AMENDED PARTY SUBMISSION
OF
CHALKS OCEAN AIRWAYS

October 18, 2006

CHALKS OCEAN AIRWAYS FLIGHT 101
GRUMMAN/FRAKES AVIATION (GULSTREAM AMERICAN)
G-73T TURBO MALLARD
GOVERNMENT CUT – MIAMI, FLORIDA
DECEMBER 19, 2005
NTSB DCA-06-MA-001

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1. Introduction

The objective of this submission is to provide the National Transportation Safety Board with productive and constructive information, as well as analysis and conclusions regarding the circumstances and causes of the crash of Chalks Ocean Airways (COA) Flight 101.

Although the investigation is in the final phase of completion as of the date of this submission, COA reserves the right to provide timely supplements to this submission, if necessary.

The 11-month investigation has revealed a substantial amount of information regarding both the operation and maintenance of the 1947 Grumman G-73 Mallard that COA utilized in 14 CFR Part 121 commercial service at the time of the accident.

This submission does not provide in-depth analysis of the metallurgical cause(s) of this accident, but rather identifies areas of the investigation that may not have been thoroughly explored and facts that may not have been fully developed. Based on these factors, COA exploring the areas of concern in the investigation will benefit the Safety Board by ensuring that it has not only conducted a thorough and methodical investigation, but also exhausted all probable avenues that could be logically related to the cause or causes of this accident. More importantly, the issues identified and analysis provided in this submission are intended for the Safety Board to utilize in its deliberations to determine an accurate probable cause and develop effective corrective actions that will mitigate future risk for the remaining Mallard fleet.

2. Procedural Issues - Chalk's Exclusion from Group Activities

COA Issue & Discussion:

On December 19, 2005, COA Flight 101 crashed shortly after takeoff from the Government Cut (waterway) near Miami. The circumstances of the accident indicate that the right wing and respective engine separated from the fuselage in-flight, rendering the airplane uncontrollable. The airplane subsequently crashed in the water, causing fatal injuries to the two crewmembers and 18 passengers.

The National Transportation Safety Board (NTSB) sent its investigative team to Miami shortly after the accident and COA was afforded "party" status on December 20, 2005, at the onset of the NTSB activities. Since the accident, COA has provided both the services and the expertise of its personnel to assist the NTSB in determining the cause or causes of this accident. Because of the relatively small size of COA, the investigative process has been an extreme hardship on many of the employees. However, because of the importance of its contribution to the NTSB investigation, COA personnel have spent countless hours assisting the Safety Board in the development of the facts, conditions and circumstances by contributing information, providing exemplar airplanes, and educating the investigative team on the unique characteristics of operating an amphibious seaplane in commercial airline service.

As a party to the NTSB investigation, it was the understanding of the COA designated Coordinator and COA group members that they would participate in all planned NTSB Group activities, and contribute to the development and collection of pertinent accident-related information. Although COA was not able to provide a member for each Group

formed by the Safety Board, they did have personnel participating on the Operations/Human Factors Group, the Maintenance Records Group, and provided personnel for the Structures/System Group. COA personnel assigned to these groups did participate in some NTSB-planned post-accident activities such as wreckage examinations, records reviews and some interviews. However, it became apparent to COA during the course of the investigation that COA group members were not being informed or invited to participate in planned Group activities, and that in some cases COA only became aware of pertinent information revealed in interviews and other activities when the supporting written documents were entered into the public docket.

This was exemplified by the conduct of several important interviews with COA pilots and maintenance personnel without the participation of the respective COA group member. Further, many of the interviews conducted by the Safety Board of former COA pilots were performed without the COA group member being notified nor invited to participate. Considering the unique nature of COA airline operations and use of the Grumman Mallard in commercial airline service, it would have been both prudent and beneficial to the Board to have the COA representative involved in such activities to provide expertise and balance to information revealed, and stimulate the development of additional areas of investigation.

This point is further exemplified by the fact that information obtained from the interviews with current and former pilots (and without COA member presence) was not validated and assumed factual. Upon learning the content of the interviews with several pilots, COA provided the following information:

The Safety Board initially did not conduct any follow-up interviews with COA management personnel to determine if: 1) the company was aware of the opinions of the Mr. Grady Washatka, and 2) validate these opinions and determine how the company addressed Mr. Washatka's letter. The inclusion of Mr. Washatka's letter without proper validation compromises the objectivity of the Safety Board's investigation because it does not provide balance to statements expressed during the interview with Mr. Washatka who said, "[h]e personally did not experience any engine failures or primary flight control failures and did not experience any abnormalities that required reporting." In addition to the interview, Mr. Washatka provided the NTSB with a letter that he authored and dated January 13, 2005, in which he discussed safety-related issues he believed existed, but did not personally experience. This letter was not his resignation letter, but rather a submission that was provided to COA on January 28, 2005, his last day of employment. Unfortunately, the Safety Board did not request the personnel files of Mr. Washatka, which would have included his resignation letter or the personnel files of the other former pilots that had been interviewed. The absence of this information, and the failure to validate the opinions expressed by Mr. Washatka and the other pilots, leaves the NTSB factual record incomplete.

Further, based on the information contained in the Public Docket, it is evident that the majority of Mr. Washatka's opinions were in fact related to routine maintenance issues that COA had addressed at the time they were received, either from maintenance logbook entries, discussion with pilots, or corrective actions accomplished at the time of the respective occurrences. It is also apparent that despite the letter dated January 13, 2005, Mr. Washatka, was not deterred from continuing to operate COA airplanes as captain (the person responsible for ensuring the safety of the passengers on those flights) until his departure from COA on January 28, 2005. Based on his actual resignation letter, it is

further evident that Mr. Washatka's concern for both his safety and that of his passengers was not the basis for his departure from COA.

Additionally, after reading the Human Performance Group Chairman Factual Report, the maintenance department reviewed the airplane logbooks of the airplanes flown by Ms. Marks including N2969, since she became a captain in May 2005. The purpose of the review was in part to determine whether there was any validity to statements made by Mr. Marks describing Ms. Marks' alleged concerns with the maintenance and to identify every maintenance write-up that she generated and determine: the corrective action taken by maintenance. This review also enabled COA personnel to determine, 1) if the same maintenance item reoccurred on any subsequent flights flown by Ms. Marks or any other crew, and 2) the validity of the allegations expressed by Mr. Marks in his interview with the NTSB. Based on the records that were reviewed, all maintenance discrepancies identified by Ms. Marks were addressed in a timely manner and corrected without reoccurrence, and Mr. Marks allegations were determined to be invalid.

