UNITED STATES MARINE CORPS
2D MARINE AIRCRAFT WING
II MARINE EXPEDITIONARY FORCE
FLEET MARINE FORCES
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JUN 29 2022

FIRST ENDORSEMENT on (b)(6), (b)(7)c, (b)(3) 5800/IO of 14 Jun 22

From: Commanding General, 2d Marine Aircraft Wing, FMF
To: Files

Subj: COMMAND INVESTIGATION INTO THE MV-22B AVIATION MISHAP THAT OCCURRED ON 18 MARCH 2022 DURING EXERCISE COLD RESPONSE

1. The findings of fact, opinions and recommendations of the investigating officer are approved. The investigation is closed.

2. On 18 March 2022, an MV-22B from Marine Medium Tiltrotor Squadron 261 (VMM-261), call sign "Ghost 31," crashed into the steep side of a valley near Bodø, Norway during Exercise COLD RESPONSE. The mishap resulted in the tragic and untimely deaths of Corporal Jacob M. Moore, Gunnery Sergeant James W. Speedy, Captain Ross A. Reynolds, and Captain Matthew J. Tomkiewicz.

3. Any accident that results in the death of a Marine demands an investigation that is both exhaustive and transparent. In order to achieve this in the aftermath of the Ghost 31 mishap, I appointed two highly-experienced investigating officers. (b)(3), (b)(6), (b)(7)c has already commanded a squadron and is currently slated to command a Marine Aircraft Group. He was assisted by (b)(3), (b)(6), (b)(7)c an MV-22B pilot with extensive tactical knowledge of the aircraft who has served as both a squadron operations and maintenance officer. Both investigating officers are Weapons and Tactics Instructors. They traveled to Norway to inspect the crash site, reviewed hundreds of pages of documents and conducted extensive interviews. During their investigation, they looked closely at aircrew readiness, aircraft maintenance, squadron planning and procedures, and external and environmental factors such as weather. Lastly, they carefully reconstructed the final moments of the flight in order to reach conclusions about what exactly happened to Ghost 31, and why. They produced a very thorough and insightful investigation.

4. The investigation focused first on causal factors for the mishap. A causal factor is an error that can be directly tied to the accident and without which the accident would not have occurred. The investigation shows, from the recovered video and flight data, that the causal factor for the Ghost 31 mishap was pilot error. Though we cannot determine which pilot was at the controls, it is clear that the aircraft made a series of maneuvers through the Gråtådalen Valley that caused a loss of altitude, airspeed, and turning-room from which Ghost 31 was unable to recover.

5. The investigation also explored five other factors to determine if they contributed to the mishap: weather and environmental factors, procedures for low-altitude training, errors in maintenance paperwork, inexperience in mountainous environments, and the use of recording devices. While there were errors of commission and failures to adhere to procedure, none of the five factors investigated were causal or could reasonably be considered contributory.

a. *Weather and environmental factors.* Adverse weather - including high winds, blowing snow and freezing rain - made it impossible for search-and-rescue personnel to reach the crash site in the hours after they located the wreckage of Ghost 31. The investigative team initially surmised that similar weather may have played a role in the crash itself. The evidence later proved this was not the case. Video footage recovered from the site shows that the weather in the Gråtådalen Valley immediately prior to the mishap featured visibility greater than five miles and scattered clouds well above the altitude at which Ghost 31 was flying. There are indications of an approximately 24-knot tailwind just before the accident. While it is possible that this tailwind adversely affected the turning performance of the aircraft, similar winds were experienced the previous day by an MV-22B flight that flew through the same valley without incident. It is the opinion of the investigating officers that weather was not a significant factor in this mishap, and I concur.

b. *Procedures for scheduling and authorizing low-altitude training (LAT).* Both the Training and Readiness Manual and a 2d Marine Aircraft Wing order establish procedures for scheduling and authorizing LAT. VMM-261 did not follow all of these procedures while deployed to Norway for COLD RESPONSE. In particular, the squadron scheduled LAT in areas not officially designated for that purpose, and did not set minimum altitudes for some LAT flights. In light of these facts, the investigating officers make several recommendations that could improve how LAT for the MV-22B is defined, planned and scheduled across the Marine Corps. Although these recommendations could play a role in preventing future mishaps, there is no evidence to suggest that the squadron's failure to follow LAT procedures had any impact on the Ghost 31 mishap. Even when required administrative procedures were not scrupulously followed, VMM-261 safely carried out LAT in Norway when those evolutions were scheduled and authorized by the commander. It would be speculation to suggest that a failure to properly schedule LAT on other days influenced or impacted the decision by the pilots of Ghost 31 to conduct LAT on a flight when it was neither scheduled nor authorized.

c. *Administrative errors in maintenance paperwork.* The investigating officers carefully examined the maintenance performed on the mishap aircraft in the days, weeks and months prior to the accident. They found the aircraft was functionally capable of performing the mission, and that there is no evidence of any catastrophic component failure that might have contributed to the crash. There were numerous administrative discrepancies on the maintenance paperwork, such as missing signatures and other

documentation errors. These errors were likely the result of limited computer and printer assets in the deployed environment. Nevertheless, in ***every*** instance where a signature or comment was missing from a document, a later entry establishes that the maintenance in question was properly conducted and annotated. I have no doubt the Ghost 31 aircraft was safe for flight, and that maintenance malpractice did not play a role in the mishap.

d. *Inexperience in mountainous terrain.* Aviators who are stationed in eastern North Carolina have fewer opportunities to fly in mountainous terrain than their counterparts on the West Coast. The investigation recommends that squadrons deploying to Norway or other mountainous areas pursue pre-deployment opportunities to cover this potential training gap. In this case, VMM-261's pilots completed an additional tailored training syllabus prior to Exercise COLD RESPONSE that considerably exceeded the requirements of the Training and Readiness Manual. While it is possible that inexperience in the mountains played a role in the Ghost 31 mishap, it is clear the squadron took every reasonable step to mitigate that possibility.

e. *Use of unauthorized personal recording devices and absence of official recording devices.* A personal GoPro device was found at the crash site, and the recovered footage shows it was in use as the aircraft conducted low-altitude maneuvers in the Gråtådalen Valley. Such devices are prohibited on grounds that they can incentivize risk-taking and serve as a distraction; that ***may*** have been the case with Ghost 31. But the investigating officers raise an important corollary: if an unauthorized device could contribute to risky decisions, it is very likely that the mandatory employment of a video and voice recording system provided by the Marine Corps would have the opposite effect. Unfortunately, the MV-22B does not yet possess such a capability. The investigation recommends that this deficiency be remedied as quickly as possible, by whatever means are available, and I wholeheartedly concur.

6. The Marine Corps aviation community will utilize the findings of this investigation to make us better in both practice and execution. On behalf of the entire 2d Marine Aircraft Wing, I extend my deepest condolences to the families of our fallen Marines. I hope this investigation will provide some reassurance of the efforts put forth to discover what happened to their loved ones, why it happened, and what steps are being taken to reduce the possibility of such mishaps in the future.

M. S. Cederholm

M. S. CEDERHOLM

Copy to:
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CO, MAG-26
CO, VMM-261
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II MARINE EXPEDITIONARY FORCE
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IO

JUN 14 2022

From: (b)(3), (b)(6), (b)(7)c USMC
To: Commanding General, 2d Marine Aircraft Wing, II MEF, FMF

Subj: COMMAND INVESTIGATION INTO THE MV-22B AVIATION MISHAP THAT OCCURRED ON 18 MARCH 2022 DURING EXERCISE COLD RESPONSE

Ref: (a) JAGINST 5800.7G
(b) NAVMC 3500.14E Training and Readiness Program Manual
(c) NAVMC 3500.11F Ch 1-4 MV-22B Training and Readiness Manual
(d) CNAF M-3710.7
(e) WgO 3710.38D 2d MAW Flight Operations SOP
(f) GruO 3710.32B MAG-26 Flight Operations SOP
(g) SqdnO 3710.1B VMM-261 Flight Operations SOP
(h) NTRP 3-22.4-MV22B Naval Aviation Technical Information Product
(i) 2d MAW Portable Electronic Device Policy
(j) MAG-26 Portable Electronic Device Policy
(k) COMNAVAIRFORINST 4790.2D
(l) A1-V22AB-NFM-000 MV-22B NATOPS 15 Jan 2020
(m) NTTP 3-22.5 MV-22B Tactical Pocket Guide
(n) NTTP 3-22.3 MV-22B Air Naval Tactics, Techniques, and Procedures

Encl: (1) Appointment Ltr from CG, 2d MAW, dtd 23 Mar 22
(2) Extension Ltrs
(3) VMM-261 18 Mar 22 COLD RESPONSE Flight Schedule
(4) Capt Tomkiewicz NATOPs Jacket
(5) Capt Tomkiewicz Logbook
(6) Capt Tomkiewicz Aircrew Performance Record Summary
(7) Capt Reynolds NATOPs Jacket
(8) Capt Reynolds Logbook
(9) Capt Reynolds Aircrew Performance Record Summary
(10) Cpl Moore NATOPs Jacket
(11) Cpl Moore Logbook
(12) Cpl Moore Aircrew Performance Record Summary
(13) GySgt Speedy NATOPs Jacket
(14) GySgt Speedy Logbook
(15) GySgt Speedy Aircrew Performance Record Summary
(16) Interview Summary: (b)(3), (b)(6), (b)(7)c
(17) VMM-261 Personnel Interviews
(18) VMM-261 COLD RESPONSE Training Syllabus
(19) VMM-261 Standardization Board Minutes
(20) MV-22B Academic Lecture 2610, Low Altitude Tactics I (excerpts)
(21) VMM-261 Schedule Validation Report: 18 Mar 22 Schedule
(22) VMM-261 Risk Assessment Worksheet: GT31 / 18 Mar 22
(23) VMM-261 Operations Duty Officer Brief: GT31 / 18 Mar 22
(24) VMM-261 Operations Duty Officer Logbook for 18 Mar 22
(25) VMM-261 GT31 Mission Brief 18 March 22
(26) VMM-261 COLD RESPONSE Flight Schedules (1/5/17 March 22)
(27) VMM-261 GT31 Mission Brief 17 Mar 22
(28) Norwegian Air Force Route Authorization Email

(29) GT31 Flight Plan Submissions, 18 Mar 22
(30) LAT Flight Recreations
(31) NAOC COLD RESPONSE Flight Safety Brief
(32) NAOC COLD RESPONSE Flight Safety Brief Training Record
(33) 2d MAW COLD RESPONSE Weather Cancellation Tracker
(34) BUNO 168330 KVADR Data Recorder Record: 18 Mar 22
(35) BUNO 168330 KVADR Data Recorder Record: 17 Mar 22
(36) Norwegian Air Traffic Control Track Data, Ghost 31, 18 Mar 22
(37) GT31 Recovered Video Footage, GoPro Camera (still images)
(38) Fleet Support Team Flight Recreation for Mishap Flight
(39) Interview Summary: Search and Rescue Aircrew, 330 Squadron
(40) 330 Squadron Mission Report (translated), 18 Mar 22
(41) BUNO 168330 Scheduled Inspections Report
(42) BUNO 168330 NALCOMIS OMA Misc History Report
(43) BUNO 168330 Flight Record
(44) BUNO 168330 Electronic Acceptance Sheet - 18 March 2022
(45) BUNO 168330 Safe For Flight Screening Checklist
(46) VMM-261 ASM Qual/Cert/License/Medical Cross-Tab Report
(47) Discrepancy Work Orders, MCN: 28QT7KX, 28T088A, 28T0883, 28T088B 28T0888
(48) BUNO 168330 Turnaround / Daily Inspection Maintenance Record 18 March 2022
(49) (b)(3), (b)(6), (b)(7)c QCL/QPT ASM Report: Plane Captain Designation
(50) BUNO 168330 Active Work Order Query, MCN: 28T887
(51) Completed Work Orders, MCN: 28T08E9, 28T08E8, 28T08EH, 28T08CM, 28T08C1, 28T08D3, 28T088C
(52) BUNO 168330 Historical Work Order Query
(53) FST Engineering Assessment
(54) MWSS-272 Bodø Fuel Test Results
(55) Mishap Site Photos
(56) Glossary of Acronyms and Terms

Executive Summary

1. On 18 March 2022, an MV-22B Osprey with Marine Medium Tiltrotor Squadron 261 (VMM-261), call-sign Ghost 31 (GT31), departed from Bodø, Norway on a training flight in support of Exercise COLD RESPONSE 22. There were four Marines aboard: Captain Matthew J. Tomkiewicz, the aircraft commander; Captain Ross A. Reynolds, the co-pilot; Corporal Jacob M. Moore, the crew chief; and Gunnery Sergeant James W. Speedy, the aerial observer.

2. GT31 returned to base for fuel without incident after conducting local area familiarization flights and confined area landings to the north of Bodø. After re-fueling, GT31 departed on an approved flight plan in clear conditions to the south of Bodø. GT31 maintained voice communications with Norwegian air traffic control until 1510 local time, and remained in radar contact until 1538 when the track deviated to the north in the vicinity of the airport at Brønnøysund. GT31 contacted two additional Norwegian airports to advise of transiting their airspace northbound. The last noted air traffic control position for GT31 was N66 41.23 / E014 10.53 at an altitude of 2900 feet above mean sea level at 1619L hours. Through analysis of flight planning products and aircraft data, it is estimated that GT31 entered the Gråtådalen Valley at 1622L. It is estimated that the aircraft impacted the eastern side of the valley at approximately 1623L. The crash resulted in the total loss of the aircraft and the death of all four Marines aboard.

3. It is assessed that the mishap was the result of pilot error. Specifically, analysis of the recovered aircraft data shows that GT-31, while maneuvering within the Gråtådalen Valley, made a left turn at 68 degrees angle-of-bank. The steepness of this turn resulted in a loss of both airspeed and altitude when GT 31 over corrected with a right turn in excess of 80 degrees from which the aircraft could not recover. It is not known which pilot had control of the aircraft at the time.

Preliminary Statement

1. In accordance with reference (a), this report marks completion of the command investigation conducted into the fatal aviation mishap involving an MV-22B, BUNO 168330, during exercise COLD RESPONSE in Bodø, Norway.

2. Both the Investigating Officer (IO) and Assistant IO (AIO) are Weapons and Tactics Instructors. The IO has commanded a squadron and is slated for command of a Marine Aircraft Group. The AIO is an MV-22B pilot with extensive tactical knowledge of the airframe having served as both a squadron operations and maintenance officer.

3. The IO collected all reasonably available evidence and met each convening authority directive found in enclosure (1). Of note, the IO decided not to delay conclusion of the investigation in order to wait for a toxicology report from the Armed Forces Medical Examiner. Based on interviews, along with three hours of uneventful flight prior to the mishap, there is no reason to believe that any of the Marines aboard GT31 were impaired by alcohol or illicit substances.

4. The 2d Marine Aircraft Wing (2d MAW) Office of the Staff Judge Advocate (OSJA) provided legal support.

5. Prior to questioning, the IO advised witnesses of the purpose of the JAGMAN investigation and reasons for apparent duplication of effort with the Aviation Mishap Board (AMB). All personnel cooperated fully with this investigation. Since none of the personnel interviewed were suspected of an offense under the Uniform Code of Military Justice, warnings pursuant to Article 31(b) were not necessary.

6. The IO and AIO conducted extensive analysis of data recovered from mission recorders found at the crash site. Additionally, the IO requested a flight recreation based on flight data, recorded mission time, and modeled atmospherics from the analysts and engineers of the MV-22B Fleet Support Team (FST) in Patuxent River, Maryland.

7. Line-of-duty determinations were made separately pursuant to section 0212 of reference (a). All four Marines involved in the mishap were found in the line of duty.

8. Enclosures (1) through (56) contain material pertinent to this investigation. All enclosures are original or true and accurate copies of the documents they represent. The enclosures, additional photos, and all full-motion video associated with the investigation will remain on file with the 2d MAW OSJA.

9. All times in this report are local Norway time unless otherwise indicated. At the time of the mishap, the local time in the vicinity of Bodø was UTC+1.

10. All photographs listed in the enclosures were either taken by 2d MAW Strategic Communications Marines or Norwegian search-and-rescue (SAR) personnel. Norwegian SAR aircrew provided photos and video of the mishap site taken the day after the mishap.

11. Video footage from a personal "GoPro" device found at the crash site showed approximately twelve minutes and thirty-six seconds of flight time prior to the mishap. This video footage was given to the IO by Norwegian authorities via the AMB.

12. Original items of physical evidence are in the custody of the AMB aboard MCAS New River, NC.

13. References (b) and (d) provide the specific definitions used for human factors, currency, proficiency, crew resource management, and other relevant considerations.

14. The IO focused on four areas while investigating facts pertaining to the mishap on 18 March 2022: 1) aircrew readiness and/or ability to complete the assigned mission; 2) aircraft readiness and/or ability to complete the assigned mission; 3) procedures relevant to the mishap; and 4) external/ environmental factors. The IO/AIO worked top-down through the evidence and data, first investigating potential flaws in training pipelines and aircraft readiness before moving to the chain-of-command and then down to the mishap crew. The investigative team employed this methodology to gain the most comprehensive understanding of all factors associated with the mishap.

15. The IO's reviewed flight planning, briefing, and execution procedures designed to mitigate the dynamic arctic weather conditions and mountainous terrain of Norway. These included the Naval Service Training and Readiness (T&R) Manuals and tactics publications for MV-22B platforms, guiding documents from higher headquarters, flight operations briefs from the country of Norway, and a supplemental training syllabus designed at the squadron level that included specific procedures designed for the Norwegian environment. The review provided a comprehensive understanding of how the Marine Corps trains aviators for mountainous and cold weather operations and what measures tactical units took beyond the institutional minimums.

16. Aircrew readiness was researched with information derived from squadron interviews, Marine Sierra Hotel Aviation Readiness Program (MSHARP), review of the aircrew's Naval Air Training and Operating Procedures Standardization (NATOPS) jackets, and Aircrew Performance Records.

17. A limited review of data from the U.S. Naval Safety Center was conducted to gain a historical perspective on mishaps in mountainous regions. No historical mishaps were discovered that were closely correlated enough to be of use.

18. For aircraft readiness, the IO and senior maintenance representative reviewed digital and printed records from VMM-261 Advanced Skills Management (ASM), Naval Aviation Logistics Command Management Information System (NALCOMIS)/Optimized Organizational Maintenance Activity (OOMA), and interviews of squadron maintenance personnel.

19. The IO obtained information concerning the local weather from the AMB, which consulted Norwegian experts who produced a rigorous model for the weather patterns on 18 March 2022.

20. The findings of fact are organized as follows: 1) summary of training and qualification for mishap aircrew to include flight time, aeromedical clearance, medical history, and human factors/personal stressors; 2) summary of the scheduling, planning, and mission briefing of the flight; 3) summary of the mishap aircraft's maintenance records; 4) the operational guidance and added measures employed to prepare for Cold Response; and 5) a summary of the mishap flight re-created from aircraft recorded data, viewing of flight recreations, and a brief timeline of SAR efforts to recover aircrew on 18 March 2022.

