it is just as appropriate in different aspects of reports over the years. Our IRC spends a great deal of time breaking down the sequence of events of the incident and after assigning where the error occurred improperly suggested alternatives that may have corrected the fault. This is colloquially called “Monday morning quarterbacking” and investigations are expressly supposed to avoid this. Remember my earlier point that this is not a USCG marine accident report with beneficial general lessons to be learned but an investigation into whether pilot error occurred and if that was contributory to an incident. This stylistic approach of the committee was painfully obvious in the last report where its very own conclusion was clearly described in one sentence – but hidden in footnote number one at the bottom of page 7 of 19.

My objection extends beyond the BRM discussion but encompasses the stylistic thread of the report’s author(s) to include legal references to support arguments. These reports are not the place for this artistic license. It could be problematic for the Board or the licensee. The author(s) is (are) not a legal authority nor is the report intended to be utilized in such a manner.

I ask the Board to consider the ideas I have outlined in this paper. HNC 1180 and 1181 form the basis of why the IRC is to be convened. It is for several purposes, either to investigate a navigational incident, a report of misconduct or an other matter for which the license issued by the Board may be revoked or suspended. The IRC is not narrowly focused on whether it needs to determine negligence when investigating a navigation incident. Removing this handcuffing interpretation should make it easier to fix the other shortcomings I have identified. By more closely conforming to a simpler approach to the investigation utilizing the list in HNC 1180.3 and recognizing the statutory purpose will help the committee meet its deadlines.

I really do appreciate the hard work of the IRC in ensuring a good product is placed before this Board for deliberation. I share the enjoyment of an excellent incident report but recognize that our focus is not the same as the USCG or MAIB. We are looking for error. We are naming pilots. And if necessary, we are determining misconduct and recommending suspension or revocation of licenses.

Footnotes:

1. NTSB Marine Accident Report, PB2011-916404 “Eagle Otome”, page 70. M-11-19
2. USCG Report on the Investigation into the Allision of the Cosco Busan with the Delta Tower of the SF-Oakland Bay Bridge, Nov 7, 2007. Conclusion 23, page 31.
3. SFBP Fatigue Risk Management System, 2024, 7. Definitions of work period.
4. Letter from the NTSB Chairman to CA Governor Brown, 12 January 2016
5. MAIB Marine Guidance Note 564 (M+F)2012