Based on the aforementioned, it is apparent that the Safety Board was selective in COA's participation in the investigative activities. COA believes it was not able to participate in a meaningful way such as asking in-depth questions during interviews or group activities for clarity, or assist in the development of protocols or methodologies for identifying additional factual information in the investigation.

COA Proposed Action:

COA is concerned that as a designated party to the Safety Board's investigation, it was not afforded the opportunity to participate in several important activities and that valuable information pertinent to this investigation was not developed or obtained. Further, COA is concerned that some of the information that was garnered by the Safety Board Group activities without COA personnel is incomplete, invalid and does not provide a balanced perspective to the subject matter discussed. Thus, COA believes that the Safety Board should ensure that the Group Chairman Factual Reports are accurate and complete with regard to assertions, allegations or baseless statements made by former pilots and maintenance-related personnel that may not be support by fact. Further, COA believes that it is necessary to conduct additional interviews and re-interview previous witnesses to obtain a thorough understanding of both operational and maintenance policies, procedures and practices of COA.

3. Investigative Issues

a. Additional investigation activities are required of the Operations Group to ensure the factual is factually complete.

COA Issue & Discussion:

A review of the Operations Group Chairman Factual Report and associated supporting documentation currently in the NTSB public docket revealed several documents that require either further clarification or additional information to provide balance to the information obtained from interviews.

First, Mr. Robert Lutz was a Captain at COA at the time of the accident. He stated in an interview that was conducted by the Operations Group that "pilot morale declined in December 2004." Further, he indicated that during that same time period the pilots had a

meeting with COA management regarding concerns related to routine maintenance of the fleet. Mr. Lutz stated that subsequent to the pilot/management meeting he noted an improvement in the routine maintenance and believed that the COA maintenance department enhanced their efforts to address the real or perceived concerns of the pilots.

Mr. Robert Higgs was a COA First Officer at the time of the accident. He stated that the maintenance department was "great" and that the maintenance technicians were very responsive to addressing issues or mechanical write-ups brought to the attention of the department.

Mr. Scott Adams was a First Officer at COA at the time of the accident. He stated in his interview with the Safety Board that the COA airplanes always came out of maintenance in "good shape." He also stated that the company "always followed the rules" and that he had the "utmost trust in the company." Mr. Adams did state that he was concerned that COA did not use X-ray during the performance of maintenance on the airplanes. Unfortunately there is no further detail as to basis for Mr. Adams concern regarding the lack of X-ray; and it is not known what, if any knowledge he had about the use of X-ray and its limitations. Nonetheless, COA did not use X-Ray or Eddy Current testing for inspections because, according to several FAA Principle Inspectors, it was an unreliable method of identifying structural anomalies in "aged aircraft." Further, these methods were not required under the FAA-approved COA CAMP.

COA is concerned about the inconsistency of the pilots' statements. For example, Captain Lutz said that the pilots' morale had declined in 2004 and that there were concerns about fleet maintenance. Conversely, he also stated that he had neither personal concerns with the airplanes nor any problems flying any of the COA airplanes. Additionally, Mr. Lutz flew the last scheduled COA flights after the accident. Although Mr. Lutz characterized the pilot morale as low and cited safety considerations that occurred it is evident from interview information of other pilots that Mr. Lutz did not represent the views of all COA pilots. Based on the available information, it is apparent that the issues addressed to COA management in 2004 were resolved to all parties' satisfaction in early 2005.

COA Proposed Action:

Thus, based on the aforementioned, COA believes the Safety Board should expand the scope of the report to explain the uses and limitations of non-destructive testing in this particular area specifically around the difficulties in using non-destructive testing in hard to access areas and areas that are essentially sandwiches of metallic material. The Safety Board should conduct more interviews of both current and former pilots to provide balance and accuracy to the investigation. Considering the small size of COA's fleet and current and former pilots this activity is not believed to be burdensome. Additionally, all interview comments should be qualified and maintained both in context and time frame.

b. Additional information is necessary in the Survival Factors Factual Report to explain "explosion" heard by numerous witnesses.

COA Issue & Discussion:

A review of the Survival Factors Group Chairman Factual Report and associated supporting documentation currently in the NTSB public docket revealed that the witnesses' description of an "explosion" sound that occurred during the accident event could be misinterpreted. The following is a brief description of some of the witness descriptions:

- John Mondazzi "heard a huge explosion."
- Oscar Diaz heard what sounded like an "engine exploding on the right wing."
- Fernando Fuentes "heard a loud explosion."
- John Franks told investigators that "[s]uddenly there was a fireball and then he heard a bang and saw an explosion."
- Diane Ares said that "[a]s she was watching the airplane, the right wing suddenly exploded then she heard a bang and she saw a fireball."

Although the witnesses heard what they described as an "explosion" it is evident that the context of their sound observations could be misinterpreted to mean that an explosion had occurred (like TWA Flight 800) that caused a failure of the airplane wing.

COA Proposed Action:

COA believes that the NTSB factual record should address this issue to prevent confusion and provide clarity by briefly discussing that the evidence does not indicate that an explosion due to a bomb or other device caused the structural failure; and that the noise that was heard was produced by the catastrophic failure of the metal wing structure.

c. The Structures Group Factual Report contains inaccurate information and additional analysis is necessary to determine the role of the Frakes Aviation turbopropeller conversion in the accident.

COA Issue & Discussion:

COA's has reviewed Section 6.4 of the Structures Group Chairman Factual Report containing information obtained during an NTSB interview with Mr. John Patterson, a contract FAA Designated Engineering Representative (DER) that had performed DER services for COA. The Structures Group conducted this interview and the COA group member was neither invited nor did he participate in the interview process.

Mr. John Patterson states that in his analysis "the skin and stringer carry 70 % of the load and the spar caps about 30 % of the load." The only structural repair that Mr. Patterson was contracted to complete was the right wing on aircraft N142PA. Since the right wing of aircraft N142PA did not fail after a 22" crack was discovered, clearly Mr. Patterson's analysis is incorrect. This repair took several months for Mr. Patterson and his crew to complete. At no time did Mr. Patterson convey to COA his thoughts on the wing load analysis.

Considering the skin crack was located in the area under the right wing center section with likely the highest stress, bending, and load concentration (the lower wing root) and

did not fail, Mr. Patterson's analysis is incorrect. This disproves his unsubstantiated claim that the skin and stringer have 70 % of the strength with the spar caps carrying the remaining 30 %.