Findings of Fact

Part One: Training and Qualification of Mishap Aircrew

Captain Tomkiewicz (Aircraft Commander):

1. Captain Tomkiewicz was the aircraft commander for GT31. [Encl (3)]

2. On 18 March 2022, Captain Tomkiewicz was on active duty, executing "Duties Involving Flying - Operational" orders in the regular Marine Corps. [Encl (4)]

3. Captain Tomkiewicz was designated a Naval Aviator on 25 April 2019. [Encl (4)]

4. Captain Tomkiewicz completed undergraduate pilot training with a Navy Standard Score (NSS) of 52.7 and one unsatisfactory event. Captain Tomkiewicz's NSS is considered above-average. [Encl (4)]

5. Captain Tomkiewicz's sole unsatisfactory event occurred during the C4205 advanced syllabus event, where he had trouble with headwork and situational awareness. [Encl (4)]

6. Captain Tomkiewicz was designated a T2P (co-pilot) on 9 October 2019. [Encl. (4)]

7. On 18 March 2022, Captain Tomkiewicz held a current aeromedical certification to participate in aviation duties. The certification was valid through 30 June 2022. [Encl. (4)]

8. On 18 March 2022, Captain Tomkiewicz was not prescribed any medications by the military health system. [Encl. (17)]

9. Captain Tomkiewicz possessed a current MV-22B NATOPS qualification and associated open / closed book exams. These were valid through 28 February 2023. [Encl (4)]

10. Captain Tomkiewicz possessed a current Standard Instrument Rating which was valid through 31 July 2022. [Encl. (4)]

11. On 18 March 2022, Captain Tomkiewicz was current with annual Emergency Egress, Water Survival, and Crew Resource Management (CRM) requirements for flight operations. [Encl. (4)]

12. Captain Tomkiewicz was designated a tiltrotor aircraft commander (TAC) on 9 February 2022. [Encl. (4)]

13. Captain Tomkiewicz was designated a TAC after 450.1 total flight hours with 159.1 MV-22B simulator hours. [Encl. (4), (5)]

14. Minimum flight hours to be designated a TAC is 500 hours, of which 10% may be accounted for with Type / Model / Series syllabus simulator time. This equates to minimum requirements of 450 flight hours and 50 MV-22B syllabus simulator hours to be designated a TAC. [Ref (d)]

15. A review of Captain Tomkiewicz's Aviation Performance Record history and squadron interviews indicated no enduring deficiencies as an MV-22B pilot. Captain Tomkiewicz was generally described as "solid" with average to above-average situational awareness. [Encl. (6), (17)]

16. Captain Tomkiewicz's TAC syllabus event aviation training forms described him as a little slow with aircraft checklists and requiring work on his CRM skills. CRM became a strength by the end of the syllabus along with knowledge, situational awareness, and risk management. [Encl. (6)]

17. Prior to the mishap, Captain Tomkiewicz had not reported any abnormal life stressors, nor had any events of significance been discussed during the preceding three months of VMM-261 Human Factors Councils. [Encl. (16), (17), (22)]

18. Captain Tomkiewicz's roommate did not report any abnormal sleep patterns from Captain Tomkiewicz prior to 18 March 2022. [Encl. (17)]

19. Captain Tomkiewicz logged completion of VMM-261's COLD RESPONSE low-altitude training (LAT) and mountain area training (MAT) simulator event on 2 February 2022. [Encl (5), (18)]

20. Captain Tomkiewicz was provided the Norwegian Air Operations Center (NAOC) Safety Brief on 21 February 2022. [Encl. (31), (32)]

21. Captain Tomkiewicz's 30/60/90-day total flight times on the date of the mishap were 18.6/29.7/32.9. [Encl. (5), (22)]

22. Captain Tomkiewicz's flight time on 18 March 2022 was 468.7 total hours, with 269.9 MV-22B hours. [Encl. (5)]

23. Captain Tomkiewicz's last fly date prior to the mishap was 17 March 2022, the day prior. [Encl. (5), (26)]

24. Captain Tomkiewicz's last emergency procedure simulator event was completed on 1 February 2022. [Encl. (5)]

25. Prior to 18 March 2022, Captain Tomkiewicz had conducted flight operations in Norway seven times. [Encl (5)]

Captain Reynolds (Co-Pilot):

26. Captain Reynolds was the co-pilot for GT31. [Encl. (3)]

27. On 18 March 2022, Captain Reynolds was on active duty, executing "Duties Involving Flying - Operational" orders in the regular Marine Corps. [Encl. (7)]

28. Captain Reynolds was designated a Naval Aviator on 7 August 2020. [Encl. (7)]

29. Captain Reynolds completed undergraduate pilot training with an NSS of 50.4 and no unsatisfactory events. Captain Reynolds' NSS is considered average. [Encl (7)]

30. Captain Reynolds was designated as a T2P (co-pilot) on 1 March 2021. [Encl. (7)]

31. On 18 March 2022, Captain Reynolds held a current aeromedical certification to participate in aviation duties. The certification was valid through 31 March 2023. [Encl. (7]

32. On the day of the mishap, Captain Reynolds was not prescribed any medications by the military health system. [Encl (17)]

33. Captain Reynolds possessed a current MV-22B NATOPS qualification and associated open / closed book exams. These were valid through 31 March 2023. [Encl. (7)]

34. Captain Reynolds possessed a current Standard Instrument Rating which was valid through 28 February 2023. [Encl. (7)]

35. A review of Captain Reynolds' Aviation Performance Record, along with squadron personnel interviews, indicated generally above-average performance with no specified enduring deficiencies as an MV-22B pilot. [Encl. (9), (17)]

36. On 18 March 2022, Captain Reynolds was current with annual Emergency Egress, Water Survival, and CRM requirements for flight operations. [Encl. (7), (21)]

37. Prior to 18 March 2022, Captain Reynolds had not reported any abnormal life stressors, nor had any events of significance been discussed during the preceding three months of VMM-261 Human Factors Councils. [Encl. (16), (17)]

38. Captain Reynolds' roommate did not report any abnormal sleep patterns from Captain Reynolds prior to 18 March 2022. [Encl. (17)]

39. Captain Reynolds logged LAT and MAT codes in accordance with the COLD RESPONSE training syllabus on 7 February 2022 while conducting his annual NATOPS evaluation. [Encl (7), (8)]

40. Captain Reynolds was provided the NAOC Safety Brief on 21 February 2022. [Encl. (31), (32)]

41. Captain Reynolds' 30/60/90-day total flight time on the date of the mishap were 6.8/17.8/17.8. No flights were logged between 10 December 2021 and 26 January 2022. [Encl (8), (22)]

42. Captain Reynolds' flight time on 18 March 2022 was 280 total hours, including 91.4 MV-22B hours. [Encl (8)]

43. Captain Reynolds' last fly date before the mishap was 17 March 2022, the day prior. [Encl (8), (26)]

44. Captain Reynolds' last emergency procedure simulator event was completed on 8 February 2022. [Encl (8)]

45. Prior to 18 March 2022, Captain Reynolds had conducted flight operations in Norway five times. [Encl (8)]

Corporal Moore (Crew Chief):

46. Corporal Moore was the crew chief for GT31. [Encl. (3)]

47. On 18 March 2022, Corporal Moore was on active duty, executing "Temporary-Indefinite Crewmember Flight Orders" in the regular Marine Corps. [Encl. (10)]

48. Corporal Moore's "volunteer for flying duty" form was signed 29 January 2019. [Encl. (10)]

49. Corporal Moore was designated an MV-22B Crew Chief on 5 December 2019. [Encl. (10)]

50. On 18 March 2022, Corporal Moore held a current aeromedical certification to participate in aviation duties. The certification was valid through 31 December 2022. [Encl. (10)]

51. On 18 March 2022, Corporal Moore was not prescribed any medications by the military health system. [Encl (17)]

52. Corporal Moore possessed a current NATOPS qualification and associated open / closed book exams. These were valid through 28 February 2023. [Encl. (10)]

53. On 18 March 2022, Corporal Moore was current with annual Emergency Egress, Water Survival, and CRM requirements for flight operations. [Encl. (10), (21)]

54. A review of Corporal Moore's Aviation Performance Record indicated generally high situational awareness with occasional lapses of self-confidence and microphone-wind mitigation techniques during landing. [Encl. (12)]

55. Prior to 18 March 2022, Corporal Moore had not reported any abnormal life stressors, nor had any events of significance been discussed during the preceding three months of VMM-261 Human Factors Councils. [Encl. (16), (17), (22)]

56. Corporal Moore's roommate did not report any abnormal sleep patterns from Corporal Moore prior to the mishap. [Encl. (17)]

57. No specific COLD RESPONSE training events were mandated for enlisted aircrew. [Encl. (17), (18)]

58. Corporal Moore's 30/60/90-day total flight time on the date of the mishap were 31.8/38.4/42.8. [Encl (11), (22)]

59. Corporal Moore's total flight time as of 18 March 2022 was 486.1 total hours, all of which were in the MV-22B. [Encl. (11)]

60. Corporal Moore's last fly date was 17 March 2022, the day prior to the mishap. [Encl. (11), (26)]

61. Corporal Moore's last emergency procedure simulator event was completed on 1 February 2022. [Encl (11)]

62. Prior to 18 March 2022, Corporal Moore had conducted flight operations in Norway eleven times. [Encl (11)]

Gunnery Sergeant Speedy (Aerial Observer):

63. Gunnery Sergeant Speedy was the aerial observer for GT31. [Encl. (3)]

64. On 18 March 2022, Gunnery Sergeant Speedy was on active duty, executing "Temporary-Indefinite Non-Crewmember Flight Orders" in the regular Marine Corps. [Encl. (13)]

65. Gunnery Sergeant Speedy's "volunteer for flying duty" form was signed 2 December 2020. [Encl. (13)]

66. Gunnery Sergeant Speedy was assigned to the MV-22B Aerial Observer / Gunner syllabus. [Encl. (14), (15), (21)]

67. Gunnery Sergeant Speedy had not completed the MV-22 Aerial Observer / Gunner Core Syllabus and was not NATOPS qualified, but was authorized to fly with a qualified crew chief instructor. Cpl Moore was a Basic Instructor Crew Chief. [Encl. (10), (13), (15), (21)]

68. On 18 March 2022, Gunnery Sergeant Speedy held a current aeromedical certification to participate in aviation duties. The certification was valid through 30 June 2022. [Encl. (13)]

69. On the day of the mishap, Gunnery Sergeant Speedy was not prescribed any medications by the military health system. [Encl (17)]

70. On 18 March 2022, Gunnery Sergeant Speedy was not current with annual Emergency Egress and CRM - Flight requirements. Gunnery Sergeant Speedy possessed a valid Water Survival training qualification and CRM - Ground training. [Encl. (13), (21)]

71. In order to log the CRM - Flight training event, the MV-22B Aerial Observer / Gunner syllabus requires the completion of a NATOPS evaluation, which occurs at the end of the Core Skill training phase. The Emergency Egress refresher is also conducted with the NATOPS check. [Ref (c)]

72. Prior to 18 March 2022, Gunnery Sergeant Speedy had not reported any abnormal life stressors, nor had any events of significance been discussed during the preceding three months of VMM-261 Human Factors Councils. [Encl. (16), (17), (22)]

73. Gunnery Sergeant Speedy's roommate did not report any abnormal sleep patterns from Gunnery Sergeant Speedy prior to the mishap. [Encl. (17)]

74. No specific pre-COLD RESPONSE training events were mandated for enlisted aircrew. [Encl. (17), (18)]

75. Gunnery Sergeant Speedy's 30/60/90-day total flight times on the date of the mishap was 0/0/0. [Encl. (14), (22)]

76. Gunnery Sergeant Speedy's total flight time as of 18 March 2022 was 78.4 hours. [Encl. (14)]

77. Gunnery Sergeant Speedy's last fly date prior to the mishap was 4 November 2021. [Encl (14), (22)]

78. Gunnery Sergeant Speedy's last emergency procedure simulator event was completed on 20 September 2021. [Encl. (14)]

79. Prior to 18 March 2022, Gunnery Sergeant Speedy had not conducted flight operations in Norway. [Encl. (14)]

Part Two: Scheduling, Planning and Briefing of GT31 Mission

80. The four Marines aforementioned were scheduled to fly as GT 31 on 18 March 2022. [Encl (3)]

81. GT31 was assigned to conduct single-aircraft Confined Area Landings (CALs) and Air Logistics Support (ALS) to support on-call COLD RESPONSE tasking. [Encl. (3)]

82. The crew had the required proficiency to conduct the assigned missions and Training and Readiness Manual assigned events. [Encl. (3), (4), (6), (9), (12), (15), (21), (22)]

83. The composition of the GT31 crew met the requirements for planned flight operations for CALs and ALS. [Encl. (3), (4), (7), (10), (13), (21), (22), Ref (c)]

84. Captain Tomkiewicz was current and qualified to sign for the aircraft. [Encl. (3), (4), (5), Ref (b-g)]

85. The GT31 crew was afforded sufficient rest between completion of the previous day's flight events and the brief time for the mishap mission on 18 March 2022. [Encl. (3), (17), (22), (26), Ref (d)]

86. The 18 March 2022 VMM-261 flight schedule was validated in M-SHARP for anomalies. Annotations were made by the schedule writer consistent with common squadron practices. [Encl. (21)]

87. The 18 March 2022 VMM-261 flight schedule was digitally signed by the commanding officer and annotated as having been reviewed by representatives from the Operations, Maintenance, and Safety & Standardization departments. [Encl. (3), (16)]

88. The Risk Assessment Worksheet (RAW) was signed by the squadron commanding officer acknowledging Low Risk for the flight. [Encl. (22)]

89. The crew was scheduled to conduct operations within the allowable standard crew day. [Encl. (3), Ref (d-g)]

90. Captain Tomkiewicz conducted a scheduled low-altitude tactics (LAT) event on 17 March 2022 along the same route utilized by GT31 on 18 March 2022. [Encl. (17), (26), (30), (35)]

91. The LAT profile flown on 17 March 2022 through the Gråtådalen Valley, in vicinity of the next day's mishap location, was between 1800' - 2000' above mean sea level (MSL), 220 knots calibrated airspeed (KCAS), with angles of bank of approximately 55 degrees. Above ground level (AGL) altitudes varied between 575' and 1000'. [Encl. (30), (35)]

92. Tiltrotor LAT is defined as flight where the briefed intent is to conduct tactical flight where terrain avoidance is a significant factor. Tiltrotor LAT is further defined as the briefed intent to fly at or below 500' AGL in order to develop terrain avoidance skills. Tiltrotor LAT is composed of both low-level and contour flight profiles. [Ref (b)]

93. GT31 was not scheduled to conduct LAT on the date of the mishap. [Encl. (3)]

94. Unscheduled LAT is strictly prohibited. [Ref (b), (e)]

95. Tactical flight is not defined in the references. [Ref (b), (d-g)]

96. Low-level flight is defined as flight conducted at a selected altitude to minimize or avoid enemy detection or observation. Aircrews conducting low-level flight pre-select a route that generally consists of straight-line navigation, constant airspeed and constant altitude above mean sea level. [Encl. (20), Ref (b), (e)]

97. Low-altitude flight shall be conducted in restricted airspace, military operating areas, on military training routes, or other low-altitude training areas as designated by the Wing or Task Force commander. [Encl. (20), Ref (b), (e)]

98. The "Bravo" route is one of two navigation routes provided by the Norwegian Air Force in which aircraft may fly as low as 500' AGL. [Encl. (28)]

99. The "Bravo" route flown by GT31 was not designated a low-altitude training area by the Wing commander on 18 March 2022. [Encl (16), (17), (28)]

100. MV-22B pilots are instructed that reasons to conduct LAT can be classified as threat (enemy) considerations and weather. [Encl (20)]

101. Captain Tomkiewicz and Corporal Moore were qualified, proficient, and current to conduct LAT if properly scheduled on 18 March 2022. [Encl. (3), (4), (5), (6), (10), (11), (12), Ref (b), (c)]

102. Captain Reynolds was qualified and proficient to conduct LAT, but lacked currency due to not having flown LAT within the preceding 30 days prior to 18 March 2022. [Encl. (7), (8), (9), Ref (b), (c)]

103. Gunnery Sergeant Speedy's APR contained an unsigned Day LAT designation letter. He was not listed as LAT-qualified according to his MSHARP qualification report. Unqualified personnel must fly with a proficient LAT Instructor. [Encl. (13), (15), Ref (b), (e)]

104. Corporal Moore was not designated a LAT Instructor. [Encl. (10)]

105. VMM-261 scheduled training events that included an intent to perform LAT on 1 March, 5 March and 17 March 2022. [Encl. (26)]

106. The flight schedules on 1, 5, and 17 March 2022 did not include a minimum altitude in accordance with ref (d). [Encl. (26)]

107. Of the 1, 5, and 17 March 2022 flight schedules, only the 17 March 2022 schedule indicated the low altitude training area to be utilized. [Encl. (26)]

108. GT31 was not scheduled to conduct mountain area training (MAT) on 18 March 2022. [Encl. (3)]

109. The purpose of mountain area training is to develop proficiency in day and night vision device (NVD) mountainous terrain operations. Aircraft landings shall be conducted at zones above 6000' DA and where mountainous terrain is a significant factor. [Ref (b)]

GT31 Mission Brief

110. The GT31 mission brief was conducted at 0900 local time on 18 March 2022. [Encl. (3), (17), (23), (24)]

111. GT31 was scheduled to fly from 1100 to 1800 hours for a total of 6.6 hours of flight time. [Encl. (3)]

112. The radar picture at approximately 0620 that morning displayed isolated areas of moisture along both the northern and southern portions of the planned route. The forecast for the duration of the mission called for "visual meteorological conditions," (VMC), meaning that the weather would be sufficient for the aircraft to maintain visual separation from the terrain and other aircraft. [Encl. (23)]

113. The weather model outlook for Bodø forecasted ceilings between 1400 feet for departure and 1600 feet for recovery with thunderstorms in the vicinity of the airfield. [Encl. (23)]

114. There were no warnings involving Significant Meteorological Information (SIGMETs) or Airman's Meteorological Information (AIRMETs) active at the time of the mission brief. SIGMETs and AIRMETs are used to warn pilots of potentially hazardous weather conditions. [Encl. (23)]

115. A 1000' ceiling with visibility at or greater than three statute miles is considered visual meteorological conditions (VMC), in which aircraft may execute flights under visual flight rules (VFR). Flights conducted under VFR conditions are done when aircraft have sufficient cloud layers and visibility to maintain separation from terrain and other aircraft. [Ref. (d)]

116. The weather minimums, as directed by the VMM-261 commanding officer, were a 1000-foot ceiling and three statute-mile visibility for airplane-mode

operations. Below that aircrew were expected to operate in conversion mode, and were expected to operate in conversion mode to an altitude as low as the weather minimums for instrument approaches, similar to a helicopter. [Encl. (16), (17)]

117. The standard VMM-261 mission brief template includes a reminder to aircrew that "There is no mission in training worth compromising the safety of our Marines." [Encl. (23)]

118. The flight mission brief was conducted by Captain Tomkiewicz. [Encl. (17), (25)]

119. The mission brief contained visual depictions of the planned northern and southern routes, including map chips of individual flight legs which included terrain relief depictions via Digital Terrain and Elevation Data (DTED) and Minimum Safe Altitudes (MSAs). This provided enhanced terrain awareness as well as altitudes along the route which would provide at least 500' of clearance from terrain in case of an emergency. [Encl. (25)]

120. Captain Tomkiewicz briefed the risk to forces as "poor weather calls with confining terrain and icing." The mitigation was briefed as (a) in case of weather less than 5000' / 5sm at coastal airports, no inland LAT would be performed; (b) in case of weather less than 1000' / 3sm, flight would be in conversion mode only; and (c) weather less than 500' / 1sm would be a "no-go." [Encl. (25)]

121. "No Go" refers to conditions that would prevent the aircraft from launching. [Ref (n)]

122. The risk assessment provided in the brief by Captain Tomkiewicz on 18 March 2022 mirrored the briefed risk assessment annotated on the 17 March 2022 mission brief. [Encl. (25), (27)]

123. A digital copy of the risk assessment worksheet was filled out and marked as signed by Captain Tomkiewicz. Weather factors to mission were highlighted as "low risk" for weather greater than 1000' / 3mi visibility. The area of greatest risk was annotated by Captain Tomkiewicz as "FLIGHT IN MOUNTAINOUS TERRAIN IN POOR WX [WEATHER]." The mitigation measures were listed as "WX TRIGGERS TO NOT CONDUCT THAT FLIGHT PROFILE". [Encl. (22)]

124. Flight plans were submitted for GT31 along both the northern and southern routes of flight. The requested transit altitudes were listed as 1,500 feet above ground level. [Encl. (29)]

125. The southern route of flight was planned to require 6,700 pounds of fuel in order to land with VMM-261 standard operating procedure (SOP) fuel of 1,400 pounds. Planned takeoff fuel was 10,500 pounds. [Encl. (25), (30), Ref (g)]

126. The planned fuel remaining after completion of the southern route (3800 pounds above minimum landing fuel) equates to approximately 1 hour and 15 minutes of additional flight time available. [Encl. (25), (30), Ref (m)]

127. GT31 was planned for a transit altitude of 1000 feet above ground level. [Encl. (30)]

128. The minimum safe altitudes along the route of flight were annotated between 2700 feet and 6100 feet above mean sea level. [Encl. (30)]

129. The route in vicinity of the mishap location was planned directly between checkpoints provided by the Norwegian Air Force. GT 31 planned no intermediate checkpoints along the intended route through the terrain. [Encl. (25), (30)]

130. Any planned flight below 1000 feet above ground level required a confirmation with the Norwegian Air Operations Center and either a face-to-face or video conference brief between the NAOC and the aircrew prior to launch. [Encl. (31)]

131. An exception to the requirement for a face-to-face brief existed for flights operating on an authorized route down to 500' AGL. [Encl. (28)].

132. GT31 did not conduct a low-altitude brief with the NAOC prior to executing their mission on 18 March 2022. [Encl. (17)]

133. The weather update brief with Bodø Air Operations (Lion Ops) was conducted by the Operations Duty Officer for the crew of GT31. [Encl. (17)]

134. On 18 March 2022, 19 fixed-wing USMC flights supporting COLD RESPONSE cancelled operations due to winds exceeding take-off minimums for ejection seat envelopes. [Encl (33)]

Part Three: Maintenance History for the Mishap Aircraft (BUNO 168330)

135. The mishap aircraft was an MV-22B Osprey, Aircraft 14, BUNO 168330, assigned to VMM-261. [Encl (42)].

136. The aircraft was inducted into Planned Maintenance Interval (PMI) involving extensive airframe and aircraft systems inspections, component replacements, and technical directive integration at MCAS Cherry Point from 13 February 2021 through 8 November 2021. [Encl (42)]

137. The aircraft was transferred from VMM-365 to VMM-261 on 18 November 2021. [Encl (42)]

138. On 18 March 2022, the aircraft had 1685.7 flight hours on the airframe prior to the mishap flight. [Encl (41)]

139. The aircraft had 222.0 flight hours remaining prior to the next Phase Inspection. [Encl (41)]

140. The aircraft was flown nine times in Norway, including twice on 17 March 2022, for a total of 6.6 flight hours. [Encl (43)]

131. The aircraft was released as safe for flight (SFF) on 18 March 2022 by (b)(3), (b)(6), (b)(7)c [Encl (44)]

142. (b)(3), (b)(6), (b)(7)c used a SFF checklist to safe the aircraft prior to releasing the aircraft for flight on 18 March 2022. [Encl (45)]

143. (b)(3), (b)(6), (b)(7)c is qualified to safe an aircraft for flight as of 21 May 2020. [Encl (46)]

144. On 18 March 2022, the aircraft had five open Partial Mission Capable (PMC) discrepancies (MCN: 28QT7KX, MCN: 28T088A, MCN: 28T0883, MCN: 28T088B, MCN: 28T0888) which contained documentation errors. [Encl (47)]

145. Work orders are required to have the number of the toolbox used, and the signature of the technician that performed the tool container inventory to verify that all tools were accounted for. (par. 15.3.8.1.B) [Ref. (k)]

146. Work orders are also required to have the name of the assigned worker and the toolbox number utilized annotated under the "Worker Hours" section on the form. (par. 15.3.8.2.C) [Ref. (k)]

147. Work orders are required to have in-process inspection comments annotated on the form to document the type of work that was accomplished. Required comments include, but are not limited to, functional testing, adjusting, assembly of components, servicing, installation, or witnessing application of torque during installation. (par. 7.1.4.b.2) [Ref (k)]

148. Work orders are required to document that the work center supervisor or Collateral Duty Inspector (CDI) and the technician assigned to the task conducted a joint inventory and inspection of the tool container and its contents prior to starting work and at each work stoppage. (par. 10.12.3.6.2) [Ref (k)]

149. On WO MCN: 28QT7KX (Right Outboard Vortex Generator Removed and Discarded in Flight Line), only (b)(3), (b)(6), (b)(7)c signed under the "Worker Hours" section on the work order. The Worker and the CDI in-process comments for the maintenance performed were not annotated. [Encl. (47)]

150. (b)(3), (b)(6), (b)(7)c is a qualified Airframes Collateral Duty Quality Assurance Representative (CDQAR). [Encl. (46)]

151. On WO MCN: 28T088A, the Right Green Blade Temperature Sensor F (P) was troubleshot on 13 March 2022 by (b)(3), (b)(6), (b)(7)c and (b)(3), (b)(6), (b)(7)c The CDI in-process comments for the maintenance and reinstallation of the right-hand spinner dome were not annotated. [Encl. (47)].

152. (b)(3), (b)(6), (b)(7)c and (b)(6), (b)(7)c, (b)(3) are not CDIs and do not have authority to make CDI in-process comments. [Encl. (46)]

153. The reinstallation of the right-hand spinner dome with associated application of torque and properly documented CDI in-process comments was annotated on WO MCN: 28T0887 on 14 March 2022. [Encl. (50)]

154. On WO MCN: 28T088A, the CDI block on the work order was signed by (b)(3), (b)(6), (b)(7)c, (b)(3) (b)(3), (b)(6), (b)(7)c (b)(3), (b)(6), (b)(7)c is not a CDI or a work center supervisor for the personnel who worked on the task. [Encl. (47), (46)]

155. (b)(3), (b)(6), (b)(7)c did not physically verify the inventory of toolbox 200-3-4 on WO MCN: 28T088A on 13 March 2022. Toolbox 200-3-4 was correctly inventoried on 14 March 2022 on WO MCN: 28T0887. [Encl. (47), (50)]

156. On WO MCN: 28T0883, the Left Pen Damp Heaters F (P) were troubleshot on 14 March 2022 by (b)(3), (b)(6), (b)(7)c and (b)(3), (b)(6), (b)(7)c The CDI in-

process comments for the maintenance and reinstallation of the left-hand spinner dome were not annotated. [Encl. (47)]

157. (b)(3), (b)(6), (b)(7)c and (b)(3), (b)(6), (b)(7)c are not CDIs and do not have authority to make CDI in-process comments. [Encl. (46)]

158. The reinstallation of the left-hand spinner dome with associated application of torque and properly documented CDI in-process comments were annotated on WO MCN: 28T08C1 on 17 March 2022. [Encl. (51)]

159. On WO MCN: 28T088B, the Left Spinner Temperature Sensor Zone 10 was troubleshot on 13 March 2022 by (b)(3), (b)(6), (b)(7)c The toolbox used and the worker were not annotated. [Encl. (47)]

160. On WO MCN: 28T0888, the Right Spinner Temperature Sensor 2 F (P) was troubleshot on 13 March 2022 by (b)(3), (b)(6), (b)(7)c The toolbox used and the worker were not annotated. [Encl. (47)]

161. (b)(3), (b)(6), (b)(7)c is a qualified Avionics CDQAR as of 16 November 2021. [Encl. (46)]

162. The mishap aircraft's Daily and Turnaround Inspection was completed on 18 March 2022 at 0925 by (b)(3), (b)(6), (b)(7)c prior to the mishap flight. [Encl. (48)]

163. (b)(3), (b)(6), (b)(7)c is a qualified Plane Captain as of 7 April 2020. [Encl. (49)]

164. The mishap aircraft had 23 open work order discrepancies when the aircraft was signed safe for flight. Of the 23 open work orders, 16 were PMC-Equipment Operational Capability (EOC) coded discrepancies, which inform maintenance control and the pilot as to what missions the aircraft is mechanically capable of executing. The other seven were non-EOC coded general discrepancies. [Encl. (50)]

165. The mishap aircraft had 41 Technical Directive work orders open when the aircraft was signed safe for flight. The Technical Directives were either due to be implemented, or had been deferred for completion, until after the aircraft returned from Norway. [Encl. (50)]

166. Three WO's were signed off between 17 March 2022 at 2205Z and the mishap flight: MCN: 28T08E9, MCN: 28T08E8, and MCN: 28T08EH. [Encl. (51)]

167. WO MCN: 28T08E9 and MCN: 28T08E8 concerned the removal and replacement of aircraft fire extinguishers. The work orders were inspected by (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), (b)(6), (b)(7)c [Encl. (51)]

168. (b)(3), (b)(6), (b)(7)c is a qualified flight equipment CDI as of 1 February 2022. [Encl. (46)]

169. (b)(3), (b)(6), (b)(7)c is a qualified Safe for Flight maintenance controller as of 5 January 2022. [Encl. (46)]

170. On WO MCN: 28T08EH, the right-hand engine was serviced with 36 ounces of MIL-PRF-23699 oil. The work order was inspected by c, (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), , (b)(6), (b)(7)c [Encl. (51)]

171. (b)(3), (b)(6), (b)(7)c is a qualified Power Line CDI as of 9 September 2021. [Encl. (46)]

172. The mishap aircraft had four major components removed and replaced within the last 10 flights; MCN: 28T08CM, MCN: 28T08C1, MCN: 28T08D3, and MCN: 28T088C. [Encl. (51)]

173. On WO MCN: 28T08CM, the Right-Hand System 3 Thermal Control Valve was removed and replaced. The work order was inspected by (b)(3), (b)(6), (b)(7)c (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), (b)(6), (b)(7)c [Encl. (51)]

174. (b)(3), (b)(6), (b)(7)c is a qualified Airframes CDI as of 16 November 2021. [Encl. (46)]

175. On WO MCN: 28T08C1, the left hand Central De-ice Distributor (CDD) was removed and replaced. The work order was inspected by (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), (b)(6), (b)(7)c [Encl. (51)]

176. On WO MCN: 28T08D3, the Upper Crew Door Window was removed and replaced. The work order was inspected by (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), (b)(6), (b)(7)c [Encl. (51)]

177. (b)(3), (b)(6), (b)(7)c is a qualified Airframe CDI as of 25 May 2021. [Encl. (46)]

178. On WO MCN: 28T088C, the Shaft Driven Compressor was removed and replaced. The work order was inspected by (b)(3), (b)(6), (b)(7)c and maintenance control was signed off by (b)(3), (b)(6), (b)(7)c [Encl. (51)]

179. A review of the previous five months of completed work orders indicated no administrative discrepancies that would pertain to this mishap. [Encl. (42), (47), (50), (51), (52)]

180. Post-mishap K-series Voice and Data Recorder (KVADR) analysis by the MV-22B Fleet Support Team (FST) indicates the only recorded mechanical anomaly as a spike in right-hand prop-rotor gearbox (PRGB) torque just after GT31's closest proximity to the western valley wall. [Encl. (34), (53)]

181. KVADR data does not indicate any catastrophic component failure as potentially attributable to the PRGB torque spike. [Encl. (53)]

182. Computer and other information technology shortcomings which occurred after arriving in Norway left the squadron with limited paper printer capability. This resulted in mission products such as cover pages and navigation logs being produced on computers and then photographed for reference on Marine Air Ground Tablets (MAGTAB). This also resulted in the electronic routing and signature of documents like flight schedules, RAWs, and other paper products used daily in squadron activities. It may also have been a contributing factor in missing signatures or entries on maintenance documents. [Encl. (16), (17)]

Part Four: Guidance and Added Measures to Prepare for COLD RESPONSE

183. The Commanding General of 2d MAW directed the commanding officer of VMM-261 to provide pilots with approximately 15 hours of flight time within the 30 days prior to executing COLD RESPONSE. (Encl. (16)]

184. The VMM-261 commanding officer directed pilots that were to participate in COLD RESPONSE to complete at least ten flight hours and five simulator hours prior to departing for the exercise. [Encl. (16), (17)]

185. A dedicated syllabus was created by the VMM-261 Operations Department, modeled after the MV-22B Training and Readiness Manual. It consisted of three simulator events covering COLD RESPONSE specific training. These events covered icing systems and emergency procedures, MAT, LAT, and Reduced Visibility Landings (RVL) in snow ("white out") conditions. [Encl. (16-18)]

186. The squadron procured additional cold weather survival equipment prior to departing for COLD RESPONSE to aid in crew sustainment if forced to land away from an airfield. This equipment was packaged and installed onto aircraft for the duration of the exercise. Aircrew were briefed on the possibility of this occurrence, and conducted a live, overnight test of the equipment to validate supportability and confidence in the systems. [Encl. (16-17), (31)]

Part Five: The GHOST 31 Flight and Post-Mishap Identification

187. GT31 conducted initial takeoff from Bodø Airport at **1100** on 18 March 2022 to conduct the first portion of the planned flight to the north. [Encl. (24), (34), (36)]

188. GT31 flew the northern portion of the flight without incident and returned to Bodø Airport for fuel at **1402**. [Encl. (17), (24), (34)]

189. GT31 departed Bodø Airport for a second time at **1433** with 11,142 pounds of fuel on board. [Encl. (17), (24), (34), (36)]

190. A post-mishap fuel sample obtained by MWSS-272 indicated no issues with fuel taken aboard the mishap aircraft. [Encl. (54)]

191. At **1442**, MC reported "Southbound" to Norwegian air traffic control (callsign Polaris Control) on radio frequency 118.55Mhz. [Encl. (36)]

192. At approximately **1510Z**, Polaris Control transmitted "Unreadable" and directed GT31 to "contact Stokka frequency 120.4Mhz". There was no further communication from GT31 on frequency 118.55Mhz between **1511** and **1630**. [Encl. (36)]

193. The radar track from Polaris Control indicates GT31 traveled along the pre-planned route until approximately **1538** when the aircraft deviated to the north in the vicinity of the airport at Brønnøysund. [Encl. (36)]

194. Polaris Control recorded operating altitudes for GT31 between 300 and 1200 feet above ground level along its route of flight. Altitudes below 500 feet above ground level were correlated with available data and indicated the aircraft was either over water, operating in conversion mode, or both. [Encl. (36)]

195. Polaris Control's last observed position for GT31 was N66 53.6 / E012 51.16, at 900 feet above ground level and turning southeast. [Encl. (36)]

196. GT31 was in contact with Mosjøen Airport between **1558 and 1601**. [Encl. (36)]

197. GT31 made contact with Mo i Rana Airport between **1604 and 1610**, entering its airspace from the west and leaving to the north. [Encl. (36)]

198. The last noted air traffic control position for GT31 was at N66 41.23N / E014 10.53, at 2900 feet above mean sea level at **1619** as determined through Identify Friend/Foe return. [Encl. (36)]

199. At approximately **1622**, flight recorder data indicates GT31 entered the Gråtådalen valley at 1241 feet above ground level (2926 feet above mean sea level) at an airspeed of 223 knots, heading northeast. [Encl. (34), (38)]

200. The floor of the Gråtådalen valley lies approximately between 1500 and 1000 feet above mean sea level, sloping down towards the north. [Encl. (27), (30)]

201. At the time, the weather in the Gråtådalen Valley appeared to be scattered clouds higher than 5000 feet above mean sea level and visibility approximately five statute miles or more. [Encl. (37)]

202. Winds within the valley were recorded at approximately from 229 degrees at 24 knots by onboard aircraft systems, indicating a south-to-north tailwind for the aircraft. [Encl. (34)]

203. At approximately **1622:08**, GT31's cyclic position was moved forward, initiating a descent from 3045 feet above mean sea level/ 1145 feet above ground level. The cyclic did not return to the previous longitudinal position until approximately **1622:40**, as the aircraft reached approximately 1568 feet above mean sea level / 532 feet above ground level. [Encl. (34), (38)]

204. Following the descent, the radar altimeter for GT31 did not register an altitude above 557 feet above ground level for the rest of the flight. [Encl. (34), (38)]

205. After conducting the descent, GT31 began maneuvering at greater than 45 degrees angle of bank (AOB) while transiting around terrain along the Gråtådalen valley at speeds of up to 259 knots calibrated airspeed (KCAS), 39 knots faster than VMM-261's default LAT planning airspeed. [Encl. (34), (38), Ref. (g)]

206. GT31 conducted a left-hand turn to follow the river valley. During this turn, the aircraft reached 68 degrees AOB. [Encl. (34), (38)]

207. The NATOPS limit for AOB in an MV-22B is 60 degrees. [Ref. (l)]

208. An MV-22B is unable to maintain both altitude and airspeed at 68 degrees AOB in any published airplane configuration flight regime published in Energy-Maneuverability Diagrams. [Ref. (h)]

209. GT31 lost altitude and airspeed following the left-hand turn and began rapidly closing the distance to the western wall of the valley. In an effort

to avoid the terrain, GT31 conducted a right-hand turn that reached 89 degrees AOB. At the time of this right-hand turn, GT31's airspeed was 202 KCAS and its altitude was 1261 feet above mean sea level. GT31 came as close as 27 feet from the western valley wall during the maneuver. [Encl. (34), (37), (38)]

210. Attempting to complete the turn at 89 degrees AOB placed the aircraft well outside of the tested aircraft maneuverability capabilities. The highest AOB depicted on any MV-22B airplane configuration Energy-Maneuverability Diagram is 75 degrees. Flight in this regime is unsustainable and results in the aircraft rapidly descending. [Encl. (38), Ref (h)]

211. During the right-hand turn, the thrust control lever (TCL) position was reduced to full aft for approximately 2-3 seconds, followed by a rapid increase to the full forward soft stop (4"). [Encl. (34), (38)]

212. A reduction in airspeed while maintaining angle of bank and altitude may cause an increase in turn-rate and a decrease of intended turn radius, meaning a tighter and "faster" turn. [Ref (h)]

213. The near 90-degree AOB turn resulted in a rate of descent as high as 4000 feet per minute. [Encl. (34), (38)]

214. The recorded aircraft telemetry and fault data ends at approximately **1623:02**. [Encl. (34)]

215. Extrapolation based on the last recorded aircraft speed and locations indicates that GT31 crashed into the eastern wall of the Gråtådalen Valley at approximately **1623:04**. [Encl. (30)]

216. The impact resulted in complete structural failure and separation of all major airframe components. [Encl. (55)]

217. The photographic evidence suggests that all four Marines aboard GT31 were killed by the impact. [Encl. (55)]

218. When GT31 failed to return as expected at 1800, efforts were made to establish communications with the aircraft. These were unsuccessful. Of note, satellite communication networks were not available for use by the aircraft. Communication with the ODO was often limited to the local area due to line-of-sight communications being restricted by the terrain. Aircrew were often only able to update status and location during missions via cellular phone text messages when on deck at intermediate locations. (Encl. (16-17)]

219. Overdue aircraft procedures were initiated by VMM-261 at **1830**, 30 minutes after GT31's expected return. This is standard procedure and accounts for normal delays in operations. The squadron began executing the COLD RESPONSE pre-mishap plan which included notification of higher headquarters, and initial coordination for search and rescue assets. [Encl. (16-17)]

220. A Norwegian search-and-rescue (SAR) squadron received tasking from the Joint Rescue Coordination Center for an overdue aircraft at **1900**. A SAR helicopter was launched at **1935** due to delays associated with weather planning. [Encl. (39), (40)]

221. The Norwegian SAR standard operating procedure is to launch within 15 minutes of notification. [Encl. (39)]

222. The SAR helicopter was initially directed to the last known GT31 radar return location. While enroute, it was updated with GT31's route of flight. It then proceeded to the Gråtådalen Valley. [Encl. (39), (40)]

223. The SAR helicopter initially identified the crash site via GT31's automatic Emergency Locator Transmitter (ELT). The ELT transmits on the VHF-Guard frequency (121.5 Mhz). The SAR helicopter did not pick up the ELT signal until the second overflight; due to the terrain, it was only able to receive the signal while directly overhead. This was followed by visual observation of an infrared strobe light and evidence of the crash in the terrain at approximately **2105**. [Encl. (39), (40)]

224. The SAR helicopter attempted to lower first responders to the crash site to search for survivors. They were forced to abort and depart the area due to deteriorating weather. The weather at **2100** was assessed to be overcast ceilings at approximately 2000 feet above mean sea level with blowing snow and freezing rain. The SAR crew reported low confidence of survivors based on observations of the crash site. [Encl (39), (40)]

225. Two personal electronic devices (PEDs) were located at the crash site, including an iPad and a GoPro camera. The GoPro footage was collected by Norwegian personnel and shared with both the IO and the AMB. [Encl. (37), (55)]

226. The VMM-261 commanding officer reported that non-approved PEDs are not authorized for use during flight operations, in accordance with 2d MAW and Marine Aircraft Group 26 policy. [Encl. (16), (17), Ref (i), (j)]

227. The squadron is equipped with an approved Marine Air Ground Tablet (MAGTAB) set. Aircrew routinely utilized them to record and transport pre-flight planning documents to the aircraft for use in flight. [Encl. (17)]

Opinions

1. The IO and AIO were tasked by enclosure (1) with addressing six different issues. The opinions of the IO and AIO are summarized as follows:

a. *The circumstances of GT31's tasking and the degree to which the mission was necessary.* GT31 was tasked on 18 March 2022 with supporting the COLD RESPONSE training exercise with Air Logistics Support (ALS). If the COLD RESPONSE scenario did not require ALS, then GT31 was authorized to conduct unit-level training such as familiarization, instrument, and Mountain Area Training in order to maintain aircrew proficiency, develop Captain Tomkiewicz's flight leadership experience, and progress the squadron towards its annual flight hour goals. The degree to which the flight was necessary is a matter of nuance. No sortie scheduled by 2d MAW in support of COLD RESPONSE was absolutely necessary, since the exercise took place in training rather than a real-world combat or crisis-response environment. However, conducting realistic training is an important component of ensuring real-world readiness in the event of a conflict or crisis. Since the weather conditions were met for the training flight, the aircrew were qualified, and the airframe was properly maintained and airworthy, the GT31 mission on 18

March 2022 was as necessary as any that is assigned on a daily flight schedule across the Marine Corps. [FF 1-79, 80-89, 110-123, 134, 135-178]

b. *Whether the mission could or should have been delayed or cancelled due to weather or any other factor.*

(1) It is clear that the mission could have been delayed or cancelled had weather concerns or any other safety-of-flight factor been present. 2d MAW squadrons supporting COLD RESPONSE in Norway had adequate sources of weather forecasting, authority to adjust or cancel missions, and lines of communication between aircrew and operations duty officers to receive weather updates in a timely manner. The ability of squadrons to cancel flights due to weather is evident from the fact that numerous fixed-wing sorties were cancelled on 18 March 2022 due to winds exceeding ejection-seat limits. [FF 110-134]

(2) It is also clear that there was no weather-related reason to delay or cancel the GT31 mission specifically. The weather brief received by the GT31 aircrew on the morning of 18 March 2022 contained data from the United States National Weather Service, the United States Air Force Global Air-Land Weather Exploitation Model (GALWEM), and Norwegian agencies. The holistic forecast showed the weather remaining sufficient for GT31 to conduct flight under "visual flight rules" conditions for the planned duration of the mission. [FF 110-123]