It is evident from the information provided by Mr. Patterson that there are numerous inaccuracies and mis-statements that have no factual basis or validity. For example Mr. Patterson stated he was retained by COA to "reverse engineer parts affected by corrosion damage." This statement is inaccurate because COA records indicate that Mr. Patterson was contracted for inventory parts replacement and the performance of a structural repair on aircraft N142PA. Many of the exemplar parts that were provided to Mr. Patterson were not airworthy and were intended as reference parts for his use while performing his duties as a DER. Thus, based on the limited scope of Mr. Patterson's contractual duties with COA and that he only completed structural repairs on N142PA, it is apparent that his characterization of COA and his duties are inaccurate and without merit.

The record shows there were patches on the skin of the wings and on the center section of the aircraft, but it is also clear from the record that the skin did not break under any areas that had a patch nor did any of those patches themselves fail. This means that in all likelihood the skin area failed after the spar cap broke and the secondary failures were only collateral damage. The failure of the skin inboard of the patches indicates that the skin patches were neither the cause nor a contributing factor in the wing separation.

COA is concerned that the NTSB record does not reflect any information or "fact-checking" to determine the validity of this statement. If a check had been performed, it would have been revealed that Mr. Patterson's statements were not based on fact but rather his belief based on limited knowledge about the Grumman G-73T.

COA Proposed Action:

COA believes that the NTSB factual record should address this issue with additional engineering information that identifies the load path values at various parts of the wing structure to provide validity and clarity to the mis-information provided by Mr. Patterson.

d. COA did not own the accident aircraft since the date of manufacture and given the location of the "double drill hole" there is no evidence to suggest that any COA maintenance personnel or any other maintenance provider drilled the subject hole in the right hand side of the main spar cap nor do the records show the center section was ever removed since manufacture.

COA Issue & Discussion:

COA has reviewed "Attachment A" to the Structures Group Chairman's Factual Report depicts "Figure 10" with a description of the "double drill hole" that became the early focus of the NTSB investigation. Although the drill hole was examined, it is evident from the lack of information contained in the factual record that the direction from which the hole was drilled was not determined.

Examination of the photos provided by the Safety Board of the drill hole under high magnifications indicates the hole was drilled from the bottom of the rear wing spar. Thus, based on this observation, it is evident that the COA maintenance personnel could not have drilled the hole because there was no requirement or necessity to access the horizontal flange of the rear spar cap, especially considering it is located in an

inaccessible area on top of the fuselage. Further, because there was no guidance nor protocols provided by either Grumman, Frakes, or Gulfstream America to perform routine inspections or repairs in this area, nor was there guidance by the FAA to conduct periodic inspections in this part of the wing, COA maintenance personnel would not have had a reason to access this area or drill a hole in the wing spar.

Considering that this hole was not drilled completely through the multilayered wing box structure, to even access this area would have required the following steps:

- De-fuel the airplane's fuel tank
- Jack the airplane
- Place it on a cradle
- Remove the fairing located at wing root of the airplane;
- Strip the Paint from Station 202 to 240 on the fuselage.
- Remove the skin from the fuselage from the leading edge to the gear well;
- Strip the paint from the emergency exit to the gear well on the fuselage side;
- De-rivet the skin from the emergency exit to the gear well;
- Remove rivets from the main support bracket;
- Cut the bucktails and punch rivets out;
- Move inside the cabin of the aircraft;
- Remove the interior of the aircraft;
- Remove the shelf from the upper gear well to access the rear portion of the primary attach bracket;
- Remove both engines, the nacelles and their attachments;
- Secure the wings in order to maintain alignment;
- De-rivet and Remove the aircraft's skin;
- Remove the cross-member attachment from the fuselage to the center section; and,
- A major time consuming demating of the center section from the fuselage that alone would take a crew of three at least a month to de-rivet and remove the center section skin and at least two months to reinstall after the completion of any work done.

COA Proposed Action:

COA believes that this portion of the investigation is critical because it establishes a possible basis for the failure of the wing structure. Further, COA is concerned that the NTSB's investigation into this issue may not have been fully researched throughout the Mallard fleet (both turbine and piston) to determine if this was a systemic or isolated characteristic. The fact that Grumman, Frakes and Gulfstream America did not provide information about this particular drill hole nor the inspection or repair guidance for this portion of the wing, which provides the basis for continued concern that structural anomalies may exist within the remainder of the fleet and that the risk of failure may not be completely mitigated.

Therefore, COA believes that the Safety Board must conduct further examination or obtain valid data from qualified inspection personnel as to the integrity of the wing structure on other non-COA turbine and piston-powered Grumman Mallard airplanes.

e. The Maintenance Records Factual Report is both misleading and factually inaccurate. Revisions to the report, as determined at the NTSB Technical review, have not been accomplished to correct the factual record.

COA Issue & Discussion:

COA's review of the Maintenance Records Group Chairman's Factual Report indicates several issues that have been previously brought to the Safety Board's attention during the technical review but have not yet been resolved. During the investigation COA submitted letters to the Maintenance Group citing concerns it had about investigative activities and information that had not been conducted or obtained. While many were discussed during the technical review on September 12, 2006 and the Safety Board (IIC) indicated that there would be revisions, as of the date of this submission none have been forwarded to COA for review.

The information currently available in the Group Chairman's Factual Report is incomplete and there are statements contained in the report that are neither factual nor substantiated.

In Section E (9.0), the Factual Report makes reference to fuel leaks in July 2005 (flight log entries Nos. 6172, 6173, 6175, and 6176) and September 2005 (flight log entries Nos. 6261, 6262, and 6264). The reason there is more than one entry for fuel leaks is that the aircraft fuel tanks in the G-73 T are integral structural fuel tanks (wet wing type). As such, in order to seal the wet wing tank, a sealant compound must be applied in the fuel tank. Once applied, the sealant compound is permitted to dry for at least 24 hours after application. Fuel is added to the tank to leak check the repair, prior to the return to service. If the leaks are still present, the above process is repeated until they are sealed.

Also, because of the design of the integral fuel tanks, fuel leaks may not reoccur or show seepage for several days. However, once they are discovered, the sealant process described above is repeated as evidenced by the consecutive work cards referencing fuel leaks.

The next paragraph in Section 9.0 references discrepancies reported by COA's pilots regarding elevator flutter, elevator vibration and elevator trim. The Mallard was designed to land on water as well as land and as such, the empennage of these aircraft are frequently operated in a water environment, especially COA airplanes which are operated in salt water. The original design of the elevator trim tab system spools and jack screws (trim tab actuator), used sealed bearings and multiple moving parts in their complete assembly.

COA's normal practice has been to continually and consistently address the elevator trim tab system, searching for solutions to eradicate the discrepancies. In addition, on some occasions, after maintenance work was completed, COA released the airplane for operational check flights under Part 91 (with no for-hire passengers aboard) for the purpose of determining whether the repairs rectified the problem.