(3) In addition, two findings are indicative that the weather developed as forecast. The first is the conduct of the pilots during flight operations. GT31 initially launched at 1100 and flew for approximately three hours before returning to Bodø for fuel. After re-fueling, the aircraft commander (Captain Tomkiewicz) made the decision to continue with the mission; it can be assumed that he would not have done so if the weather had been adverse. The second is the GoPro footage recovered from the wreckage, which reveals that the weather immediately prior to the mishap and in vicinity of the mishap location was greater than five miles of visibility with a scattered cloud deck at an altitude greater than 5000 feet above mean sea level. It is possible that the tailwind encountered in the valley may have adversely affected the turning performance of the aircraft in proximity to the terrain just prior to impact. However, similar winds were experienced by the 17 March LAT flight. Any adverse influence of the winds on the mishap aircraft's performance were a result of the profile and maneuvers conducted in the valley by the crew of GT31. It is the opinion of the IO that the weather was sufficient to conduct the assigned mission and was not a causal factor in the mishap. [FF 110-134, 187-189, 201]

c. *Whether the pilots and aircrew were sufficiently qualified, experienced and prepared to fly the mission under the conditions that were known to exist or which could reasonably have been expected.*

(1) VMM-261's commanding officer made a reasonable and risk-mitigated decision to assign the crew to the 18 March 2022 flight schedule supporting COLD RESPONSE tasking and squadron training. The squadron had established procedures that demonstrated an elevated level of respect for the dynamic nature of the Norwegian weather patterns and aviation risks associated with mountainous operations. Prior to deploying to Norway, the squadron exceeded requirements by conducting a customized training syllabus with proscribed academics and simulation events to prepare aircrew for mountainous and cold weather operations. Both Captain Tomkiewicz and Captain Reynolds took part

in the pre-deployment training, received the flight safety briefs from Norwegian officials, and had ample exposure to squadron risk mitigation measures concerning terrain and weather. [FF 1-79, 184-186]

(2) An extensive review of training records shows that all four personnel aboard GT31 were qualified and prepared to carry out the mission as assigned. Regarding experience levels, Captain Tomkiewicz had flown seven events in Norway, equating to 18.6 flight hours, and overflew the planned route of flight the day prior. Captain Reynolds had flown five events in Norway totaling 6.8 flight hours. Corporal Moore had 31.8 hours of flight time in Norway. Although Gunnery Sergeant Speedy had not flown for over 130 days and was still in the Aerial Observer training syllabus, he was qualified to carry out the assigned mission. Holistically, the crew of GT31 had sufficient pre-deployment training, country briefs, mission planning and execution considerations, and exposure to Norwegian conditions to safely conduct the assigned mission. [FF 1-79, 81-90, 110-123, 183-186]

d. *Whether the aircraft had any known or suspected mechanical problems, and the extent to which these problems were resolved prior to the mission.*

(1) Interviews of VMM-261 maintenance personnel, an extensive review of BUNO 168330 maintenance records, and data recovered from BUNO 168330 were examined to determine if maintenance malpractice or catastrophic component failure were contributors to the mishap. The historical maintenance records for the preceding twelve months indicate that the aircraft was functionally capable to support the mission for which it was assigned. Although several administrative discrepancies are noted in the findings, these are not believed to be indicative of maintenance malpractice. The administrative discrepancies involved documentation errors and were most likely the result of limited computer and printer assets in the maintenance department. On maintenance work orders where component installation was improperly documented, the components in question were properly installed, documented, and annotated on follow-on work orders prior to the aircraft's next flight. [FF 135-182]

(2) Additionally, the IO consulted with the MV-22B Fleet Support Team to validate assumptions concerning recovered KVADR data. The validation process included a flight recreation and an associated engineering evaluation based on GT31's flight characteristics during the mishap flight. The post-mishap engineering assessment of recovered KVADR data indicate a single anomaly involving a right-hand PRGB torque spike. The cause of this spike was not assessed to have resulted from component failure or the loss of any component. We assess that the torque spike was most likely the result of the rotor hitting a treetop shortly before the crash. [FF 180-181]

(3) Although the existence of open work orders without in-process documentation should have administratively prevented the release of the aircraft as safe for flight, the maintenance performed was sufficient to render the aircraft actually safe to fly. The investigation discovered no indications that a maintenance action or catastrophic component failure contributed to the mishap. [FF 135-182]

e. *Any evidence of wrongdoing, negligence, or failure to follow required procedures or best practices.*

(1) It is evident that the squadron did not conform to the Training and Readiness Program Manual requirements for low-altitude tactics

scheduling. No LAT training areas were properly certified by qualified aircrew, nor was the required certification acknowledgement by the 2d MAW Commanding General (G-3) ever processed. Additionally, schedules written by the squadron with the intent to conduct LAT failed to specify the minimum altitudes authorized in accordance with 2d MAW standard operating procedures. Though the squadron may have attempted to apply the scheduling of LAT as a risk mitigation measure, their application process was flawed. [FF 90-109]

(2) The profile flown by GT31 was commensurate with weather conditions and the terrain until approximately 90 seconds before the crash. Upon entering the Gråtådalen Valley, GT31 deviated from the planned and filed altitudes and descended into the valley. After descending, GT31 began conducting high-angle of bank turns along the valley floor, at speeds approaching 260 KCAS, while maneuvering to avoid terrain at approximately 500 feet above ground level. This required significant maneuvering and placed the flight in a low-altitude tactics regime which it was not authorized to conduct and not qualified to execute with the crew onboard. This profile resulted in the crew maneuvering the aircraft in such a way as to exceed NATOPS limits, and placed the aircraft into a regime of flight that neither the crew nor the aircraft could recover from due to proximity to terrain. [FF 93-94, 100-104, 187-215]

(3) A member of GT31's aircrew was using an unauthorized GoPro video recorder during the mission and in the timeframe immediately preceding the crash. Without audio to accompany the GoPro flight footage, the IO cannot determine to what degree the unauthorized device influenced the aircrew's decision-making process. [FF 225-226]

f. *Any steps that should have been taken that would have allowed GT31 to have been flown more safely?*

(1) The chain of command for GT31 took all reasonable steps to prepare the squadron for operations in Norway's artic environment. Sufficient pre-deployment expectations and guidance were issued by 2d MAW, MAG-26, and the VMM-261 commanding officer which resulted in the squadron conducting an extensive training syllabus of flights/simulators and education outside of Training and Readiness Manual requirements, the development of unique flight procedures, and cold weather equipment supplementation which demonstrated a respect for the risks of flight operations in Norway. [FF 19, 39, 184-186]

(2) Although VMM-261 did fail to conduct proper administrative procedures regarding the scheduling and certification of the LAT route, this failure did not result in a "normalization of deviance" within the squadron with regards to the execution of LAT by aircrew. When LAT was deliberately scheduled - as evidenced by the 17 March 2022 mission - the squadron conducted it safely and within the performance capabilities of both the aircraft and aircrew. To illustrate this further, the crews on 17 March 2022 were scheduled to conduct LAT on the "Bravo" route. It is reasonable to assume that they understood that they were executing the mission in accordance with all governing directives since they were executing a schedule signed by the squadron commanding officer. They understood the route to be authorized and approved to fly on, and then flew it according to policy. It is unlikely that further efforts by VMM-261 to certify the route beforehand would have significantly changed the flight events or profile of 17 March 2022. Any possible influence of the 17 March 2022 flight on the decisions made by the crew of GT31 could only have been mitigated by not scheduling the

17 March 2022 LAT mission. However, it is impossible for the squadron to have predicted any such possible influence on the mishap crew because GT31 was not scheduled or authorized to conduct LAT on the day of the mishap. Without specific guidance given via the flight schedule, the choice to conduct the route of flight that ended in GT31's crash was a deliberate decision to disregard policy. [FF 90-99]

2. The IO and AIO thoroughly pursued the possibility that dynamic arctic weather patterns were a significant contributor to the mishap. This theory was supported, at least initially, by SAR weather accounts at the mishap site, temporary forecast lines taken from weather reports, pilot interviews, first-hand observation of local weather patterns, and post-mishap weather analysis products. The last thirty-five seconds of the GT31 flight recreation, and the reconstruction of the flight path into the Gråtådalen Valley would also support this hypothesis when viewed through the lens of weather avoidance. The recovered GoPro footage, however, clearly shows that while degraded weather was encountered earlier in the flight, it was not a significant factor in the vicinity of the mishap location. [FF 112-116, 120-123, 187-202, 220-225]

Recommendations

1. No further investigation is needed, and no punitive actions are required.

2. Video debriefing techniques are accepted practices across several platforms in the Marine Corps. However, the MV-22B community does not possess a video or active voice recording system. Without such a system, the ability to analyze post-flight information is reduced to raw number interpretation, aircrew recollection, maintenance data visualization, or two-dimensional position and orientation information. The lack of full-motion video (FMV) recording in the MV-22B has been highlighted as a deficiency during numerous Aviation Safety Operational Advisory Groups and was included as a recommendation following a 2014 MV-22B wire strike mishap. The capability has yet to be incorporated into the MV-22B, but should be acquired as quickly as possible through aircraft engineering or commercial off-the-shelf means. An ancillary effect of adding FMV to the MV-22B cockpit may be the impact on the cognitive processes of the aircrew. If the unauthorized employment of a video recording device can be construed as negatively influencing aircrew to make bad decisions, then the authorized employment of an institutional video recording device may encourage sound decisions and positive safety outcomes.

3. The squadron put extensive rigor into developing an additive syllabus beyond Training and Readiness Manual requirements to prepare aircrew for expected operating conditions in Norway. This syllabus should be promulgated as a "Best Practice" for future MV-22B cold-weather/arctic operations and serve as a standard to replicate for units deploying to unique and challenging environments.

4. East Coast MV-22B squadrons are at a disadvantage regarding exposure frequency to operations in mountainous terrain compared to other MV-22B units. As part of pre-deployment training, squadron deployments to locations providing exposure to general flight and LAT operations in mountainous terrain should be supported and funded as critical mission requirements.

5. The verbiage utilized by the Training and Readiness Program Manual conflates the term "low altitude tactics" as "low altitude training" in such

a way as to restrict an MV-22B commander's ability to utilize LAT proficiency and currency as a risk mitigation tool. The unique operating envelope of the MV-22B crosses fixed-wing and rotary-wing profiles, allowing for situations in which an MV-22B may operate routinely below 500 feet above ground level safely. If a commander wishes to take advantage of the proficiency and currency management of MSHARP in a situation in which crews may expect to encounter conditions which drive them to "low altitude", it must be scheduled. However, as the policy is written, a commander who does so may face scrutiny for the scheduling of LAT without an "approved LAT training area". The verbiage of the Training and Readiness Program Manual should be updated for MV-22B LAT to clarify the differences between the execution of LAT and the application of guidelines towards specified LAT "training."

6. The flight characteristics and normal operating envelope of the MV-22B create unique challenges when attempting to define and mitigate the risk of low altitude flight. The Training and Readiness Program Manual definition allows for much open-ended interpretation. This definition may allow for flexibility on a commander's behalf for conducting flight operations, but also may lead to a false sense of security when certain listed components of LAT are not met. LAT considerations are also not applied when discussing MAT, where the focus of training is not on en-route operations (where terrain and/or weather may drive personnel into a LAT regime) but on the landing environment. The MV-22B community, along with MAWTS-1, must convene a working group to discuss the issue of better defining LAT and integrating LAT / MAT together into more cohesive concepts.

(b)(3), (b)(6), (b)(7)c

UNITED STATES MARINE CORPS
2D MARINE AIRCRAFT WING
II MARINE EXPEDITIONARY FORCE
FLEET MARINE FORCES
POSTAL SERVICE CENTER BOX 8050
CHERRY POINT, NC 28533-0050

IN REPLY REFER T
5800
SJA
MAR 2 3 2022

From: Commanding General, 2d Marine Aircraft Wing, FMF
To: (b)(3), (b)(6), (b)(7)c USMC

Subj: COMMAND INVESTIGATION INTO THE MV-22 AVIATION MISHAP THAT OCCURRED ON 18 MARCH 2022 DURING EXERCISE COLD RESPONSE

Ref: (a) JAGINST 5800.7F w/ch 1 (JAGMAN)

1. This letter appoints you, per chapter II of the reference, to investigate the MV-22 aviation mishap that occurred in the vicinity of Bodo, Norway on 18 March 2022 and resulted in the death of four Marines. At a minimum, your investigation will address the following issues:

a. The circumstances under which the MV-22 mission, call-sign Ghost 31, was tasked and the degree to which the mission was necessary.

b. Whether the mission could or should have been delayed or cancelled due to weather or any other factor.

c. Whether the pilots and aircrew were sufficiently qualified, experienced and prepared to fly the mission under the conditions that were known to exist or which could reasonably have been expected.

d. Whether the aircraft had any known or suspected mechanical problems, and the extent to which those problems were resolved prior to the mission.

e. Any steps that should have been taken that would have allowed the Ghost 31 mission to have been flown more safely.

f. Whether there was wrongdoing, negligence, or failure to follow required procedures or best practices by any member of 2d Marine Aircraft Wing.

2. You will provide your findings of fact, opinions and recommendations in writing no later than 21 April 2022. This investigation is your primary duty until it is completed. Request additional time via the Staff Judge Advocate if you believe an extension is needed.

3. (b)(3), (b)(6), (b)(7)c U.S. Marine Corps, is appointed hereby as an assistant investigating officer (IO). (b)(3), (b)(6), (b)(7)c will provide technical expertise regarding the MV-22 platform, and is

Enclosure (1)

available to help in the compilation of your report in whatever manner may be necessary.

4. You are directed to seek the assistance of the Office of the Staff Judge Advocate before beginning your investigation. The point-of-contact is Colonel Joseph M. Jennings, who can be reached at (252)466-8163 or via e-mail at: joseph.m.jennings@usmc.mil.

Michael S. Cederholm

M. S. CEDERHOLM

Enclosure (1)

UNITED STATES MARINE CORPS
2D MARINE AIRCRAFT WING
II MARINE EXPEDITIONARY FORCE
FLEET MARINE FORCES
POSTAL SERVICE CENTER BOX 8050
CHERRY POINT, NC 28533-0050

IN REPLY REFER TO:
1920
SJA
MAY 22 2022

From: Commanding General, 2d Marine Aircraft Wing, FMF
To: (b)(3), (b)(6), (b)(7)c USMC

Subj: COMMAND INVESTIGATION INTO THE MV-22 AVIATION MISHAP THAT OCCURRED ON 18 MARCH 2022 DURING EXERCISE COLD RESPONSE

Ref: (a) JAGINST 5800.7F w/ch 1 (JAGMAN)

1. The request for an extension has been approved. Your investigation is now due close of business 21 June 2022.

2. The point of contact for questions or concerns is the Office of Staff Judge Advocate, (b)(6), (b)(7)c at (252)466-3559 or via e-mail at: (b)(6), (b)(7)c.

(b)(6), (b)(7)c

J. M. JENNINGS
By direction

Copy to:
Files

Enclosure (2)

UNITED STATES MARINE CORPS
2D MARINE AIRCRAFT WING
II MARINE EXPEDITIONARY FORCE
FLEET MARINE FORCES
POSTAL SERVICE CENTER BOX 8050
CHERRY POINT, NC 28533-0050

IN REPLY REFER TO:
1920
SJA

APR 21 2022

From: Commanding General, 2d Marine Aircraft Wing, FMF
To: (b)(3), (b)(6), (b)(7)c USMC

Subj: COMMAND INVESTIGATION INTO THE MV-22 AVIATION MISHAP THAT OCCURRED ON 18 MARCH 2022 DURING EXERCISE COLD RESPONSE

Ref: (a) JAGINST 5800.7F w/ch 1 (JAGMAN)

1. The request for an extension has been approved. Your investigation is now due close of business 21 May 2022.

2. The point of contact for questions or concerns is the Office of Staff Judge Advocate, (b)(6), (b)(7)c at (252)466-3559 or via e-mail at: (b)(6), (b)(7)c.

JENNINGS.JOSEPH.MCPHERSON.(b)(6), (b)(7)c
Digitally signed by JENNINGS.JOSEPH.MCPHERSON.(b)(6), (b)(7)c
Date: 2022.04.27 10:27:24 -04'00'

J. M. JENNINGS
By direction

Copy to:
Files

Enclosure (2)

~~CUI~~

UNITED STATES MARINE CORPS

MARINE MEDIUM TILTROTOR SQUADRON 261 (-) REINFORCED, COLD RESPONSE DETACHMENT
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING, FMF
POSTAL SERVICE CENTER BOX 21016
JACKSONVILLE, NC 28545-1016

MISSION: *SUPPORT THE MAGTF COMMANDER BY PROVIDING ASSAULT SUPPORT TRANSPORT OF COMBAT TROOPS, SUPPLIES AND EQUIPMENT, DAY OR NIGHT, UNDER ALL WEATHER CONDITIONS DURING EXPEDITIONARY, JOINT, OR COMBINED OPERATIONS.*

FLIGHT SCHEDULE FRIDAY, 18 MARCH 2022 (2077)

ODO:
DO (OPS 5 :
AD (OPS 5):
SCHEDULE (24)

(b)(3), (b)(6), (b)(7)c

0830-LPOD

SCHEDULED HOURS
6.6

MAR(GOAL/SCHEDULED/EXECUTED)
210.1 /130.9/ 87.1
QTR
600.3 /493.4/ 378.9
FY
2426.0 / 799.9/ 673.9

ENBO	FIELD HOURS: 24 HRS QUIET HOURS: NONE	BMNT / SR: 0412 / 0611	SS / EENT: 1812 / 2013	MR / MS: 1815 / 0703	ILLUM: 100%	LLL: NONE HLL: 2013-0407*

EVENT	TMR	BRF	ETD	ETR	HRS	AIRCREW	TRAINING CODES	MISSION	NOTES	CONFIG
GHOST 3-0 MV-22B	2K2	0900	TBD	TBD	TBD	(b)(3), (b)(6), (b)(7)c		FCF		
GHOST 3-1 MV-22B	1A1	0900	1100	1800	6.6	CAPT TOMKIEWICZ, M. CAPT REYNOLDS, R. CPL MOORE, J. GYSGT SPEEDY, J.	2240, 3040 2240, 3040 2240, 3040 2240P, 3040P	ALS / MARLOG	1	

@ AIR MISSION COMMANDER / # FLIGHT LEAD / ** DIVISION LEAD / * SECTION LEAD / X ATF REQUIRED / R NOT PROFICIENT / P PROFICIENCY EXPIRES W/I 90 DAYS
** UNLESS OTHERWISE INDICATED, ALL FLIGHTS WILL ORIGINATE AND TERMINATE AT BODØ AIR BASE (ENBO) **

FLIGHT NOTES:

1. TBD: CREW TO MARLOG AT ENKJ.

ADMIN NOTES:

START	END	LOCATION	REMARKS	NOTES	POC
0900	0930	OPS 5	MAINTENANCE MEETING	ALL DESIGNATED PERSONNEL TO ATTEND	(b)(3), (b)(6), (b)(7)c
0	1030	CAVES	INTEL BRIEF	S-2 PERSONNEL TO ATTEND	
0	TBD	OPS 5	TRAP PLANNING CELL	ALL AVAILABLE PILOTS	
1200	1200	CAVES	RETROGRADE MEETING	ALL DESIGNATED PERSONNEL TO ATTEND	
1330	1400	MS TEAMS	APB	ASRs FOR FOLLOWING DAYS VERIFICATION	
1400	1445	OPS 5	TRAP FORCE REHEARSAL MEETING	ALL 19 MARCH TRAP FORCE TO ATTEND	
NLT	1500	INDIVIDUAL SPACES	SITREP INPUTS DUE TO S-3	ALL SHOPS TO SUBMIT	
NLT	1600	OPS 5	SITREP DUE TO MAW G-3	S-3 TO SUBMIT	
NLT	1600	OPS 5	ATO INPUTS DUE TO MAW G-3	OPS CLERKS TO SEND TO (b)(3), (b)(6), (b)(7)c (b)(3), (b)(6), (b)(7)c	
1900	1930	OPS 5	MAINTENANCE MEETING	ALL DESIGNATED PERSONNEL TO ATTEND	

OPS: /S/
DSSN: /S/
MAINT: /S/

(b)(3), (b)(6), (b)(7)c

COMMANDING OFFICER

ENCLOSURE (3)

VMM-261 NATOPS AUDIT SHEET

NAME: TOMKIEWICZ DATE: 6/30/21 AUDITOR: (b)(3), (b)(6), (b)(7)c

SECTION I - GENERAL

PRIVACY ACT STATEMENT - SIGNED AND DATED / RECORD OF DISCLOSURE ✓

PART A

- NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET REVIEW AND CERTIFICATION RECORD (3760/32A) ✓
  - REVIEWED & CERTIFIED - REPORTING / ANNUALLY / CHANGE IN FLIGHT STATUS

PART B

- PILOTS - ONLY MOST CURRENT PCS (DIFOP) ORDERS ✓
- ENLISTED AIRCREW - VOLUNTARY FLIGHT STATUS LETTERS NA
- LETTERS OF SUSPENSION / REVOCATION PERMANENTLY RETAINED ✓

PART C

- MOST RECENT ANNUAL FLIGHT PHYSICAL CHIT (6410/2)(Only the most recent) ✓
- ALL GROUNDING AND SUBSEQUENT UP CHITS SINCE ANNUAL ✓
- WAIVER FORMS PERMANENTLY RETAINED ✓

PART D

- FLIGHT EQUIPMENT RECORDS CS (DIFOP) ORDER (3760/32B)(NATOPS sign the bottom) ✓

SECTION II - QUALIFICATIONS AND ACHIEVEMENTS

PART A

- PERMANENT RECORD OF ALL FUNCTIONAL DESIGNATIONS (3760/32C) (All previous letter from CO) ✓
- RETENTION OF DESIGNATION LETTERS FOR ALL DESIGNATIONS (3760/32C) ✓
  (Ensure an ATF entered ion APR and logbook updated)

PART B

- PERMANENT RECORD OF ALL QUALIFICATIONS NOT INCLUDED IN PART A ✓
- RETENTION OF DESIGNATION LETTERS FOR ALL QUALIFICATIONS (3760/32C) ✓
  (Ensure an ATF entered and logbook updated)

PART C

- PERMANENT RECORD OF CRM TRAINING AND FLIGHTS ✓
  (Matches NATOPS/Inst Check / retain annual class roster / CRMI/F logged)

SECTION III - TRAINING

PART A

- RECORD OF ALL SCHOOLS AND COURSES ATTENDED (3260/32E)(GWOT-5 no longer req) ✓
- COPY OF ALL TRAINING COMMAND / FRS SUMMARIES SINCE 01 JAN 88 ✓

PART B

- PERMANENT RECORD OF ALL SURVIVAL TRAINING (3760/32F ✓
- NITE LAB TRAINING DOCUMENTATION ✓
- ANNUAL EGRESS TRAINING DOCUMENTATION (3760/32F) ✓
  (Check EMER EGRESS completed on NATOPS check)

PART C

- ALL EXAMS PERTINENT TO AVIATION QUALIFICATIONS ✓
  (Current IGS, OPEN/CLOSED book, update coverpage SEC III.C exams)

PART D

- ALL NATOPS EVALUATION RECORDS (3710/7) (Kneeboard card and report, numerical grade for open/closed book, ensure egress/CRM complete, update SEC II.C. Misc and SEC III.B. Egress, update logbook) ✓

PART E

- ALL INSTRUMENT RATING REQUESTS (3710/2) ✓
  (Kneeboard card/application, applicant signed application, update CRM/Egress as req, update logbook)
- INSTRUMENT QUALIFICATION WAIVERS

SECTION IV - FLIGHT RECORDS

PART A

- (No longer req, MSHARP) ✓

PART B

- PERMANENT RECORD OF ALL AIRCRAFT/MISHAPS FLIGHT VIOLATIONS INVOLVING AN AIRCREW CAUSAL FACTOR, AND FNAEB RESULTS. FNAEB ENTRY SHALL CONTAIN: ENTRIES AUTHORIZED BY PARAGRAPH 10.5.2.8, DATE OF THE FNAEB, AND CO COMMENTS. CO MAY NOT DELEGATE THIS RESPONSIBILITY. (3760/32H) ✓

ENCLOSURE (4)

ATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

SECTION IA - REVIEW AND CERTIFICATION RECORD

NAME (Last, first, middle initial)	SSN
TOMKIEWICZ, MATTHEW, J.	

1. This jacket shall be reviewed by the Commanding Officer or a designated representative as follows:
   a. Upon reporting to a unit.
   b. Annually, within 30 days of birthday.
   c. Upon change in flying status.
2. This jacket shall be certified by the Commanding Officer or a designated representative upon detachment of the individual.

RECORDS OF REVIEW

DATE	SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE
3 FEB 18	(b)(3), (b)(6), (b)(7)c				
26 JUL 18					
03 JUN 19					
11 DEC 19					
23 JUN 20					
30 JUN 21					

DETACHMENT CERTIFICATION

UNIT	DATE	SIGNATURE	UNIT	DATE	SIGNATURE
VT3	8 JUN 18	(b)(3), (b)(6), (b)(7)c			
HT8	5 NOV 18				
VT35	3 MAY 19				
VMMT-204	18 NOV 19				

OPNAV 3760/32A (APR 1981)

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE CORPS AIR STATION, NEW RIVER
PSC BOX 21072
JACKSONVILLE, NORTH CAROLINA 28545-1072

1000
PERS
27 Nov 19

FIRST ENDORSEMENT on CMC Washington DC Basic Orders of 19 October 2019

From: Director, Installation Personnel Administration Center, Marine Corps Air Station New River
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7599 USMC

Subj: PERMANENT CHANGE OF ASSIGNMENT ORDERS

1. Delivered. Effective 0800, 21 November 2019 you will stand detached from your present station and duties and report by 1500, 21 November 2019 to COMMANDING OFFICER, VMM-261 MAG-26 2D MAW, PSC BOX 21015, JACKSONVILLE, NORTH CAROLINA 28545 (MCC VM2) for duty.

2. No entitlements are authorized in connection with these orders.

3. Upon arrival at your new duty station you are required to recertify your entitlement to BAH per the JTR Ch 10 para 10100.C.

4. REQUEST FOR RETIREMENT/RESIGNATION WILL BE IN ACCORDANCE WITH MCO 1811.1C.

5. These orders are Permanent Change Of Assignment Orders Duty in a flying status involving operational flights (DIFOP).

(b)(6), (b)(7)c

By direction

Copy to:
Files

RECEIVING ENDORSEMENT

1. I have read and understand the contents of my orders. I received these orders at Jacksonville, North Carolina at 0800 on 21 November 2019. I understand that I am to report no later than 1500, 21 November 2019, to COMMANDING OFFICER, VMM-261 MAG-26 2D MAW, PSC BOX 21015, JACKSONVILLE, NORTH CAROLINA 28545 VM2 for duty. I have in my possession my medical and dental records.

M. J. TOMKIEWICZ

ENCLOSURE (4)

MARINE CORPS BASIC ORDER

RANK: CAPT NAME: MATTHEW J TOMKIEWICZ EDIPI: 1512971110 PMOS: 7532
C: VM2 PRESENT COMMAND: 2D MAW (STUD PERS) JACKSONVILLE NC

HQMC ORDER DETAILS - 20191022

FMCC: VM2	FUTURE COMMAND: VMM 261 MAG 26 2DMAW NEW RIVER NC	TOUR: 48 MONTHS, CONUS (OPERATIONAL-NO COST REASSIGNMENT OR PCA)
ESTIMATED DETACH DATE: 20191120	REPORT NO LATER THAN: 20191121	BILLET: 7532, O3, DIFOP

THIS IS AN INVOLUNTARY ASSIGNMENT.

A SECRET SECURITY CLEARANCE IS REQUIRED FOR THIS ASSIGNMENT.

20191022 - Original Order

PCA (DIFOP) (TOUR LENGTH 48 MONTHS)

1. DIR SNO RPT NLT 21 NOV 2019 TO CO VMM 261 MAG 26 2DMAW NEW RIVER NC (MCC VM2) DUTY IN FLYING STATUS INVOLVING OPERATIONAL FLIGHTS (DIFOP).
2. INCLUDE IN ORDERS ISSUED: REQUEST FOR RETIREMENT/RESIGNATION WILL BE IN ACCORDANCE WITH MCO 1900.16.
3. NO ENTITLEMENTS ARE AUTHORIZED IN CONNECTION WITH THIS ASSIGNMENT.

TRAVEL FUNDING DETAILS

There is no travel funding associated with these no-cost orders

ORIGINAL ORDERS

UNITED STATES MARINE CORPS
MARINE AVIATION TRAINING SUPPORT GROUP 22
TRAINING COMMAND
271 FIFTH STREET
NAS CORPUS CHRISTI, TEXAS 78419

IN REPLY REFER TO:
1320
S-1
7 May 19

SECOND ENDORSEMENT on CMC Washington DC Basic Orders of 25 Apr 19

From: Commanding Officer, Marine Aviation Training Support Group 22
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7531 USMC

Subj: MODIFICATION TO PERMANENT CHANGE OF STATION ORDERS (DUINS)

1. The following modifications to paragraph (1) of PCS Orders are authorized:

Delivered. Effective 0800, 17 May 2019 you will stand detached from your present station and duties and report by 2359, 31 May 2019 to COMMANDING OFFICER, VMMT-204, MAG 26, 2D MAW NEW RIVER, JACKSONVILLE, NORTH CAROLINA 28540 (MCC J9V) for duty under instructions (DUINS).

2. The point of contact for this matter is (b)(6), (b)(7)c at (361) 961-3486 or (b)(6), (b)(7)c.

(b)(6), (b)(7)c
By direction

Required documents:
Reporting endorsements, All Original PCS/TEMINS/DUINS orders, Web Orders, Port Calls (Coming from Overseas), Lodging Receipts (As applicable), Bus/Flight Itineraries

Sgt's and below W/O Depns not issued a meal card: NAVMC 10522 signed by CO

Married Member to Member: Last 12 Months of LES for spouse (If spouse in another service)

Accession Pipeline: Boot Camp Orders and MCT Orders MOS School Orders Training Certificates, Awards, Reclassification Message

Appointment Date: 20190531 Time: 1400

MCAS NEW RIVER IPAC
YOU REPORTED TO IPAC INBOUND
AT 0914 ON 20190531
MEAL CARD ISSUED Y/N
WILL GOV'T QTRS BE ASSIGNED Y/N
CHECKED IN BY (b)(6), (b)(7)c

UNITED STATES MARINE CORPS
MARINE AVIATION TRAINING SUPPORT GROUP 22
TRAINING COMMAND
271 FIFTH STREET
CORPUS CHRISTI, TEXAS 78419

IN REPLY REFER TO:
1320
S-1
14 May 19

FIRST ENDORSEMENT on CMC Washington DC Basic Orders of 25 April 2019

From: Commanding Officer, Marine Aviation Training Support Group 22
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7599 USMC

Subj: PERMANENT CHANGE OF STATION ORDERS

Encl: (1) PERMENANT CHANGE OF STATION (PCS)

1. Delivered. Effective 0800, 17 May 2019 you will stand detached from your present station and duties and report by 2359, 31 May 2019 to COMMANIDING OFFICER, VMMT-204, MAG 26, 2D MAW NEW RIVER, JACKSONVILLE, NORTH CAROLINA 28540 (MCC J9V) for duty.

2. You are authorized 0 day(s) proceed, 0 day(s) PDMRA, 9 day(s) delay chargeable as annual leave, and 5 day(s) travel via 2 Private Vehicles in reporting to your new duty station. Your projected leave balance upon completion of authorized delay is 41.5 day(s) accrued. Your dependents authorized travel under these orders are:

(b)(6), (b)(7)c

3. Should an emergency arise and you determine that more leave is required, contact your new command. Your request must include the reason, number of days requested, leave address, telephone number and your leave balance. You have given your leave address as: (b)(6), (b)(7)c (b)(6), (b)(7)c telephone number: (b)(6), (b)(7)c. You have given the person to be notified in case of emergency as: (b)(6), (b)(7)c address as: (b)(6), (b)(7)c; telephone number (b)(6), (b)(7)c
Any change of leave address shall be reported to the Commanding Officer of your new duty station.

4. Before making any rental or lease agreements or purchasing a home, you will report to the local military family housing office at your new duty station. You will submit your travel claim to the disbursing officer at your new duty station within 5 days after completion of travel to settle travel expenses. Failure to comply will result in your pay account being checked for your travel advance. Additionally, elapsed time will be charged as leave if your travel claim has not been submitted to the disbursing officer within 30 days after completion of travel under these orders.

5. Your estimated travel entitlement is $4,219.00 based on MCTFS data at the time the order was issued. It does not include any adjustments based on your outbound interview answers. Limit your GTCC use to no more than 80% of this amount. If traveling on Government procured transportation your reimbursement amount will be lower than this estimate. The actual amount of final entitlements will be computed upon settlement of your travel claim. Also at the time of settlement you are required to split disburse all charges placed on your card during your PCS move. Any GTCC use outside of PCS entitlements constitutes misuse. Contact your APC for any GTCC related questions and your supporting personnel administrative center for any PCS entitlement questions.

ENCLOSURE (4)

Subj: PERMANENT CHANGE OF STATION ORDERS

Your estimated travel entitlements are as follows:

Travel Allowance Estimates	
Member Military Air Commercial Travel:	$0.00
Member Per Diem:	$745.00
Member Mileage Allowance:	$265.00
Family Member Military Air Commercial Travel:	$0.00
Family Member Per Diem:	$558.00
Dislocation Allowance:	$2,651.00
Member Total Allowances:	$3,661.00
Family Member Total Allowances:	$558.00

6. A Temporary Lodging Expense (TLE) allowance is authorized for a total of 10 days (or 5 days, if from a Permanent Duty Station (PDS) in CONUS to a PDS outside CONUS) in connection with permanent change of station. These temporary lodgings must be in fact a temporary place of residence, acquired in the vicinity of your old or new PDS or both. You should try to obtain government quarters first. If available, you must obtain a statement of non-availability from the local commander, if you intend to claim TLE. If your old or new PDS where the TLE was incurred is not located at a post, camp, station, base, or depot or if it is in a city or metropolitan area, the statement of non-availablity is not required.

7. Upon arrival at your new duty station you are required to recertify your entitlement to BAH within 30 days of joining the command per reference(s).

8. You are further advised that in accordance with MCO 1000.6 you may be eligible for 10 days permissive TAD house hunting, upon arrival to your new duty station.

9. For emergency medical care while traveling go to the nearest emergency room and contact your Primary Care Manager (PCM) or Tricare Regional Representative within 24 hours in order to notify Tricare that services have been received. For non-emergency, urgent or routine care please contact your present Tricare Region as these items may require a referral from your PCM. It is recommended that all routine care be completed prior to detaching from your current command. A list of Tricare regions, resources and guidance on obtaining care while en route is available at: http://tricare.mil/GettingCare/Traveling.aspx or by calling 1-800-TRICARE (874-2273).

(b)(6), (b)(7)c

By direction

Subj: PERMANENT CHANGE OF STATION ORDERS

RECEIVING ENDORSEMENT

1. I have read and understand the contents of my orders. I received these orders at Corpus Christi, Texas 78419 on 17 May 2019. I understand that I am to report no later than 2359, 31 May 2019 , to COMMANIDING OFFICER, VMMT-204, MAG 26, 2D MAW NEW RIVER, JACKSONVILLE, NORTH CAROLINA 28540 (MCC J9V) for duty. I have in my possession my medical and dental records.

M. J. TOMKIEWICZ

MEDICAL RECOMMENDATION FOR FLYING OR SPECIAL OPERATIONAL DUTY

(Read Privacy Act Statement and Instructions on back before completing form.)

1. TO:	2. FROM:		3. DATE (YYYYMMDD)
CO: VMM-261	Flight Surgeon: MCAS New River		20210823
4. MEMBER NAME (Last, First, Middle Initial)	**5. IDENTIFICATION NUMBER**	**6. GRADE**	**7. DATE OF BIRTH** (YYYYMMDD)
TOMKIEWICZ, MATTHEW J	1512971110	CAPT	19940620
8. ORGANIZATION	**9. TYPE OF DUTY**	**10. FLIGHT PHYSICAL DATE** (YYYYMMDD) (If applicable)	
USMC	DIACA SG1	20210823	

11. UP: THE ABOVE INDIVIDUAL HAS BEEN FOUND QUALIFIED BY MEDICAL AUTHORITY.

a. X one:

- [ ] CLEARED AFTER (X): [ ] Temporary medical disqualification [ ] Waiver recommended (Not USAF) [ ] Aircraft mishap
  [ ] Reporting to new duty station [ ] Waiver granted [ ] Other (See remarks)
- [X] CLEARED AFTER FLIGHT DUTY MEDICAL EXAMINATION

b. EFFECTIVE DATE (YYYYMMDD)	c. EXPIRATION DATE (YYYYMMDD)
20210823	20220630

12. DOWN: THE ABOVE INDIVIDUAL HAS BEEN FOUND DISQUALIFIED BY MEDICAL AUTHORITY.

a. X one:

- [ ] TEMPORARY DISQUALIFICATION DUE TO (X): [ ] Illness or Injury [ ] Aircraft mishap [ ] Other (See remarks)
  MAY PARTICIPATE IN (X): [ ] Simulator duties [ ] Ground based flight line duties [ ] Other (See remarks)
- [ ] PERMANENT DISQUALIFICATION

b. EFFECTIVE DATE (YYYYMMDD)	c. ESTIMATED DURATION OF GROUNDING

13. REMARKS/LIMITATIONS

- [ ] VISION CORRECTION DEVICES REQUIRED IN THE PERFORMANCE OF FLIGHT DUTIES.
- [ ] MUST CARRY EXTRA SPECTACLES.

14. *(X one)*: [X] **FLIGHT SURGEON** [ ] **OTHER** *(Countersignature required for Air Force and Navy upslip)*

a. TYPED NAME (Last, First, Middle Initial)	b. GRADE	c. PROVIDER SIGNATURE	d. DATE SIGNED (YYYYMMDD)
(b)(6), (b)(7)c	LCDR	(b)(6), (b)(7)c	20210823
e. TYPED NAME (Last, First, Middle Initial)	**f. GRADE**	**g. FLIGHT SURGEON COUNTERSIGNATURE**	**h. DATE SIGNED** (YYYYMMDD)

15. MEMBER CERTIFICATION

a. I certify that I understand the above recommendations and that I:	b. AIRCREW MEMBER SIGNATURE	c. DATE SIGNED (YYYYMMDD)
[X] MAY [ ] MAY NOT perform flight duties.	Matt	20210823

16. ACTION TAKEN BY COMMANDER *(Not required for Air Force and Navy)* [ ] APPROVE [ ] DISAPPROVE

a. TYPED NAME (Last, First, Middle Initial)	b. TITLE	c. SIGNATURE	d. DATE SIGNED (YYYYMMDD)

DD FORM 2992, JAN 2015 REPLACES DA FORM 4186, AF FORM 1042, AND NAVMED FORMS 6410/1 AND 6410/2, WHICH ARE OBSOLETE. Adobe Designer 9.0

ENCLOSURE (4)

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

SECTION IIA – FLIGHT PERSONNEL DESIGNATION RECORD

NAME *(Last, first, middle finitial)* TOMKIEWICZ, MATTHEW, J. | SSN

DATE	DESIGNATION	MODEL	UNIT	PROMULGATION BY	VERIFIED
25 Apr 19	Naval Aviator	T44C	VT35	(b)(3), (b)(6), (b)(7)c	
9 OCT 19	T2P	MV-22B	VMMT-204		

OPNAV 3760/32C (APR 1981)

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE AIRCRAFT GROUP 26
2D MARINE AIRCRAFT WING
U.S. MARINE CORPS FORCES COMMAND PSC BOX 21111
JACKSONVILLE NC 28545-1111

IN REPLY REFER TO:
3710
DSSN
8 Feb 22

From: Commanding Officer, Marine Aircraft Group 26
To: Captain Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: TILTROTOR AIRCRAFT COMMANDER DESIGNATION

Ref: (a) CNAF-M 3710.7
(b) NAVMC 3500.11
(c) GruO 3710.32

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby designated Tiltrotor Aircraft Commander.

2. This letter will be maintained in your Naval Aviation Training and Standard Operating Procedures Standardization Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APP
Logbook entry

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR TRAINING SQUADRON 204
MARINE AIRCRAFT GROUP 26
2D MARINE AIRCRAFT WING
PSC BOX 21018
JACKSONVILLE, NC 28545-1018

3710
DSSN
09 Oct 19

From: Commanding Officer, Marine Medium Tiltrotor Training Squadron 204
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: DESIGNATION

Ref: (a) CNAF M-3710.7
(b) NAVMC 3500.11F
(c) A1-V22AB-NFM-000

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby designated as a Tiltrotor Second Pilot (T2P).

2. This letter will be maintained in your NATOPS Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APR
Logbook entry

ENCLOSURE (4)

DEPARTMENT OF THE NAVY
TRAINING AIR WING FOUR
245 FIFTH STREET SUITE 105
CORPUS CHRISTI TX 78419-5008

1500
Ser N00/0358
APR 25 2019

From: Commander, Training Air Wing FOUR
To: First Lieutenant Matthew J. Tomkiewicz 7531 USMC

Subj: DESIGNATION AS A NAVAL AVIATOR

Ref: (a) CNATRAINST 1500.4H

1. Pursuant to the provisions of reference (a), and having demonstrated those qualities of sound judgment and professional competence in your completion of the Advanced Multi-Engine Flight Training Syllabus of the Naval Air Training Command, you are designated a Naval Aviator effective 3 May 2019.

2. Congratulations on a job well done!

(b)(3), (b)(6), (b)(7)c

Copy to:
VT-35
PERS-4320
MATSG-22

ENCLOSURE (4)

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET
OPNAV 3760/32D (4-90)

SECTION IIB – MISSION QUALIFICATION RECORD

NAME (Last, first, middle linitial) TOMKIEWICZ, MATTHEW, J. | SSN

EFFECTIVE DATE	TYPE AIRCRAFT	MISSION QUALIFICATION	UNIT	REMARKS
29 NOV 19	MV-22B	ODO	VMM-261	(b)(3), (b)(6), (b)(7)c
4 APR 20	MV-22B	DAY LAT	VMM-261	
*2 APR 20	MV-22B	HLL	VMM-261	
23 APR 20	MV-22B	NSQ	VMM-261	
13 MAY 20	MV-22B	NS LAT	VMM-261	

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

3710
DSSN
13 May 20

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: NIGHT SYSTEMS LOW ALTITUDE TACTICS QUALIFICATION

Ref: (a) CNAF-M 3710.7
(b) NAVMC 3500.11E

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby Night Systems Low Altitude Tactics qualified.