In August 2002, COA hired DER John Patterson to re-design the elevator jackscrew for the trim tab system (the trim tab actuator). In October and November 2003, COA together with the DER redesigned the elevator jackscrew and trim tab system spools in an attempt to eliminate the persistent discrepancies regarding this system.

In the Maintenance Group Factual Report, page 10, Airplane Technical Logs, the Report references the removal of a fairing during a C-4 inspection to gain access to work on a fuel leak in the right wing of airplane N2969. The Report notes "[n]o correlating non-routine work card was located for the references fuel leak repair." Non-routine work card No. 002458, provided to the NTSB by COA describes the work performed to remove the fairing. The mechanic omitted to mention from which station the fairing was removed on work card No. 002461, but on work card No. 002458 there is an explanation concerning the removal of the fairing to seal the fuel leak at station No. 62. Attached as Exhibit A to Chalk's Response to the Maintenance Records Group Chairman's Factual Report, Exhibit One to this submission is work card No. 002458, also previously provided to the NTSB.

Also in paragraphs (b) and (c) on page Nos. 10 and 11, the Report references fuel leaks discovered during August 2003. Please see our comments under Section E (9.0) above that describes the procedure used for sealing fuel leaks.

The Report references 26 Service Difficult Reports being filled for N2969 per our records and that only 3 were discovered in the Federal Aviation Administration (FAA) SDR database. COA's practice has always been to hand-deliver the completed SDR's to the Principal Maintenance Inspector at the Fort Lauderdale Flight Standards District Office (FSDO). COA's concern is that while our records reflect these SDRs were completed and delivered that there is no way for COA to know how the FAA processes these documents after delivery.

Also in Section 12.0 of the Report, page 11, paragraph No. 3, references corrosion reported on December 12, 1991 on the top aft beam. The Maintenance Group Chairman's Factual Report states that "[o]n April 13 1992, a major repair was performed to correct the above discrepancy." This statement is in error. The Safety Board Group Chairman's Report states that the records for this repair were not available for review during the initial records review June, 2006, because COA did not provide the documentation referencing this repair. Contrary to this statement, COA did provide these records on June 29, 2006 and the NTSB was in possession of these records the entire time.

Conversely the Maintenance Group Chairman's Factual Report does in fact use information from these records later in its report. COA did not provide these records; however, the Report quotes these same records in Section E (13.0)(d):

> "On April 13, 1992, a major repair was performed to the right wing upper rear spar cap. The repair was performed in accordance with DER data from Aerospace Testing and Engineering Report number 40292, drawing number 40492. QC Labs performed an Eddy Current inspection on the area on April 13, 1992"

See Exhibit A, attached and Section E (13.0)(d) of the Report, on Page 12.

As stated in the Maintenance Group Chairman's Factual Report regarding the comments in Section 3, page 53006 of the General Maintenance Manual (GMM) states that "[e]ach corrective action will include a reference data used to correct a discrepancy." In late 2001, COA's FAA Principal Inspector addressed this same issue with COA and since that time it has been the policy of COA's Maintenance Department to reference data used on

all corrective actions. The mechanics were trained to document corrective actions taken utilizing data used to perform their task in accordance with acceptable publications. A review of our maintenance records dating back to approximately November 2001 revealed that each work card cites an appropriate reference to FAA approved data.

(b) This paragraph references a repair made on July 6, 2000. This repair was documented and it is attached as Exhibit C to this Response.

Also, this paragraph refers to a repair using FAA Form 337 and questions why there were no additions made to the CAMP to comply with the airworthiness of the repair. A review of the FAA Form No. 8110-3 completed by R.L. Torres on June 30, 2000, and drawing No. RT-G735720.629 for this repair indicates that the DER after executing the structural repair report did not require any continuing inspections or other activity.

The NTSB states in their report under section 18.0 Procedural Issues that "Chalk's Ocean Airways General Maintenance Manual (GMM), (Volume 5, Rev. 19 dated May 24, 2005) contained policy statements and procedures explaining how COA would meet the requirements of the Code of Federal Regulations. Section 3 of the GMM contained the maintenance policies and procedures used to ensure the airworthiness of COA's airplanes. GMM Section 3, page 53006, Paragraph A, also stated that "Each corrective action will also include a reference to FAA approved data, such as repaired in accordance with GMM, chapter, sec, page or any other FAA approved document applicable to corrective action signoff". In late 2001, COA had a change in their FAA assigned Principal Maintenance Inspector. The new PMI suggested that COA revise its GMM to require that each corrective action will also include a reference to FAA approved data, such as repaired in accordance with Grumman Maintenance Manual, that also cites the chapter, sec, page or any other FAA approved document applicable to corrective action signoff. As a result of this revision, COA amended its GMM to reflect this change in policy and COA has been in compliance since.

Clarification is needed for the use of AC 43.13(1)(b) for approved repairs when no structural repair manual exists. The Safety Board is inconsistent while simultaneously indicting COA for not using approved FAA data to complete repairs then compares repairs completed to accepted data.

The NTSB cited on page 13 of the Maintenance Group Chairman's Factual Report " that during the course of an interview with the Chief Inspector and Director of Maintenance, these individuals were unable to define "major" and "minor repair". COA employees told the Safety Board that the criteria for determining a major or minor repair are identified out in Appendix A to FAR 43. We don't rely upon memorization of this type of criteria is not required and every repair is assessed against the guidance contained in the manual. As a matter of policy, COA discourages the use of memory and requires strict compliance with the manual for making determinations concerning airworthiness.

COA Proposed Action:

COA's concern is that based on the aforementioned issues, inaccuracies and omissions in the Maintenance Records Group Chairman's Factual Report, it is not possible to conduct a meaningful evaluation of the role that these issued may have played in the accident. As of the date of this submission the Safety Board has not yet interviewed any of COA's FAA Principal Inspectors since COA became a Part 121 operation. The Safety Board

needs to review the FAA's process of oversight and approval of COA's maintenance program to include the type certificate holder's responsibility to provide instructions for continued airworthiness.

f. The Safety Board needs to examine the Lack of Grumman and/or Frakes Aviation support as previous and current Type Certificate (TC) and Supplemental Type Certificate (STC) holder for the G-73 and the G-73T to support continued airworthiness of the airplane.

COA Issue & Discussion:

COA's review of the Structures Group Chairman Factual Report contains a brief description of Frakes Aviation, the current Type Certificate (TC) and Supplemental Type Certificate (STC) holders of the Frakes Grumman G-73 and G-73T Turbo Mallard. Frakes Aviation re-engineered the Mallard with Pratt & Whitney PT6 Turbo-propeller engines under the STC.

Based on the information available, it is apparent that Frakes Aviation did not provide comprehensive technical support for the G-73 and the G-73T at the time of the accident. As the current TC and STC holder, it is logical to believe that Frakes Aviation would have assumed the responsibility for the "continued airworthiness" of both the G-73 and G-73T, which would have included monitoring the fleet to identify safety-of-flight issues, develop corrective actions and issue service bulletins, service letters to insure continued airworthiness. It is apparent by the lack of in-service documentation and limited contact with a primary operator of the G-73T (COA) that Grumman and/or Frakes Aviation did not fulfill their responsibility to collect useful data to identify isolated or systemic airworthiness issues. This was exemplified during the rebuilding of a G-73, serial number J-13 (a non-COA piston powered airplane; privately owned). The rebuild of this airplane included a substantial reconstruction of the entire aircraft including the wing center section using Grumman's original specifications, e.g., the paint scheme, which would have provided Grumman and/or Frakes Aviation an opportunity to collect data from an airworthy airplane and to develop a continuous airworthiness inspection program. In addition the data collected from artifacts during the reconstruction performed on J-13's wing center section may have included: visible hat channels; z-channel cracks; evidence of slosh hole cracks; stress and fatigue cracks on skins; and some distortion or corrosion on the center section spar cap assemblies would have likely served, at minimum, as the catalyst for a Service Bulletin to operators.

A further review of the factual record indicates that the COA airplanes had experienced numerous minor fuel leaks inboard of the engine nacelles. During the course of the accident investigation, the Grumman Mallard Owner's Association (GMOA) provided information to the Safety Board that indicated that they have not experienced the persistent minor fuel leak problems on the Mallard fleet equipped with the original piston engine in the same areas as those of the turbine powered airplanes. One of the differences between the GMOA fleet and that of COA is some GMOA have bladder-type fuel cells as opposed to COA's integral wet wing fuel tanks.

History has shown that airframe vibrations can have a significant detrimental effect on the structural integrity of an aircraft particularly if an undetectable double drill hole exists in the main spar cap.

It is also apparent from the review of the available documentation from Grumman and/or Frakes Aviation, that it is not possible to determine the following:

- The possible effects of vibration from the engines and the associated propeller combination coupled with the double drill hole located where the main spar cap broke on the Mallard airframe over a finite period of time;

- A propeller-induced vibration during normal operating ranges that could be the basis for the metal fatigue emanating from the double drill hole located where the main spar cap broke compromising the structural integrity;

The aforementioned is only a partial list of possible significant investigative areas that either have not been pursued or have been addressed in a cursory manner.

COA Proposed Action:

Based on the aforementioned discussion, the Safety Board has not performed a thorough analysis of the wing loading on the G-73T nor a comparison to the Mallard airplane equipped with a piston engine. This type of comparison is necessary to validate whether or not the reduction in weight on the wing (at the engine mount), and the relocation of 100.5 pounds of ballast further away from the engine mount.

4. Probable Cause Statement

COA believes that the probable cause of this accident was an in-flight structural failure of the right wing spar due to metal fatigue emanating from the double drill hole located where the main spar cap broke. COA also believes that the following factors also contributed to the accident:

- The structural metal fatigue originating from the extra drill hole or "double drill hole" in the main spar cap where the spar cap broke that occurred in an area that was not routinely accessible by COA and other maintenance personnel. The inaccessibility of this area negated the ability of COA personnel to conduct complete and thorough preventive maintenance and repair to correct potential safety of flight issue;

- The right rear spar cap failed at the point where an extra hole was drilled into it and after many years of bending at this point caused the metal spar cap to break;

- Considering the right rear spar cap is the heaviest structural spar cap of the four on the Mallard, once it failed, the remaining three spar caps became over stressed, as indicated in the record with the three new stress fractures, and broke clean. The skin and stringers then failed together with all the other collateral damage caused by this one initiating event;

- The complete lack of technical support and a maintenance service manual from Grumman and/or Frakes Aviation (the previous and current type certificate holders and the supplemental type certificate holder) for thorough and methodical inspections and repairs, especially as it relates to structural metal fatigue.

5. Safety Recommendations

COA makes the following safety recommendations:

- Grumman and/or Frakes Aviation the previous and current TC (the Type Certificate) holders and Frakes Aviation, the STC (the Supplemental Type Certificate) holder should cooperate with COA and the FAA to develop a data base to track in-service airworthiness issues and develop a maintenance and inspection protocol that complements future protocols that will mitigate future airworthiness and formulate a method of inspection of all Mallard center sections for mis-drilled holes.

- With it being impossible to inspect the center section for misplaced drill holes where the spar cap broke without the removal and tear down of the entire center section, each Mallard center section should, if not already accomplished, be completely removed, torn down and inspected to positively examine every drill hole for integrity under the supervision of an FAA designated DER.

- A review of 14 CFR Part 121 Air Carrier Maintenance Programs that were approved when numerous Part 135 air carrier operators were re-certified as Part 121 carriers, should be completed to ensure that they have adequate inspection, maintenance and repair guidance to enable an air carrier to insure continued airworthiness so that the air carrier can operate their aircraft at the highest levels of safety.

Schedule of Exhibits

1 Chalk's Ocean Airways' Comments on the Maintenance Records Group Chairman's Factual Report dated May 19, 2006;

2. Chalk's Ocean Airways' Comments on the Structures Group Chairman's Factual Report dated May 10, 2006;

3. Letter to Mr. Kenneth Egge from Tracy Perkins, dated August 2, 2006, regarding the Human Performance Group Chairman's Factual Report;

4. Letter to Mr. William English (IIC) from Tracy Perkins, dated August 25, 2006, re: Frakes' engineering;

5. Letter to Mr. William English (IIC) from Tracy Perkins, dated August 25, 2006, re: Mr. MacFie's email to Mr. Pocholo Cruz in response to Chalk's submission regarding the Maintenance Records Group Chairman's Factual Report;

6. Letter to Mr. William English (IIC) from Tracy Perkins, dated August 25, 2006, re: objecting to COA's exclusion from group interviews;

7. Letter to Mr. William English (IIC) from Tracy Perkins, dated August 25, 2006, re: inclusion of Chalk's submissions in the Public Docket; and,

8. Letter to Mr. Kenneth Egge from Alex Larsen, dated July 24, 2006.

Via Email (w/out attachments) and Federal Express (with attachments)

Mr. Pocholo G. Cruz
Maintenance Records Group Chairman
National Transportation Safety Board
Office of Aviation Safety
Aviation Engineering Division (AS-40)
490 L'Enfant Plaza, S.W.
Washington, DC 20594-2000

Re: Chalk's Ocean Airways' Comments on the Maintenance Records Group Chairman's Factual Report dated May 19, 2006

Dear Mr. Cruz:

Chalk's Ocean Airways has had an opportunity to review the Maintenance Records Group Factual Report, dated May 19, 2006 and we would like the opportunity to respond to several items in that report.