2. This letter will be maintained in your NATOPS Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APR

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

IN REPLY REFER TO:
3710
DSSN
23 Apr 20

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: NIGHT SYSTEMS QUALIFICATION

Ref: (a) CNAF-M 3710.7
(b) NAVMC 3500.11E

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are Night Systems qualified.

2. This letter will be maintained in your NATOPS Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APR
Logbook entry

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

IN REPLY REFER TO:
3710
DSSN
4 Apr 20

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: DAY LOW ALTITUDE TACTICS QUALIFICATION

Ref: (a) CNAF-M 3710.7
(b) NAVMC 3500.11

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby Day Low Altitude Tactics qualified.

2. This letter will be maintained in your NATOPS Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APR
Logbook entry

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

IN REPLY REFER TO:
3710
DSSN
2 Apr 20

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261
To: First Lieutenant Matthew J. Tomkiewicz 1512971110/7532 USMC

Subj: HIGH LIGHT LEVEL NIGHT SYSTEMS QUALIFICATION

Ref: (a) CNAF-M 3710.7
(b) NAVMC 3500.11

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby High Light Level Night Systems qualified.

2. This letter will be maintained in your NATOPS Jacket until superseded or cancelled by subsequent correspondence.

(b)(3), (b)(6), (b)(7)c

Copy to:
Operations/APR
Logbook entry

ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

IN REPLY REFER TO:
3710.7
DOSS
29 Nov 19

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261
To: Director of Safety and Standardization

Subj: OPERATIONS DUTY OFFICER

Ref: (a) GruO 3710.32A

1. Based on the training conducted in accordance with Marine Air Group 26 Standard Operating Procedures, the following are hereby qualified as Operations Duty Officer.

Rank Name
(b)(3), (b)(6), (b)(7)c
1stLt Tomkiewicz

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

CNAFINST 1542.7(Series)
2 MAY 2016

CRM TRAINING & EVALUATION RECORD

1. NAME (Last, first, middle initial):	2. RANK:	3. EDIPI NUMBER:
TOMKIEWICZ, MATTHEW, J	2nd Lt	1519971110

Note: This form shall be permanently maintained in the NATOPS Flight Personnel Training/Qualification Jacket (Section II, Part C).

CRM IMM Instructor Course 4. Date: _____ 5. Location: _____

CRM FACILITATOR TRAINING

6. T/M AIRCRAFT	7. UNIT	8. DATE

GROUND TRAINING / FLIGHT EVALUATIONS

Note: Valid for 12 months from the last day of the month in which training/evaluation was completed.
Note: Renewal flight evaluations may be completed within 60 days preceding the expiration of the current qualification.

9. T/M AIRCRAFT	10. UNIT	11. GROUND / FLIGHT	12. INITIAL / RENEWAL	13. DATE COMPLETED	14. EXPIRATION DATE
T-6B	TW 5	G	I	29 SEPT 2017	30 SEPT 2018
T-45	VT-8	GAD	F	20SEP18	30 SEP 19
T-44C	VT35	G	I	14 DEC 19	31 DEC 20
MV22B	VMMT-204	G	I	4 JUN 19	30 JUN 20
MV22B	VMMT-204	F	I	9 OCT 19	31 OCT 20
MV22B	261	G	R	3 JAN 20	31 JAN 21
MV22B	261	F	R	25SEP20	30SEP21
MV22B	261	G	R	4JAN21	31JAN22
MV22B	261	F	R	20AUG21	30 SEP 22
MV22B	261	G	R	4 JAN 22	31 JAN 23

EXTENSIONS

15. T/M AIRCRAFT	16. UNIT	17. GROUND / FLIGHT	18. AUTHORITY	19. EXPIRATION DATE

(REV 3/2016)

Enclosure (3)

ENCLOSURE (4)

VMM-261 TRAINING ROSTER

Topic: CRM Annual

Date: 1/11/22

Instructor: (b)(3), (b)(6), (b)(7)c

	Last Name, Fl. MI.	Rank	Signature
1	(b)(3), (b)(6), (b)(7)c		
2	TOMKIEWICZ M.J.	CAPT	
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(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

CRM

VMM-261 TRAINING ROSTER

Topic: CRM

Date: _____

Instructor: (b)(3), (b)(6), (b)(7)c

	Last Name, FI, MI	Rank	Signature
1	(b)(3), (b)(6), (b)(7)c		
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8	Speedy, James W	Gy Sgt	
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ENCLOSURE (4)

VMM-261

2021 Back In The Saddle

Topic: CRM

Date: 04 JAN 2021

Instructor: (b)(3), (b)(6), (b)(7)c

	Last Name, Fl. MI.	Rank	Signature
1	(b)(3), (b)(6), (b)(7)c		
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21	[illegible] M. J.	CAPT	[signature]
22	(b)(3), (b)(6), (b)(7)c		
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ENCLOSURE (4)

VMM-261

2021 Back In The Saddle

Topic: CRM

Date: 04 JAN 2021

Instructor: _____

	Last Name, Fl. MI.	Rank	Signature
36	(b)(3), (b)(6), (b)(7)c		
49	MOORE, JACOB M.	LCol	
51	(b)(3), (b)(6), (b)(7)c		
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ENCLOSURE (4)

UNITED STATES MARINE CORPS
MARINE MEDIUM TILTROTOR SQUADRON 261
MARINE AIRCRAFT GROUP 26, 2D MARINE AIRCRAFT WING
POSTAL SERVICE CENTER BOX 21015
JACKSONVILLE, NC 28545-1015

3710
DSSN
3 Jan 20

From: VMM-261 Department of Safety and Standardization
To: NATOPS Officer, VMM-261

Subj: CRM/ORM TRAINING 2020

Ref: (a) CNAF-M 3710.7
(b) CNAF 1542.7B

1. The following personnel completed Annual CRM/ORM training as required by reference (a) and (b).

	LAST	FULL FIRST	RANK
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29	TOMKIEWICZ	MATTHEW	1STLT
30			
31			
32			
33		(b)(3), (b)(6), (b)(7)c	
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ENCLOSURE (4)

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(b)(3), (b)(6), (b)(7)c

(b)(3), (b)(6), (b)(7)c

CRM Initial/Refresher Course

Rank	Last Name	First Name	Middle Int.	Unit
(b)(3), (b)(6), (b)(7)c				VMMT 204
				VMMT 204
				VMMT 204
				VMMT 204
				VMMT 204
				VMMT 204
				~~VMMT 204~~
				~~VMMT 204~~
				~~VMMT 204~~
				~~VMMT 204~~
				~~VMMT-204~~
				~~VMMT 204~~
				VMMT · 204
1st Lt	TOMKIEWICZ	MATTHEW	J.	VMMT - 204
(b)(3), (b)(6), (b)(7)c				VMMT - 204
				VMMT - 204
				VMMT - 204
				VMMT-204
				VMMT-204

CRM Training has been conducte
Date: 4 June 2019 Signature: (b)(6), (b)(7)c, (b)(3)

CLASS 20-1

ENCLOSURE (4)

IF PREREQUISITES ARE INCOMPLETE YOU WILL NOT RECIEVE CREDIT FOR THE CLASS. YOU WILL RECEIVE A PINK SHEET. YOU WILL COMPLETE THE PREREQUISITES AND REATTEND THE CLASS

SUBJECT: PRI CRM INSTRUCTOR: VT-3 teach (b)(3), (b)(6), (b)(7)c

PRINT

	LAST NAME	FIRST NAME	RANK	SOD	CLASS
1	(b)(3), (b)(6), (b)(7)c				1749
2	TOMKIEWICZ	MATTHEW	2nd Lt	VT-3	1749
3					1749
4					1749
5					1749
6					1749
7					1749
8					1749
9					1749
10					1749
11					1742
12					1749
13					1749
14					1749
15					
16					
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29					
30					
31					
32					

(b)(3), (b)(6), (b)(7)c

DATE: 29Sept17

TIME: 1215-1415

BLDG: 3625

ROOM: 112

CODE: G0105

TOT HRS: 2.0

ENTERED BY: (b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET
OPNAV 3760/32E

SECTION IIIA – SCHOOL/COURSE ATTENDANCE RECORD

NAME (Last, first, middle): TOMKIEWICZ, MATTHEW, J.

SSN: [redacted]

RECORD ALL SPECIALIZED, FORMAL AVIATION SCHOOLS, INCLUDING:

UNDERGRADUATE PILOT/INFO
FRS SYLLABI
FIRE FIGHTING
FASOTRAGRP SYLLABI
WEAPONS SYSTEMS
FRAMP
MAINTENANCE (3M) COURSES

SCHOOL/COURSE	DATES ATTENDED	PASS/FAIL/SCORE	UNIT	REMARKS	VERIFIED BY
PRE FLT	21JUN17-6AUG17	P	NASC		(b)(3), (b)(6), (b)(7)c VT3
PRE FLT	18SEP17-6JUN18	P	VT3		VT3
Intermediate	26JUL18-22OCT18	P	VT8	—	
T44C Systems	7 Dec 18	P	VT35	—	(b)(3), (b)(6), (b)(7)c
Advance	16Nov18-1May19	P	VT35	—	

ENCLOSURE (4)

NAVAL AVIATOR AVIATION TRAINING JACKET (AT[illegible]) SUMMARY CARD

NAME (LAST, FIRST, AND MIDDLE)	RANK/SERVICE	DOD IDNUMBER (10-digit)	SEX/RACE/ETHNIC CODE
TOMKIEWICZ, MATTHEW J.	1STLT/USMC	XXX	MEX

COLLEGE	MAJOR/DEGREE	PROCUREMENT SOURCE	AQR	PFAR/FOFAR		DATE OF COMMISSION
[illegible]UE UNIVERSITY	PROFESSIONAL FLIGHT	29	6	6		18JUN16

CARRIER QUALIFICATION INFORMATION (GPA/BOARDING RATE)	CARRIER QUALIFICATION DATE (MONTH/YEAR)	
XXXX	XXXX	XXXX

TYPE OF TRAINING

AVW ☐ YES ☒ NO

ANTHROPOMETRIC CODE: 10-12-4-5

☒ PILOT ☐ NFO ☐ STRIKE ☐ NAV ☐ MARITIME ☐ STRIKE ☐ E-2/C-2 ☐ STRIKE FIGHTER ☐ E-6 ☐ HELICOPTER ☐ ATDS (E-2/C-2) ☒ MV-22

PHASE OF TRAINING	DATE REPORTED	DATE COMPLETED	RAW SCORES				NSS	
			FLIGHT/ DEVICE	ACAD	# UNSAT	# MARG	PHASE	ACAD
NIFE								
PREFLIGHT	21JUN17	08AUG17		94				48
PRIMARY	18SEP17	06JUN18	1.222	92.6			58.9	46.5
PRIMARY 2 (NFO)								
INTERMEDIATE 1	26JUL18	22OCT18	1.051	94			53.4	53.2
INTERMEDIATE 2								
ADVANCED	16NOV18	1MAY19	1.1079	96.33	1		52.7	55.2

COMPOSITE SCORE: 212

** Indicates the NSS Phase value displayed is the Flight/Device NSS score.*

SUMMARY OF FLIGHT AND SIMULATOR TRAINING IN THE NAVAL AIR TRAINING COMMAND

SQUADRON	A/C / SIM MODEL	TOTAL NUMBER OF EVENTS		TOTAL NUMBER OF HOURS		FIRST PILOT HOURS		CO-PILOT HOURS		SPECIAL CREW HOURS		NIGHT HOURS		NVG HOURS	INSTRUMENT HOURS	
		SYL	N-SYL	SYL	N-SYL	SYL	N-SYL	SYL	N-SYL	SYL	N-SYL	SYL	N-SYL		ACTUAL	SIMULATED
VT3	2F207B	9		11.7		11.7										6.5
VT3	2F208B	29		37.7		37.7						7.8				19.4
VT3	T6B	54	4	81.5	2.4	68.1		13.4	2.4			9.8	1.2		5	13.4
HT8	2B42	9	2	11.7	2.6	10.4	1.3	1.3	1.3							7.8
HT8	2C67	5		6.5		6.5										
HT8	TH57B	13		22.3		15.2		7.1								
HT8	TH57C	7		15.9		9.4		3.5		3		3.5				
VT35	T44C	38		77.2		59.1		18.1			15	10.8			12.8	15.5
VT35	T44C/OFT	34		92.8		50.6		42.2				1.3				40.5

REASON FOR ATTRITION (ENTER CODE)	PHASE/STAGE AT TIME OF ATTRITION	DATE OF ATTRITION	PIPELINE CHANGE/PROGRAM CHANGE APPROVED ☐ YES ☐ NO

[illegible] OF DESIGNATION	FLEET REPLACEMENT SQUADRON ASSIGNMENT	NEW PIPELINE/PROGRAM
03MAY19	VMMT-204 MCAS New River, NC	

ENCLOSURE (4)

NAVAL AVIATOR AVIATION TRAINING JACKET (ATJ) SUMMARY CARD

PRIOR FLIGHT TIME

PILOT CERTIFICATE:	☐ PRIVATE	☒ COMMERCIAL	☐ ATP
CIVILIAN TOTAL HOURS:		IFS: ☐ COMPLETE	☒ WAIVED
DESIGNATED MILITARY AVIATOR ☐	TOTAL HOURS:	AIRCRAFT COMMANDER HOURS:	

TRAINING REVIEW BOARD ACTIONS

PHASE	STAGE	REASON FOR BOARD	CTW RECOMMENDATION

CARRIER QUALIFICATIONS (FOR STUDENT NAVAL PILOTS ONLY)

PHASE	DATE QUAL	A/C MODEL	LANDINGS		REMARKS
			T & G	ARRESTED	
INTERMEDIATE					
ADVANCED					

COMMENTS:

NAME (LAST, FIRST, AND MIDDLE)	RANK/SERVICE	DOD IDNUMBER (10-digit)
TOMKIEWICZ, MATTHEW J.	1STLT/USMC	XXXX

NAVAL AVIATOR TRAINING STAGE GRADES - PROP

a. Enter Stage Grade on Each Newly Designated NA (CNATRA PROVIDED ADVANCE STAGE AVERAGE PERIODICALLY.)

b. Retain Original IN ATJ.

NAME:	Advance Squadron	Designation Date	Assignment
1stLt Tomkiewicz, Matthew J.	VT-35	3-May-19	MCAS New River, NC

STAGE	Squadron Average	Student's Grades	Flight Waived	Remarks: (Specific comments required on below average block of training)
CONTACT	N/A	1.140		
INSTRUMENT	N/A	1.092		
NAV(ONAV)	N/A	0.000		
NAV(VNAV)				
NAV(SAR)				
NAV(LL)				
USMC FORM	N/A	1.036		
USAF FORM				

CO'S APPRAISAL OF FRS PREPAREDNESS.

1stLt Tomkiewicz successfully completed the advanced flight training syllabus. The syllabus consisted of 38 flights in the T-44 aircraft and 34 events in the T44-OFT flight simulator. He will be a welcomed asset to his next command. This officer meets all criteria and is prepared for the successful completion of the FRS curriculum.

SIGNATURE (b)(3), (b)(6), (b)(7)c (b)(3), (b)(6), (b)(7)c DATE 5/3/19

CNATRA 1542/5B (REV.8-88)

ENCLOSURE (4)

PINK SHEET SUMMARY (FRONT)

Record all flight violations, accidents, incidents, unsatisfactory events, delinquency reports and administrative actions on this sheet. Information concerning accidents/incidents REQUIRE SPECIAL HANDLING IAW OPNAVINST 3750.6. An entry shall be made from each activity/squadron listing NONE where appropriate-if no adverse events occurred in each section 1, 2, and 3.

SECTION 1 - FLIGHT VIOLATIONS/ACCIDENTS/INCIDENTS

DATE	ACTIVITY/SQUADRON	BRIEF DESCRIPTION	CAUSE	
09AUG17	NASC	API	NONE	CLERK
06JUN18	VT-3	PRIMARY	NONE	CLERK
23OCT18	HT-8	INT/HELO	NONE	LH
03MAY19	VT-35	ADVANCED	NONE	KT

SECTION 2 - UNSATISFACTORY EVENTS (Include all PINK and YELLOW sheet events)

DATE	TRNG SQUADRON	STAGE/EVENT	MAJOR DIFFICULTY	
09AUG17	NASC	API	NONE	CLERK
06JUN18	VT-3	PRIMARY	NONE	CLERK
23OCT18	HT-8	INT/HELO	NONE	LH
12FEB19	VT-35	ADV/ C4205	HW/SA	KT

SECTION 3 - STUDENT TRAINING REVIEW BOARDS/PROGRESS CHECKS

DATE	TRNG SQUADRON	TRB/IPC/FPC/APC	DISPOSITION	
09AUG17	NASC	API	**NONE**	CLERK
06JUN18	VT-3	PRIMARY	**NONE**	CLERK
23OCT18	HT-8	INT/HELO	**NONE**	LH
03MAY19	VT-35	ADVANCED	**NONE**	KT

REMARKS

STUDENT'S NAME (LAST, FIRST AND MIDDLE INITIAL)	RANK	DOD ID NUMBER
TOMKIEWICZ, MATTHEW J.	1STLT	XXXX

CNATRA 1542/90 (Rev 10/17)

ENCLOSURE (4)

PINK SHEET SUMMARY

(REVERSE SIDE CONTINUATION SHEET – PAGE 2)

Record all flight violations, accidents, incidents, unsatisfactory events, delinquency reports and administrative actions on this sheet. Information concerning accidents/incidents REQUIRE SPECIAL HANDLING IAW OPNAVINST 3750.6. An entry shall be made from each activity/squadron listing NONE where appropriate-if no adverse events occurred in each section 1, 2, and 3.

SECTION 1 - FLIGHT VIOLATIONS/ACCIDENTS/INCIDENTS (Continued)

DATE	ACTIVITY/SQUADRON	BRIEF DESCRIPTION	CAUSE	

SECTION 2 - UNSATISFACTORY EVENTS (Include all PINK and YELLOW sheet events) (Continued)

DATE	TRNG SQUADRON	STAGE/EVENT	MAJOR DIFFICULTY	

SECTION 3 - STUDENT TRAINING REVIEW BOARDS/PROGRESS CHECKS (Continued)

DATE	TRNG SQUADRON	TRB/IPC/FPC/APC	DISPOSITION	

REMARKS

STUDENT'S NAME (LAST, FIRST AND MIDDLE INITIAL)	RANK	DOD ID NUMBER
TOMKIEWICZ, MATTHEW J.	1STLT	XXXX

CNATRA 1542/90 (Rev 10/17)

ENCLOSURE (4)

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

OPNAV 3760/32F (Rev 4-90) S/N 0107-LF-009-7700

SECTION IIIB – OPERATIONAL PHYSIOLOGY & SURVIVAL TRAINING

NAME *(Last, first, middle initial)*	RANK/RATE	SSN

COURSE CATEGORY	TYPE OF TRAINING											
	AVIATION PHYSIOLOGY			EMERGENCY EGRESS			WATER SURVIVAL			LAND SURVIVAL, DWEST, SERE		
MV22 AEROMED 2022	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	4JAN22	P	261									
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE		

TRAINING ACTIVITIES

1. Pensacola, FL	8. Barbers Point, HI	15. Brunswick, ME
2. Miramar, CA	9. Cecil Field, FL	16. FASOTRAGRUPAC
3. Norfolk, VA	10. Cherry Point, NC	17. FASOTRAGRULANT
4. Corpus Christi, TX	11. Whidbey Island, WA	18. MCAS New River, NC
5. Lemoore, CA	12. Beaufort, SC	19. Okinawa
6. El Toro, CA	13. Point Mugu, CA	20. Other (List)
7. Jacksonville, FL	14. Patuxent River, MD	21.

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

SECTION IIIB - OPERATIONAL PHYSIOLOGY & SURVIVAL TRAINING

NAME (Last, First, Middle Initial)	RANK/RATE	DoD ID Number
TOMKIEWICZ, MATTHEW S	1stLt	151 297 1110

COURSE CATEGORY	TYPE OF TRAINING											
	AVIATION PHYSIOLOGY			EMERGENCY EGRESS			WATER SURVIVAL			LAND SURVIVAL DWEST, SERE		
	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
MV-22 EMERGENCY EGRESS	~~SEE~~ ~~15JUL2019~~			15JUL2019	Q	VMM 204						
	SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE		
MV-22 EMERGENCY EGRESS	DATE	GRADE	UNIT	DATE 90CT2019	GRADE Q	UNIT VMM 204	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE		
SERE	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE 15NOV19	GRADE Q	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c		
MAG 29 AEROMEDICAL BRIEFS SENPHYS HF&S LASER NVG AAE HYPOXIA	DATE 13DEC19	GRADE Q	UNIT 29	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		
2020 Aeromed MV-22 EMERGENCY EGRESS	DATE 6JAN20	GRADE Q	UNIT 261	DATE 25SEP20	GRADE Q	UNIT 261	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE		
Annual Aeromed Training AAE SEN LAS HYP HF NVD Radios Other: _____	DATE 01221	GRADE Q	UNIT 9				DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		
CLASS 3 REFRESH W/ACVEST	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE 27FEB21	GRADE Q	UNIT 261	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE		
MV-22 Emergency Egress	DATE	GRADE	UNIT	DATE 20AUG21	GRADE Q	UNIT 261	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)b			SIGNATURE			SIGNATURE			SIGNATURE		

TRAINING ACTIVITIES

1. Pensacola, FL	4. Lemoore, CA	7. Patuxent River, MD
2. Miramar, CA	5. Jacksonville, FL	8. Whidbey Island, WA
3. Norfolk, VA	6. Cherry Point, NC	9. Other (List) MCAS New River

10. Other Information

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET
OPNAV 3760/32F (REV4-90) S/N 0107-LF-009-7700
SECTION IIIB -OPERATIONAL PHYSIOLOGY & SURVIVAL TRAINING

NAME (Last, First, Middle Initial)	RANK/RATE	SSN
TOMKIEWICZ, MATTHEW	2NDLT	000-00-0000

COURSE CATEGORY	TYPE OF TRAINING											
	AVIATION PHYSIOLOGY			EMERGENCY EGRESS			WATER SURVIVAL			LAND SURVIVAL, DWEST, SERE		
INTERMEDIATE WATER SURVIVAL TRAINING	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE 10-Jul-17	GRADE Q	UNIT 20	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE		
LAND SURVIVAL TRAINING COMPLETED AT NASC	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT 31	DATE JUL 17	GRADE	UNIT 20
	SIGNATURE			SIGNATURE			SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c		
T-6B LEVEL-A EGRESS	DATE 4 OCT 17	GRADE Q	UNIT TW5	DATE 4 OCT 17	GRADE Q	UNIT TW5	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE		
Class: 7 Exp. AUG2021	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE 4/27/18	GRADE Q	UNIT H8	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE		
LEVEL A TRAINING SENSORY PROBLEMS/ SPATIAL D	DATE 7/31/18	GRADE Q	UNIT H8	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		
TH-57 EMERGENCY EGRESS DRILL ALSS	DATE	GRADE	UNIT	DATE 9/21/18	GRADE Q	UNIT H8	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE			SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE		
NITE Lab Training INDOC System: ANVIS-9	DATE 9/18	GRADE Q	UNIT TW5	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		
Sensory Problem/ Spatial D	DATE 26 Nov 18	GRADE Q	UNIT VT35	DATE	GRADE	UNIT	DATE	GRADE	UNIT	DATE	GRADE	UNIT
	SIGNATURE (b)(3), (b)(6), (b)(7)c			SIGNATURE			SIGNATURE			SIGNATURE		

TRAINING ACTIVITIES

1. Pensacola, FL	8. Barbers Point, HI	15. Brunswick, ME
2. Miramar, CA	9. Cecil Field, FL	16. FASOTRAGRUPAC
3. Norfolk, VA	10. Cherry Point, NC	17. FASOTRAGRULANT
4. Corpus Christi, TX	11. Whidbey Island, WA	18. MCAS New River, NC
5. Lemoore, CA	12. Beaufort, SC	19. Okinawa
6. El Toro, CA	13. Point Mugu, CA	Other (List) 20. NASC, Pensacola, FL
7. Jacksonville, FL	14. Patuxent River, MD	21.

ENCLOSURE (4)

DEPARTMENT OF THE NAVY
NAVY MEDICINE OPERATIONAL TRAINING CENTER
NAVAL SURVIVAL TRAINING INSTITUTE DETACHMENT
340 HULSE ROAD
PENSACOLA FL 32508-1089

IN REPLY REFER TO
3760
2 Feb 2021

From: Officer in Charge, Naval Survival Training Institute

To: **CAPTAIN MATTHEW TOMKIEWICZ**

Subj: NASTP TRAINING QUALIFICATION LETTER

Ref: (a) CNAF M-3710.7

1. In accordance with reference (a), **CAPTAIN MATTHEW TOMKIEWICZ** has received **AC REF CLASS 3** on **2 Feb 2021** at Aviation Survival Training Center **CHERRY POINT**.

2. **CAPTAIN MATTHEW TOMKIEWICZ** received a grade of **Q**. All required modules were completed.

3. This qualification expires on **28 Feb 2025** unless additional conditions listed in reference (a) chapter 8, paragraph 8.4 apply.

4. This qualification applies to the following aircrafts only:

Class 3: AH-1, H-3, H-46, H-53, H-60, H-72, H-92, OH-58C, TH-57, UH-1, V-22

Aircrew Endurance Vest training consisted of an overview and in water familiarization of either the AE Vest or PRU-70 as applicable. In water familiarization included performing underwater problem solving, underwater egress, survival swimming, treading water, survival floating, life-preserver inflation, multi-place life raft boarding and helicopter rescue procedures. Subject named training specific to the AE Vest at Aviation Survival Training Center Cherry Point.

(b)(3), (b)(6), (b)(7)c

By direction

ENCLOSURE (4)

3710/5100
DSS
04 Jan ~~21~~ 22 RAH

From: Aeromedical Safety Officer, Marine Aircraft Group 26
To: VMM-261 Department of Safety and Standardization

Subj: AEROMEDICAL TRAINING

Ref: (a) CNAF M-3710.7
(b) WgO 5100.29

1. The following personnel completed Annual Aeromedical training as required by reference (a) and (b). Topics include Sensory Problems / Situational Awareness, Radios, Human Factors, Human Performance, and FAILSAFE Program.

	LAST	FULL FIRST	RANK	PLATFORM	SQUADRON
1	(b)(3), (b)(6), (b)(7)c				261
2					261
3					261
4					261
5					261
6	TOMKIEWICZ	MATTHEW	CAPT	V-22	261
7	(b)(3), (b)(6), (b)(7)c				261
8					261
9					261
10					261
11					261
12					261
13					261
14					261
15					261
16					261
17					261
18					261
19					261
20					261
21					261
22					261

/S/
(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

VMM-261 AEROMEDICAL

6-Jan-20

Name	Signature
(b)(3), (b)(6), (b)(7)c	

ENCLOSURE (4)

CENTER FOR SECURITY FORCES
Certificate of Completion

Survival, Evasion, Resistance, and Escape Course
A-2D-4635

Commanding Officer
Center for Security Forces
Takes pleasure in granting a certificate of completion to

1STLT MATTHEW TOMKIEWICZ

Given this 15th day of November 2019

(b)(6), (b)(7)c

(b)(6), (b)(7)c **CAPTAIN, USN**
COMMANDING OFFICER
CENTER FOR SECURITY FORCES

ENCLOSURE (4)

29 Nov 18

MEMORANDUM

From: Aeromedical Safety Officer, TW-4
To: NATOPS Officer

Subj: CNAF M-3710.7 LEVEL A ANNUAL ADJUNCTIVE TRAINING

1. The personnel listed below have completed the following CNAF M-3710.7 NASTP Level A Annual Adjunctive Training on 29 Nov 2018:

Sensory Problems/Spatial Disorientation

Rank	Name	Squadron
	(b)(3), (b)(6), (b)(7)c	VT-31
		VT-31
		VT-31
		VT-31
		VT-31
		VT-31
		VT-31
		VT-31
		VT-35
		VT-35
		VT-35
		VT-35
		VT-35
1STLT	TOMKIEWICZ, MATTHEW J.	VT-35
	(b)(3), (b)(6), (b)(7)c	VT-35
		VT-35
		VT-31
		VT-35
		VT-35

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

31 Jul 18

From: Aeromedical Safety Officer, TW-5
To: CTW-5 NATOPS Officers

Subj: CNAF M-3710.7 LEVEL A ANNUAL AEROMEDICAL TRAINING

1. The listed personnel have completed the following CNAF M-3710.7 Level A Annual Training Requirements on July 31, 2018.

a. Sensory Problems/Spatial disorientation

(b)(3), (b)(6), (b)(7)c		8
Tomkiewicz, Matthew	1stLt	8
(b)(3), (b)(6), (b)(7)c		8
		8
		8
		8
		18
		18
		18
		18
		18
		18
		28
		28
		28
		28
		28
		28

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

DEPARTMENT OF THE NAVY
NAVY MEDICINE OPERATIONAL TRAINING CENTER
NAVAL SURVIVAL TRAINING INSTITUTE DETACHMENT
55 RADFORD BOULEVARD, SUITE 211
PENSACOLA FL 32508-1091

IN REPLY REFER TO
3760
27 Jun 2018

From: Officer in Charge, Naval Survival Training Institute

To: **2ND LIEUTENANT MATTHEW TOMKIEWICZ**

Subj: NASTP TRAINING QUALIFICATION LETTER

Ref: (a) CNAF M-3710.7

1. In accordance with reference (a), **2ND LIEUTENANT MATTHEW TOMKIEWICZ** has received **AC INDOC CLASS 3 on 27 Jun 2018** at Aviation Survival Training Center **PENSACOLA.**

2. **2ND LIEUTENANT MATTHEW TOMKIEWICZ** received a grade of **Q**. All required modules were completed.

3. This qualification expires on **31 Aug 2021** unless additional conditions listed in reference (a) chapter 8, paragraph 8.4 apply.

4. This qualification applies to the following aircrafts only:

Class 3: AH-1, H-3, H-46, H-53, H-60, TH-57, UH-1, V-22

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

04 Oct 17

From: Aeromedical Safety Officer, TW-5
To: CTW-5 NATOPS Officers

Subj: CNAF M-3710.7 LEVEL A ANNUAL AEROMEDICAL TRAINING

1. The listed personnel have completed the following CNAF M-3710.7 Level A Annual Training Requirements on October 04, 2017.

a. Sensory Problems/Spatial Disorientation
b. Aeromedical Aspects of Ejection
c. T-6B Ejection Seat Training
d. T-6B Emergency Ground Egress
e. Hypoxia Awareness Training
f. G-LOC and G-Tolerance Improvement Program
g. Aviation Life Support Systems (ALSS)
h. Decompression Sickness (DCS)

(b)(3), (b)(6), (b)(7)c		2
		2
		2
		2
		3
		3
		3
Tomkievicz, Matthew	2ndLt	3
(b)(3), (b)(6), (b)(7)c		3
		6
		6
		6
		6

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

DEPARTMENT OF THE NAVY
NAVY MEDICINE OPERATIONAL TRAINING CENTER
NAVAL SURVIVAL TRAINING INSTITUTE DETACHMENT
55 RADFORD BOULEVARD, SUITE 211
PENSACOLA FL 32508-1091

IN REPLY REFER TO
3760
8 Aug 2017

From: Officer in Charge, Naval Survival Training Institute

To: **2ND LIEUTENANT MATTHEW TOMKIEWICZ**

Subj: NASTP TRAINING QUALIFICATION LETTER

Ref: (a) CNAF M-3710.7

1. In accordance with reference (a), **2ND LIEUTENANT MATTHEW TOMKIEWICZ** has received **AIRCREW INDOCTRINATION NASTP TRAINING FOR CLASS 1 AIRCRAFT** on **8 Aug 2017** at Aviation Survival Training Center **PENSACOLA.**

2. **2ND LIEUTENANT MATTHEW TOMKIEWICZ** received a grade of **Q**. All required modules were completed.

3. This qualification expires on **31 Aug 2021** unless additional conditions listed in reference (a) chapter 8, paragraph 8.4 apply.

4. This qualification applies to the following aircrafts only:

Class 1: AV-8, EA-6, F/A-18, F-16, S-3, T-2, T-38, T-45, T-6B
Class 4: C-12, C-130T, C-20, C-21, C-26, C-35, C-37, C-40, C-9, E-4, E-6, P-8, T-1A, T-39, T-44

(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET
OPNAV 3760/32G (Rev 4-90)

ECTION IIIC--EXAMINATION RECORD

NAME (Last, first, middle initial)
2nd Lt TOMKIEWICZ, MATTHEW, J.

SSN

NATOPS EXAMS

OPEN BOOK

DATE	GRADE	PASS/FAIL	GRADED BY
25AUG18	4.0	P	(b)(3), (b)(6), (b)(7)c
18SEP19	4.0	P	
21SEP20	4.0	P	
19AUG21	4.0	P	
05JAN22	4.0	P	

CLOSED BOOK

DATE	GRADE	PASS/FAIL	GRADED BY
55EP18	4.0	P	(b)(3), (b)(6), (b)(7)c
30SEP19	4.0	P	
23SEP20	4.0	P	
18AUG21	4.0	P	
10JAN22	4.0	P	

INSTRUMENT EXAM

DATE	GRADE	PASS/FAIL	GRADED BY
20MAR19	Q	P	VT35
14SEP19	Q	P	MCALMS
28JUL20	Q	P	MCALMS
19JUL21	Q	P	MCALMS

COURSE RULES

DATE	GRADE
4JAN21	Q

OTHER EXAMS

TITLE	DATE	GRADE	PASS/FAIL	GRADED BY
VT-3 SOP	11 OCT 17			

ENCLOSURE (4)

VMM-261 PILOTS OPEN BOOK NATOPS

Revised 03 Feb 2021

NAME: TOMKIEWICZ MATTHEW
DATE: 05 JAN 2022
GRADE: 4.0
GRADED BY: (b)(3), (b)(6), (b)(7)c

1. The MV-22 is a multi-mission aircraft within many applications. These applications include the following:

a. Medium Lift Assault Support
b. TRAP
c. Emergency Evac
d. Fleet Logistics Support
e. Logistics Support Ashore
f. Long Range Logistics Support
g. Medical Evac

2. The maximum VTOL gross weight of the V-22 is 52,600 lbs sea level; maximum Short Takeoff (STO) gross weight is 57,000 lbs; and maximum alternate gross weight is 60,500 lbs.

3. The nose to tail length of the V-22 is 57 ft 4 in.

4. Each DEU controls operation of 2 MFDs, with the capability of controlling all 4 MFDs in the event of a DEU failure.

5. There are five main Aircraft Interface Units (AIUs) on the aircraft: the Avionics Bay Interface Unit (ABIU), two Nacelle Interface Units, the Wing Interface Unit, and the Drive Systems Interface Unit (DSIU).

6. The DSIU, located on the midwing forward equipment shelf, monitors and controls the Emergency Lubrication System, and monitors for oil debris in the PRGB, TAGBs, MWGBs, and both engines.

7. The APN-194 radar altimeter provides aircraft altitude above ground level (AGL) from 0 to approximately 4500 ft.

8. Stall warning is provided for nacelle angles between 0° and 95°.

9. The Sink rate warning is initiated when the vertical velocity exceeds the vertical velocity limit with airspeed less than 60 kts and nacelle angle greater than 65°.

10. If the aircraft was Shut down without a proper system log off, the MCs will attempt to restore the aircraft configuration available prior to loss of power. This is referred to as a Warm Start.

ENCLOSURE (4)

VMM-261 PILOTS CLOSED BOOK NATOPS

(b)(2)

ENCLOSURE (4)

This is to certify that

1st Lt Matthew Tomkiewicz

has successfully completed the following training course:

IGS - Tiltrotor Credit Course

Identifier: B7863B9592494A2F984B07F80C74209A

07/19/2021

Marine Corps Aviation Learning Management System Enterprise

ENCLOSURE (4)

VMM-26[illegible] OT NATOPS EVALUATION FORM V2021

Evaluee VICE, MATTHEW
EDIPI 1512971110
Instructor (b)(3), (b)(6), (b)(7)c
Date of Flight
Total Hours 446.9
Model Hours 248.1
Flight Duration
Buno
Date of Last Evaluation 20 AUG 21
Expires 30 SEP 2022

Open Book Date and Grade 10 JAN 22/ 4.0
Closed Book Date and Grade 10 JAN 22/ 4.0

Turn in completed ATF to S-3 Pilot Training	[ ]
Correct TMR code entered into MSHARP	[ ]

	Q	CQ	U
Phase I Ground Evaluation			
Open/Closed Book	✓	[ ]	[ ]
Oral Exam	✓	[ ]	[ ]
Phase II Flight Evaluation			
1. Preflight:			
*a. Records check	✓	[ ]	[ ]
* b. Crew briefing	✓	[ ]	[ ]
*c. Flight Planning			
DTM load procedure	✓	[ ]	[ ]
d. Preflight check	✓	[ ]	[ ]
2. Start/engage/post-engagement:			
a. Start/Engage	✓	[ ]	[ ]
b. Post-engagement	✓	[ ]	[ ]
*3. Taxi:			
a. Procedures	✓	[ ]	[ ]
b. Taxi	✓	[ ]	[ ]
4. Takeoff/transition:			
* a. procedures	✓	[ ]	[ ]
b. Type takeoff			
*(1) Vertical	✓	[ ]	[ ]
*(2) STO	✓	[ ]	[ ]
(3) Crosswind	✓	[ ]	[ ]
(4) Maximum Gross	✓	[ ]	[ ]
*c. Transition to airplane mode	✓	[ ]	[ ]
5. Climb/cruise			
* a. Procedures	✓	[ ]	[ ]
*b. Power control	✓	[ ]	[ ]
*c. Aircraft control	✓	[ ]	[ ]
*d. CMS utilization/knowledge			
(1) CDU/EICAS	✓	[ ]	[ ]
(2) MFDs	✓	[ ]	[ ]
(3) Digital Map	✓	[ ]	[ ]
(4) FLIR	✓	[ ]	[ ]
(5) Key Pad functions	✓	[ ]	[ ]
e. Slow flight airplane mode	✓	[ ]	[ ]
f. Steep turns	✓	[ ]	[ ]
g. ~~Stalls~~ D ND	✓	[ ]	[ ]
*6. Approach and landing:			
a. Procedures	✓	[ ]	[ ]
b. Power control	✓	[ ]	[ ]
c. Aircraft control	✓	[ ]	[ ]
d. Type of la[illegible]			
*(1) Vertical	✓	[ ]	[ ]
*(2) ROL	✓	[ ]	[ ]
*(3) No-Hover	✓	[ ]	[ ]
(4) Crosswind	✓	[ ]	[ ]
(5) Maximum gross	✓	[ ]	[ ]
(6) Steep			
a. Normal	[ ]	[ ]	[ ]
b. Nose Low	[ ]	[ ]	[ ]
(7) Confined area landing	[ ]	[ ]	[ ]
*7. Emergency Procedures (critical area/sub area)			
a. Procedures	✓	[ ]	[ ]
b. Aircraft control	✓	[ ]	[ ]
*8. Cockpit Resource Management			
a. Decision Making	✓	[ ]	[ ]
b. Assertiveness	✓	[ ]	[ ]
c. Mission analysis	✓	[ ]	[ ]
d. Communication	✓	[ ]	[ ]
e. Leadership	✓	[ ]	[ ]
f. Adaptability/Flexibility	✓	[ ]	[ ]
g. Situational Awareness	✓	[ ]	[ ]
9. Shutdown/ post-flight			
a. Shutdown	[ ]	[ ]	[ ]
b. Post flight inspection	[ ]	[ ]	[ ]
*10. Debriefing	[ ]	[ ]	[ ]
Phase III Mission Evaluation Areas			
1. Confined area landing (critical area/sub area):			
a. Procedures			
(1) Zone evaluation			
b. Approach			
c. Power control			
d. Aircraft control			
2. Navigation			
3. Instrument Procedures			
4. LAT			
5. Special/Other			

Narrative of Flight: _____

Strengths _____

Weaknesses _____

Notes _____

ENCLOSURE (4)

NATOPS EVALUATION REPORT

1. NAME *(Last, first, middle initial)*	2. RANK:	3. EDIPI NUMBER:	4. DATE OF LAST EVALUATION:
Tomkiewicz, Matthew J.	Capt	1512971110	20-Aug-2021

5. UNIT:	6. CREW POSITION & QUALIFICATIONS:	7. HOURS IN MODEL:	8. DATE OF CHECK FLIGHT:
VMM-261	Aircraft Commander	248.1	08-Feb-2022

9. TOTAL FLIGHT HOURS:	10. AIRCRAFT MODEL:	11. AIRCRAFT BUNO:	12. FLIGHT DURATION:	13. EXPIRATION DATE:
446.9	MV-22B	168019	2.6	28-Feb-2023

NATOPS EVALUATION

14a. REQUIREMENT	14b. DATE COMPLETED	14c. GRADE		
		Q	CQ	U
OPEN BOOK EXAMINATION	10-Jan-2022	Q		
CLOSED BOOK EXAMINATION	10-Jan-2022	Q		
ORAL EXAMINATION	08-Feb-2022	Q		
EVALUATION FLIGHT	08-Feb-2022	Q		

OVERALL FINAL GRADE: QUALIFIED

14d. REMARKS OF EVALUATOR:

Narrative:
Capt Tomkiewicz flew a NATOPS evaluation flight as defined by the MV-22B NATOPS Flight Manual, CNAF M-3710.7, and applicable Federal Aviation Regulations (Part 91). He demonstrated sound knowledge of aircraft capabilities and limitations and displayed effective crew resource management. He is qualified to hold a NATOPS rating in the MV-22B aircraft. ***NOTE: Capt Tomkiewicz will be qualified to be designated an Aircraft Commander in the MV-22B once reaching 450 total flight hours.***

Strengths: Aircraft Control
Weakness: Adaptability/Flexibility

Annual Egress was performed IAW CNAF M-3710.7 Series.
Annual CRM evaluation flight conducted IAW CNAFINST 1542.7D