Please note that the attachments are included with this letter sent via Federal Express.

Below please find Chalk's Ocean Airways' Response to the NTSB Maintenance Records Group Factual Report ("the Report"):

Section E(9.0) Airplane Flight Log Sheets

With respect to the flight logs sheets Nos. 4010-4200 from January 2000 to January 2001, Chalk's Ocean Airways is actively looking for these archived documents and as soon as they are found we will immediately deliver them to the NTSB.

In the next paragraph, also in Section E(9.0), the Factual Report makes reference to fuel leaks in July 2005 (flight log entries Nos. 6172, 6173, 6175, and 6176) and September 2005 (flight log entries Nos. 6261, 6262, and 6264). The reason there is more than one entry for fuel leaks is that the aircraft fuel tanks in the G-73 T are integral structural fuel tanks (wet wing type). As such, in order to seal the wet wing tank, a sealant compound must be applied in the fuel tank. Once applied, we allow the sealant compound to dry for at least 24 hours after application and then add fuel to the tank to see if the leaks were repaired. If leaks are still present, then we repeat the above process until they are repaired.

Also, leaks in the integral fuel tanks may not show seepage for several days, but once they are discovered, the sealant process described above is repeated as evidenced by the consecutive work cards referencing fuel leaks.

The next paragraph in Section 9.0 references discrepancies reported by Chalk's Ocean Airways' pilots regarding elevator flutter, elevator vibration and elevator trim. As you know the Mallard was designed to land on water and as such, the empennage of these aircraft are frequently in contact with salt water. The original design of the elevator trim tab system spools and jack screws (trim tab actuator), used sealed bearings and multiple moving parts in their complete assembly.

In August 2002, Chalk's Ocean Airways hired a Designated Engineering Representative (DER) to re-design the elevator jackscrew for the trim tab system (the trim tab actuator). In October and November 2003, Chalk's together with the DER redesigned the elevator jackscrew and trim tab system spools in an attempt to eliminate the persistent discrepancies regarding this system.

At Chalk's Ocean Airways, we continually and consistently are addressing the elevator trim tab system searching for solutions to eradicate the discrepancies written against said system. In addition on some occasions, after maintenance work was completed, Chalk's would release the airplane for operational check flights under Part 191 (with no passengers aboard) for the purpose of determining whether the repairs rectified the problem.

Section E(10.0) Airplane Technical Logs

In this section on page 10, the Report discusses the removal of a fairing during a C-4 inspection to gain access to work on a fuel leak in the right wing of airplane N2969. The Report notes that "[n]o correlating non-routine work card was located for the references fuel leak repair." Non-routine work card No. 002458, provided to the NTSB by Chalk's describes the work performed to remove the fairing. The mechanic omitted to mention from which station the fairing was removed on work card No. 002461, but on work card No. 002458 there is an explanation concerning the removal of the fairing to seal the fuel leak at station No. 62. Attached as Exhibit A is work card No. 002458, also previously provided to the NTSB.

Also in paragraphs (b) and (c) on page Nos. 10 and 11, the Report references fuel leaks discovered during August 2003. Please see our comments under Section E(9.0) above that describes the procedure used for sealing fuel leaks.

Section E(12.0) Service Difficulty Reports (SDR)

The Report references 26 Service Difficult Reports being filled for N2969 per our records and that only 3 were discovered in the Federal Aviation Administration (FAA) SDR database. Chalk's Ocean Airways' practice has always been to hand-deliver the completed SDR's to the Principal Maintenance Inspector at the Fort Lauderdale Flight Standards District Office (FSDO).

Also in Section 12.0 of the Report, page 11, paragraph No. 3, references corrosion reported on December 12, 1991 on the top right aft beam. On April 13 1992, a major repair was performed to correct the above discrepancy. Your report states that the records for this repair were not available for review because Chalk's Ocean Airways did not provide the documentation referencing this repair. Chalk's Ocean Airways has located the documentation in the records previously provided to the NTSB for the repair on April 13, 1992 and is attaching same as Exhibit B to this Response.

Also, the Report states that Chalk's Ocean Airways did not provide these records; however, the Report quotes these same records in Section E(13.0)(d):

> "On April 13, 1992, a major repair was performed to the right wing upper rear spar cap. The repair was performed in accordance with DER data from Aerospace Testing and Engineering Report number 40292, drawing number 40492. QC Labs performed an Eddy Current inspection on the area on April 13, 1992"

See Exhibit A, attached and Section E(13.0)(d) of the Report, on Page 12.

Section E(13.0) Major Repairs and Alterations

(a) This item refers to a major repair that was completed on the center wing box lower right skin stringer. Your report states that the documentation for the repair completed on July 2, 2000, was not provided. Chalk's Ocean Airways has located the paper work for this repair in the records previously provided to the NTSB and is attaching same as Exhibit B to this Response.

(b) This item refers to a repair on the lower right wing skin at wing station 34. At this time, Chalk's Ocean Airways is unable to locate any documentation referencing this repair. In addition, Chalk's Ocean Airways has no knowledge of who performed this repair, where the repair was performed, or when the repair was performed. We believe that this repair was likely completed before Chalk's Ocean Airways acquired the airplane.

(d) This section describes the major repair with its accompanying paperwork that you described as missing in Section E(12.0). This record is also attached as Exhibit B.

Section 18.0 Procedural Issues

Regarding the comments on Section 3, page 53006 of the General Maintenance Manual (GMM) requiring that each corrective action will include a reference data used to correct a discrepancy. In late 2001, our FAA Principal Inspector brought this same issue to Chalk's Ocean Airways attention and since that time it has been the policy of Chalk's Maintenance Department to reference data used on all corrective actions. The mechanics were instructed to document corrective actions taken utilizing data used to perform their task in accordance with acceptable publications. A review of our maintenance records since approximately November 2001 reveal that each work card cites an appropriate reference to FAA approved data.

(a) This paragraph references a repair made on July 6, 2000. This repair was documented and it is attached as Exhibit C to this Response.

Also, this paragraph refers to a repair using FAA Form 337 and questions why there were no additions made to the CAMP to comply with the airworthiness of the repair. A review of the FAA Form No. 8110-3 completed by R.L. Torres on June 30, 2000, and drawing No. RT-G735720.629 for this repair indicates that the DER after executing the structural repair report did not require any continuing inspections or other activity.

(b) This paragraph refers to discrepancies signed off without data used during the work performed. We earlier stated that in late 2001, it became Chalk's Ocean Airways procedure to cite to FAA approved document data applicable to each corrective signoff.

If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours,

Tracy C. Perkins
Director of Maintenance
Chalk's Ocean Airways

Chalks Exhibit 1b –

See Maintenance Records Attachment 5, and Maintenance Records Addenda/Errata.

From: "Tracy Perkins" [redacted]
To: "Murphy Brian" [redacted]
Sent: Wednesday, May 10, 2006 1: 13 PM
Subject: Chalks Flight 101

To:	Bill English / Brain Murphy
From:	Tracy Perkins
Dated:	5/10/2006
RE:	Comments of Chalk's

Thank you for the opportunity to review the Materials Lab Factual Report and Structures Group Factual Report. Both reports make reference to numerous "repairs" made to the aircraft wings, but do not identify when these repairs were performed or by whom. Further, the references do not contain information as to why the repairs were made; the methods and guidance documents utilized for the repairs, and inspections protocols (if any).

In addition, because of the lack of supporting documentation, there is no discussion about whether the repairs were performed prior to Chalk's taking possession of the airplane, or that the repairs were performed correctly to address the identified problem. The information, as currently presented in the NTSB Group Chairman's Factual Reports implies the referenced repairs were made by Chalk's and that our airline had knowledge of these repairs prior to the investigative findings. In an interest to ensure the thoroughness of these findings, I respectfully request that prior to terminating its investigative work, the NTSB further research the historical maintenance records to determine who performed the repairs, when they occurred, and the methodology use to perform the repairs.

I have also reviewed the factual findings of various structural conditions revealed during the examination of the wreckage. However, I do not see any analysis of how, when, or why these failures occurred. The report appears to imply that these conditions "should" have been discovered by Chalk's during routine maintenance activities. In order to determine the airworthiness of the repairs, or the time period of the repairs, I again respectfully request, and believe that it is necessary to perform additional structural analyses to address these outstanding issues.

In addition to the aforementioned comments, the Group Chairman Factual Reports do not address how these anomalies could have been discovered by Chalk's during the course of routine or preventative maintenance conducted in accordance with our FAA. Approved maintenance program. Also, there is no discussion about technology, methodology or processes that would have been required to detect and identify these conditions in this type of wet wing design. Thus, we believe the Safety Board Factual Reports should include a discussion about the fact that prior to the accident, there was no manufacturer's inspection procedure or guidance information, no manufacturer's repair methodology, and no manufacturer-recommended inspection schedule to identify and correct anomalies that could develop in the wing structure where the fatigue cracks were found during the investigation.

CHALK'S

OCEAN

AIRWAYS

August 2, 2006

Via Federal Express

Mr. Kenneth Egge
Human Performance/Operations Group Chairman
National Transportation Safety Board
490 L'Enfant Plaza, East, S.W.
Washington, DC 20594

Re: Human Performance Group Chairman's Factual Report
In Re: Chalk's Accident of December 19, 2005
Your File No.: DCA06MA010

Dear Mr. Egge,

I have reviewed the public docket released by the NTSB several weeks ago. During my review of the Human Performance Factual report I read a letter from Mr. Mark Marks, the captain's (Michelle Marks) husband. Within that letter, Mr. Marks stated concerns that Michelle had expressed to him about "problems" within the maintenance department here at Chalk's. The specific "problems" stated by Mr. Marks were similar, and in some cases identical, to several issues raised by former Chalk's captain Grady Washatka in his letter dated January 13, 2005. The issues raised by Mr. Washatka were the basis for a review by me and other Chalk's personnel to identify the aircraft logbook records and maintenance write-ups associated with his assertions validate the discrepancy and the corrective actions.

Based on the statements by Mr. Marks, I reviewed the aircraft logbook records and maintenance write-ups for every flight flown by Michelle in aircraft N2969 since she became a captain in May 2005. Specifically, I looked at every write-up that she generated and the corrective action taken by Chalk's maintenance personnel. Further, I tracked the discrepancy on future flights to determine if they reoccurred on any of her flights or flights flown by any other crew member. My review indicated that there were no documented repeat discrepancies that were associated with initial write-up, thus Mr. Marks' comments about the maintenance "problems" at Chalk's are not accurate.

I believe that to ensure the Human Performance Factual report is complete and accurate, I respectfully request the Human Performance Group conduct a review and audit of all

maintenance records attributed to the flights flown by Captain Michelle Marks to provide balance and validation to the assertions made by her husband in his interview taken on December 21, 2005. I was able to complete the review of these records very quickly, thus I don't believe that this task will be a burden on the Group.

If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours,

Tracy Perkins
Director of Maintenance
Chalk's Ocean Airways

Chalk's

International Airlines

Since 1919

August 25, 2006

Via Federal Express

Mr. William R. English
Investigator in Charge
National Transportation Safety Board
Major Investigations (AS-10)
490 L'Enfant Plaza East, S.W.
Washington, DC 20594-2000

Dear Mr. English:

In reviewing the available material in the public docket in preparation for the technical review, I have noticed there is no discussion regarding the analysis of the original Frakes engineering to support the installation of the turbine engines on this aircraft.

During the on scene investigation, it had been mentioned repeatedly by NTSB personnel that an analysis would be conducted during the course of the investigation. I find no reference of that task referenced anywhere in the public docket, nor was I informed as the party coordinator that this activity had been conducted or would take place.

I believe that it is critical to the investigation that this type of analysis be conducted because the turbo prop conversion would have resulted in substantial change to wing loading. Additionally, the information contained in the Material Laboratory Report No. 06-043 raises some interesting questions, i.e., the fact that there are similar findings on the Z-stringers of N632SS raises additional questions as to the origins of these cracks and their relationship to the turboprop conversion.

It is respectfully requested that the NTSB if they have not already done so, examine this very issue.

As always, if you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

[redacted]

Tracy Perkins
Chalk's Party Representative
Chalk's Ocean Airlines

610 S.W. 34th Street • Building 3 • Suite 202 • Ft. Lauderdale, Florida 33315
Reservations: 1(800) 4-Chalks • Admin. Offices (954) 359-0329 • Fax: (954) 359-6356

Chalk's

International Airlines

Since 1919

August 25, 2006

Via Federal Express

Mr. William R. English
Investigator in Charge
National Transportation Safety Board
Major Investigations (AS-10)
490 L'Enfant Plaza East, S.W.
Washington, DC 20594-2000

Dear Mr. English:

I have been reviewing information in preparation for the technical review, I was reviewing Mr. MacFie's email to Pocholo Cruz in response to Chalk's submission regarding the Maintenance Records Group Chairman's Factual Report and I would like to comment on his email.

Under Chalk's authority as a Part 121 air carrier, when we use designated engineering representatives we are not required to complete and submit FAA form 337. In addition, FAA form 8110-related paperwork is proprietary in nature and maintained in-house. Copies of these proprietary documents of repairs were provided to the NTSB.

As always, please feel free to contact me with any questions you may have.

Sincerely,

[redacted]

Tracy Perkins
Chalk's Party Representative
Chalk's Ocean Airlines

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Chalk's International Airlines

Since 1919

August 25, 2006

Via Federal Express

Mr. William R. English
Investigator in Charge
National Transportation Safety Board
Major Investigations (AS-10)
490 L'Enfant Plaza East, S.W.
Washington, DC 20594-2000

Dear Mr. English:

In review of the public docket in preparation for the technical review, I noticed in Structures Group Chairman's Factual Report that several interviews were conducted by the NTSB with only the FAA participating. These interviews were conducted without Chalk's participation or knowledge. It is apparent that these interviews were a group activity without knowledge to me as the Party Coordinator and Party Member of the Structures or Airworthiness Group. Consequently the summary of the interviews revealed areas of questioning that need to be further developed in order to have a complete and balanced factual record.

We ask that we simply reconduct the interviews of Sergio Alen, John Patterson and Ramon Torres with the presence of the Chalk's party representative.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

[redacted]

Tracy Perkins
Chalk's Party Representative
Chalk's Ocean Airlines

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Chalk's

International Airlines

Since 1919

August 25, 2006

Via Federal Express

Mr. William R. English
Investigator in Charge
National Transportation Safety Board
Major Investigations (AS-10)
490 L'Enfant Plaza East, S.W.
Washington, DC 20594-2000

Dear Mr. English:

I have noticed that there are no statements from Chalk's Principal Maintenance Inspectors in the public docket relating to this accident. Since our 121 certificate was issued in 1997, we have had only three PMI's, I believe that it would be a great benefit to the NTSB investigation to interview these individuals regarding our FAA approved maintenance program.

As always, please feel free to contact me with any questions you may have.

Sincerely,

[redacted]

Tracy Perkins
Chalk's Party Representative
Chalk's Ocean Airlines

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CHALK'S OCEAN AIRWAYS

July 24, 2006

Mr. Kenneth Egge
Human Performance/Operations Group Chairman
National Transportation Safety Board
490 L'Enfant Plaza East, SW
Washington, D.C. 20594

Dear Mr. Egge:

I have reviewed both the Human Performance Group Chairman's Report and the recently-released information contained in the NTSB Public Docket. After reviewing the information, I have concerns about the method used to collect some specific information and its validity.

As Chalk's Chief Pilot, I was designated as the party representative to work with the Operations and Human Performance groups. In February 2006, the Safety Board Human Performance Group conducted interviews of pilots that had separated from Chalks, including Mr. Grady J. Washatka. As a member of the Operations and Human Performance groups, I am disappointed that at no point was I invited to participate in the interviews with these pilots, and am further concerned that I may not have been invited to participate in other group activities that have occurred since February.

Further, based on my review of the information in both the factual reports and the public docket, I don't understand why the NTSB did not conduct any follow-up interviews with Chalks management personnel to determine if: 1) the company was aware of the opinions expressed by Mr. Washatka, and 2) validate these opinions and determine how the company addressed Mr. Washatka's letter. I believe that the inclusion of Mr. Washatka's letter without proper validation compromises the objectivity of the Safety Board's investigation because it does not provide balance to statements that are "emotionally based" rather than factual. This is exemplified by statements expressed during the interview with Mr. Washatka who said, "[h]e personally did not experience any engine failures or primary flight control failures and did not experience any abnormalities that required reporting." In addition to the interview, Mr. Washatka provided the NTSB with a letter that he authored and dated January 13, 2005, in which he

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discussed the safety-related issues he believed existed, but did not personally experience. This letter was not his resignation letter, but rather, a submission that was provided to Chalk's on January 28, 2005, his last day of employment. Unfortunately, the NTSB did not request the personnel files of Mr. Washatka, which would have included his resignation letter (enclosed) or the personnel files of the other former pilots that had been interviewed. The absence of this information, and the failure to validate the opinions expressed by Mr. Washatka and the other pilots, leaves the NTSB factual record incomplete.

Further, based on the information contained in the Public Docket, it is evident the majority of Mr. Washatka's opinions were in fact related to routine maintenance issues that Chalk's had addressed at the time they were received, either from maintenance logbook entries, discussion with pilots, or corrective actions accomplished at the time of the respective occurrences. It is also apparent that despite the letter dated January 13, Mr. Washatka, was not deterred from continuing to operate Chalk's Ocean Airways airplanes as captain (the person responsible for ensuring the safety of the passengers on those flight) until his departure from the airline on January 28, 2005. Based on his resignation letter, it is further evident that Mr. Washatka's concern for both his safety and that of his passengers was not the basis for his departure from Chalk's.

In consideration of this information, and the fact that Mr. Washatka's concerns were either personal opinions about business operations (not safety related), or opinions expressed by others and not personal experience, I believe additional information is necessary that will enhance the factual record and provide both validity and balance. I will provide a list of former pilots (captains) who flew for Chalks Ocean Airways for you to interview regarding flight operations and maintenance.

If you have any questions or concerns, please do not hesitate to contact me.

Very truly yours,

[redacted]

Capt. Alexander Larsen
Chief Pilot
Chalk's Ocean Airways

(Encl.)

[redacted]

[redacted]
Hollywood, FL 33019
[redacted]

January 28, 2005

Mr. Nair
Chalk's Ocean Airways
704 SW 34th St.
Ft. Lauderdale FL, 33315

To Whom It May Concern:

I would like to begin this letter by saying thank you for the wonderful opportunity to come and work for Chalk's. You have given me the rare chance not only become a seaplane pilot, but to work for a legendary airline. The skills that I have acquired here will no doubt serve me well throughout the rest of my career. I will always cherish the time that I have spent at Chalk's.

Unfortunately I feel that in order to further my career in aviation it is time to move on, and the purpose of this letter is to serve as my two weeks notice. My last day of work will therefore be February 11, 2005.

Sincerely,

[redacted]

Grady J. Washatka

[redacted]