15a. PRINT NAME OF EVALUEE:	15b. RANK:	15c. DATE:	15d. SIGNATURE:
M. J. Tomkiewicz	Capt	08-Feb-2022	Matt
16a. PRINT NAME OF INSTRUCTOR:	**16b. RANK:**	**16c. DATE:**	**16d. SIGNATURE:**
(b)(3), (b)(6), (b)(7)c		08-Feb-2022	(b)(3), (b)(6), (b)(7)c

17. REMARKS OF UNIT COMMANDER:

450 HRS ACHIEVED ON 9 FEB 2022. CONGRATS!

18a. UNIT COMMANDER:	18b. RANK:	18c. DATE:	18d. SIGNATURE:
(b)(3), (b)(6), (b)(7)c		9-FEB-2022	(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

VMM-261 INSTRUMENT EVALUATION FORM

Evaluee TOMKIEWICZ MATTHEW
Evaluee EDIPI 1517973110
DOB 06/20/1994
Instructor (b)(3), (b)(6), (b)(7)c
Date of Flight 21 JULY 21
Buno CF00-6
Total years flying 4
Total flight time(all years) 381.9
Total flight time (MV-22) 183.1
Date of last instrument Check 07/31/2020

Approaches			
	Last 6 Months	Last 12 Months	Total All Years
Precision	6	24	N/A
Non-Precision	7	12	N/A
Flight Time			
Actual	5.2	14.5	38.1
Simulated	8.9	15.2	76.5

Instrument Ground School
Date Attended 07/19/21 [ ]
Test Grade 98 [ ]

Phase I Ground Evaluation	Q	CQ	U
Brief	[M]	[ ]	[ ]
Flight Planning	[M]	[ ]	[ ]

Phase II Flight Evaluation

1. Instrument Take-Off	[M]	[ ]	[ ]
2. Turn Pattern	[M]	[ ]	[ ]
3. Climbs/Descents	[M]	[ ]	[ ]
4. Unusual Attitudes	[M]	[ ]	[ ]
5. Partial Panel	[M]	[ ]	[ ]
6. Instrument Approaches			
a. Tacan	[M]	[ ]	[ ]
b. ILS	[M]	[ ]	[ ]
c. PAR	[M]	[ ]	[ ]
d. ASR	[M]	[ ]	[ ]
7. Communication	[M]	[ ]	[ ]
8. Navigation	[M]	[ ]	[ ]
9. Emergency Procedures	[M]	[ ]	[ ]

ENCLOSURE (4)

NATOPS INSTRUMENT RATING REQUEST

1. NAME *(Last, first, middle initial)*:	2. RANK:	3. EDIPI NUMBER:	4. DATE OF LAST EVALUATION:
TOMKIEWICZ, MATTHEW J.	CAPT	1512971110	31 JULY 2020

5. UNIT:	6. CREW POSITION & QUALIFICATIONS:	7. HOURS IN MODEL:	8. DATE OF CHECK FLIGHT:
VMM-261	T2P	183.1	21 JULY 21

26 AIRCRAFT MODEL:	10. AIRCRAFT BUNO:	11. FLIGHT DURATION:	12. EXPIRATION DATE:
MV-22B	CFTD-6	2.0	31 JULY 2022

13. MISCELLANEOUS SUMMARY

ITEM	LAST 6 MO.	LAST 12 MO.
PRECISION APPROACHES	6	24
NON-PRECISION APPROACHES	7	12

14. TOTAL PILOT TIME	381.9

15. CURRENT RATING:
STANDARD

16. ISSUED RATING:
STANDARD

17. SIGNATURE OF APPLICANT:
[signature]

18. INSTRUMENT PILOT TIME

ITEM	LAST 12 MO.	LAST 6 MO.	TOTAL ALL YEARS
ACTUAL	14.5	5.2	38.1
SIMULATED	15.2	8.9	76.5
INSTRUMENT PILOT TIME TOTAL	29.7	14.3	114.6
TOTAL YEARS FLYING EXPERIENCE *(Military and Commercial)*	4		

WRITTEN EXAMINATION

19. THIS IS TO CERTIFY THAT THE APPLICANT HAS...
☒ SATISFACTORILY ☐ UNSATISFACTORILY
COMPLETED THE WRITTEN EXAMINATION FOR AN INSTRUMENT RATING AS REQUIRED BY THE NATOPS INSTRUMENT FLIGHT MANUAL.

20. 1ST EXAM *(Grade)*:	21. 2ND EXAM *(Grade)*:	22. 3RD EXAM *(Grade)*:
PASS		

23. EXAMINING OFFICER:	24. RANK:
MCALMS WEBSITE, VERIFIED	O-3
25. UNIT: VMM-261	26. DATE OF EXAM: 19 Jul 2021

FLIGHT EVALUATION

	27. PART ONE *(Basic Instruments)*	Q	U		28. PART TWO *(Instrument flight within control areas with emphasis on VOR/TACAN where feasible)*	Q	U
1	INSTRUMENT TAKEOFF *(Optional)*	X		1	FLIGHT PLANNING	X	
2	CLIMBING, DESCENDING, AND TIMED TURNS*	X		2	CLEARANCE COMPLIANCE	X	
3	STEEP TURNS*	X		3	INSTRUMENT APPROACHES	X	
4	RECOVERY FROM UNUSUAL ATTITUDES*	X		4	COMMUNICATIONS AND NAVIGATION EQUIPMENT	X	
5	VOR/TACAN POSITIONING	X		5	EMERGENCY PROCEDURES	X	
6	PARTIAL PANEL AIRWORK*	X		6	VOICE PROCEDURES	X	
7				7			

* Not required when evaluation is conducted under actual instrument conditions.

29. FLIGHT EXAMINER:	30. RANK:	31. DATE:	32. SIGNATURE:
(b)(6), (b)(7)c		22 JUL 21	(b)(3), (b)(6), (b)(7)c

33. REMARKS:
SIM was a local area instrument round robin to KILM, KMYR, KFAY, and back to KNCA. Upon takeoff, SNM received a landing gear malfunction with a GPS fail. SNM elected to remain below the clouds and troubleshoot the landing gear. The gear malfunction cleared but the GPS failure didn't clear. SNM switched from INAV to ENAV with some prompting and then proceeded with the flight. Remember to always back yourself up with ENAV when you're flying pure IFR. SNM shot a TACAN A to a low approach. SNM elected to leave the gear up but received an engine failure passing through 200'. SNM conducted a good roll on. Proceeding up to KFAY, we conducted the unusual attitudes and partial panel work. By the end of the flight the INS drift was enough to be disorienting. Good learning points all around. Good to progress.

Strengths: Basic air work, EP procedures
Areas for Improvement: Remember to back up with ENAV.

34. UNIT COMMANDER:	35. RANK:	36. DATE:	37. SIGNATURE:
(b)(3), (b)(6), (b)(7)c		23 Jul 2021	(b)(3), (b)(6), (b)(7)c

ENCLOSURE (4)

ENCLOSURE (5)

NAME TOMKIEWICZ, MATTHEW J

FILE OR SERIAL NO. 426925

DESIGNATION: NO. USMC

DATE NOV 2017

LOG NO. 1 FROM NOV 2017

TO

IF FOUND, PLEASE RETURN TO

CHIEF OF NAVAL OPERATIONS
NAVY DEPARTMENT
WASHINGTON, D.C. 20350

OPNAV FORM 3740-31 REV. (4-63)

QUALIFICATIONS AND ACHIEVEMENTS

(e. g. instrument card, patrol plane commander, aircraft type, CarQual, etc.)
(To be signed by Commanding Officer or authorized deputy)

QUALIFICATION	DATE	SIGNATURE
COMPLETED MILITARY CHECK-OUT AS PIC IN T-6B	8 JUN 18	(b)(3), (b)(6), (b)(7)c VT-3
INSTRUMENT CHECK	1 May 19	(b)(3), (b)(6), (b)(7)c
Naval Aviator	25 Apr 19	
COMPLETED MILITARY CHECKOUT AS PILOT IN COMMAND/T-44	3 May 19	
MV22B T2P/NATOPS	9 OCT 19	(b)(3), (b)(6), (b)(7)c VMMT-204
MV22B INSTA, ✓	24 SEP 19	VMMT-204
MV22B HLL NSQ	2 APR 20	261
MV22B DAY LAT	4 APR 20	261
MV22B NSQ	23 APR 20	261
MV22B NSLAT	15 MAY 20	261
MV22B INST	31 JUL 20	(b)(3), (b)(6), (b)(7)c 261
MV22B NATOPS	25 SEP 20	261
MV22B INST	21 JUL 21	261
MV22B NATOPS	20 AUG 21	261

Make entries on lines, or in rubber stamp impressions anywhere on the page.

QUALIFICATIONS AND ACHIEVEMENTS

(e. g. instrument card, patrol plane commander, aircraft type, CarQual, etc.)
(To be signed by Commanding Officer or authorized deputy)

ENCLOSURE (5)

QUALIFICATION	DATE	SIGNATURE

Make entries on lines, or in rubber stamp impressions anywhere on the page.

SUMMARY OF PILOT TIME

(To summarize flight data in this log and last months of previous log)

YEAR AND ITEM	JAN	FEB	MAR	APR	MAY	JUN	JUL
2019 MV22B	10.9	12.9	31.9	22.4	1.4	—	4.5
2020 MV22B	3.0	5.0	4.8	13.0	7.8	2.8	1.0
2021 MV22B	0.5	2.0	13.6	7.0	16.8	10.0	9.3
2022 MV22B	8.4	4.2					

BY MONTH, MODEL, ETC.

(Enter year and item (e. g. model) on lines; transfer data from log)

AUG	SEP	OCT	NOV	DEC	JAN-MAR	APR-JUN	JUL-SEP	OCT-DEC	YEAR TOTAL
11.5	13	3.5	—	3.4	55.7	23.8	29	6.9	115.4
14.6	3.5	0.3	9.5	16.5	17.8	23.6	19.1	26.3	86.2
13	18.6	16.8	/	6.3	16.1	32.8	30.2	23.1	103.3

ENCLOSURE (3)

MONTH _____ YEAR _____

A—Automatic P—ADF S—Simulated
F—GCA G—GCA O—OMNI
I—ILS R—Radar J—Jet

DAY	AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBER	KIND OF FLIGHT CODE*	PILOT TIME TOTAL PILOT TIME	FIRST PILOT	CO-PILOT	A/C COMDR	INSTRUMENT FLIGHT TIME SIM	NIGHT TIME	LANDINGS CARRIER ARR	CARRIER T&G	CARRIER BOL	FCL	SEA/LAND	CATAPULT	STD INST. APPR. COMPLETED NO	TYPE	S	REMARKS
5	MV22B	168019	2L4	2.6	1.3	1.3								6-2 0-3 6-1		1	1		1) 2240 2241 6080 (b)(3), (b)(6), (b)(7)c
9	MV22B	166719	IAH	0.6	0.6			0.6						6-2		1 2	A B		2) 2240 2034 (b)(3), (b)(6), (b)(7)c
19	MV22B	168305	2J2	1.0	0.5	0.5	1.0												(b)(3), (b)(6), (b)(7)c 2240 2241
TOTAL THIS PAGE				4.2	2.4	1.8	1.8	1.0	0.6	-				5/5					CERTIFIED A CORRECT RECORD
BROUGHT FORWARD		446.9		32.3	17.1	15.2	-	1.1	0.1	11.1				52/135					Pilot
TOTAL TO DATE		451.1		36.5	19.5	17.0	1.8	1.1	0.7	11.1				57/138					Approved
*See page 2 for codes.		TOTAL ACCUM. PILOT TIME		TOTALS, THIS FISCAL YEAR				TOTALS, THIS FISCAL YEAR											CO or authorized deputy

Pilot-time report submitted through last (or, ——) day of this month; noted by (initials)

ENCL (5)

MONTH _____ YEAR _____

A – Automatic F – ADF L – LF range T – TACAN
C – GCA G – GCA O – OMNI S – Simulated
H – ILS I – ILS R – Radar J – Jet

DAY	AIRCRAFT MODEL	AIRCRAFT SERIAL NUMBER	KIND OF FLIGHT CODE*	PILOT TIME TOTAL PILOT TIME	PILOT TIME FIRST PILOT	PILOT TIME CO-PILOT	PILOT TIME A/C COMBD	DUAL TIME SIM	DUAL TIME NIGHT TIME	LANDINGS CARRIER AER	LANDINGS CARRIER TBG	LANDINGS CARRIER BOL	LANDINGS FCL	LANDINGS SEA/LAND	CATAPULT	STD INST APPR. COMPLETED NO	STD INST APPR. COMPLETED TYPE	STD INST APPR. COMPLETED S	REMARKS
01	MV22B	168330	IA1	2.8	1.4	1.4	2.8							6-1 L-1					1) (b)(3), (b)(6), (b)(7)c 2031 2242
02	MV22B	166724	IA1	3.3	1.6	1.7	3.3							L-2					1) (b)(3), (b)(6), (b)(7)c 2240 2241
5	MV22B	168305	IA1	1.6	0.8	0.8													1) (b)(3), (b)(6), (b)(7)c 2240 2241
7	MV22B	168330	IA1 2M4	3.3	1.6	1.7	3.3	0.5											1) (b)(3), (b)(6), (b)(7)c 2031 2242
11	MV22B	168223	IA1 2M2	3.3	1.5	1.8	3.3							W-4					1) (b)(3), (b)(6), (b)(7)c 2031 2240 2241
TOTAL THIS PAGE																			
BROUGHT FORWARD																			
TOTAL TO DATE																			
*See page 2 for codes.		TOTAL ACCUM. PILOT TIME		TOTALS, THIS FISCAL YEAR				TOTALS, THIS FISCAL YEAR											

CERTIFIED A CORRECT RECORD

Pilot

Approved

C.O. or authorized deputy

Pilot-time report submitted through 1st (or, ——) day of this month: (continued)

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Log Book for Capt TOMKIEWICZ, MATTHEW 1/1/2017 - 3/31/2022

Generated on 04/25/2022 1216 UTC-04:00

Date Range Totals				Hours										Landings												App					T&R									
	TMS	Device	Type	TPT	FPT	CPT	ACMDR	ACT	SIM	NIGHT	HLL	LLL	TAC	6	F	9	D	P	J	5	2	N	M	S	Q	L	R	W	K	1	2	A	B	5	T&R 1	T&R 2	T&R 3	T&R 4	T&R 5	T&R 6	T&R 7	T&R 8	T&R 9	NAVFLIR
Totals				829.0	416.1	412.7	12.0	44.4	87.1	248.7	63.6	41.7	71.0	238	45	212	17	146	10	14	1	8	24	6	10	59	8	4	2	78	1	60	28	1										
6/6/2018	T-6B	Baseline	Aircraft	1.1	1.1																																				
8/30/2018	TH-57B	Baseline	Aircraft	1.1	1.1																																				
10/22/2018	TH-57C	Baseline	Aircraft	1.1		1.1																																			
5/1/2019	T-44	Baseline	Aircraft	1.1	1.1																																				
6/13/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
6/18/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
6/19/2019	MV-22B	ICLE	Simulator	1.1		1.1			1.1																																
6/20/2019	MV-22B	ICLE	Simulator	1.1		1.1			1.1																																
6/25/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
6/27/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
7/1/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
7/3/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
7/8/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
7/9/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
7/10/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
7/11/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
7/12/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
7/15/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
7/16/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
7/17/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
7/22/2019	MV-22B	168295	Aircraft	1.0																																				
7/25/2019	MV-22B	168679	Aircraft	1.1																																				
7/30/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
7/31/2019	MV-22B	168384	Aircraft	1.1																																				
8/1/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/5/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
8/6/2019	MV-22B	168043	Aircraft	1.1																																				
8/7/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
8/8/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/9/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/12/2019	MV-22B	168652	Aircraft	1.1																																				
8/15/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/15/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/19/2019	MV-22B	168645	Aircraft	1.1																																				
8/20/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/20/2019	MV-22B	FFS1	Simulator	1.1		1.1			1.1																																
8/21/2019	MV-22B	168650	Aircraft	1.1																																				
8/22/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/23/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
8/26/2019	MV-22B	FFS1	Simulator	1.1		1.1			1.1																																
8/26/2019	MV-22B	FFS3	Simulator	1.1		1.1			1.1																																
8/27/2019	MV-22B	169317	Aircraft	1.1																																				
8/28/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/28/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
8/29/2019	MV-22B	168651	Aircraft	1.1	1.1																																				
8/30/2019	MV-22B	169316	Aircraft	1.1																																				
9/4/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
9/9/2019	MV-22B	168646	Aircraft	1.1																																				
9/10/2019	MV-22B	168043	Aircraft	1.1																																				
9/11/2019	MV-22B	168384	Aircraft	1.1																																				
9/12/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
9/13/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
9/16/2019	MV-22B	FFS2	Simulator	1.1		1.1			1.1																																
9/17/2019	MV-22B	168651	Aircraft	1.1																																				
9/18/2019	MV-22B	168676	Aircraft	1.1																																				
9/19/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
9/23/2019	MV-22B	FFS1	Simulator	1.1		1.1			1.1																																
9/24/2019	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
9/25/2019	MV-22B	169384	Aircraft	1.1		1.1																																		
9/30/2019	MV-22B	168646	Aircraft	1.1																																				
9/30/2019	MV-22B	168045	Aircraft	1.1																																				
10/1/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
10/2/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
10/3/2019	MV-22B	FTD	Simulator	1.1		1.1			1.1																																
10/7/2019	MV-22B	168645	Aircraft	1.1																																				
10/9/2019	MV-22B	168676	Aircraft	1.1																																				
10/10/2019	MV-22B	168644	Aircraft	1.1																																				
11/27/2019	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
12/4/2019	MV-22B	168724	Aircraft	1.1																																				
12/5/2019	MV-22B	168622	Aircraft	1.1																																				
12/13/2019	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
12/17/2019	MV-22B	168724	Aircraft	1.1																																				
1/6/2020	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
1/7/2020	MV-22B	165496	Aircraft	1.1																																				
1/8/2020	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
1/10/2020	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
1/14/2020	MV-22B	168687	Aircraft	1.1																																				
2/11/2020	MV-22B	168622	Aircraft	1.1																																				
2/19/2020	MV-22B	165656	Aircraft	1.1																																				
2/20/2020	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
2/26/2020	MV-22B	168019	Aircraft	1.1																																				
2/27/2020	MV-22B	CFTD-6	Simulator	1.1		1.1			1.1																																
2/28/2020	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
3/2/2020	MV-22B	CFTD-1	Simulator	1.1		1.1			1.1																																
3/13/2020	MV-22B	165494	Aircraft	1.1																																				
3/15/2020	MV-22B	168019	Aircraft	1.1																																				
3/16/2020	MV-22B	168019	Aircraft	1.1																																				
3/24/2020	MV-22B	168622	Aircraft	1.1																																				

ENCLOSURE (5)

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3/27/2020	MV-22B	FTD	Simulator	
3/31/2020	MV-22B	CFTD-1	Simulator	
4/2/2020	MV-22B	168822	Aircraft	
4/3/2020	MV-22B	FTD	Simulator	
4/4/2020	MV-22B	168484	Aircraft	
4/7/2020	MV-22B	168724	Aircraft	
4/16/2020	MV-22B	165956	Aircraft	
4/23/2020	MV-22B	168829	Aircraft	
4/24/2020	MV-22B	168724	Aircraft	
4/29/2020	MV-22B	CFTD-1	Simulator	
5/1/2020	MV-22B	CFTD-1	Simulator	
5/6/2020	MV-22B	168228	Aircraft	
5/8/2020	MV-22B	CFTD-1	Simulator	
5/13/2020	MV-22B	168484	Aircraft	
5/15/2020	MV-22B	FTD	Simulator	
5/21/2020	MV-22B	168484	Aircraft	
5/28/2020	MV-22B	168822	Aircraft	
6/5/2020	MV-22B	CFTD-1	Simulator	
6/9/2020	MV-22B	FTD	Simulator	
6/17/2020	MV-22B	168819	Aircraft	
6/30/2020	MV-22B	168230	Aircraft	
7/16/2020	MV-22B	165956	Aircraft	
7/31/2020	MV-22B	CFTD-1	Simulator	
8/5/2020	MV-22B	168873	Aircraft	
8/6/2020	MV-22B	168822	Aircraft	
8/13/2020	MV-22B	168724	Aircraft	
8/21/2020	MV-22B	168724	Aircraft	
8/22/2020	MV-22B	168724	Aircraft	
8/26/2020	MV-22B	CFTD-1	Simulator	
9/1/2020	MV-22B	165956	Aircraft	
9/8/2020	MV-22B	CFTD-1	Simulator	
9/25/2020	MV-22B	CFTD-1	Simulator	
10/26/2020	MV-22B	CFTD-6	Simulator	
10/27/2020	MV-22B	168873	Aircraft	
10/29/2020	MV-22B	168873	Aircraft	
11/2/2020	MV-22B	CFTD-6	Simulator	
11/4/2020	MV-22B	168731	Aircraft	
11/7/2020	MV-22B	168484	Aircraft	
11/8/2020	MV-22B	168484	Aircraft	
11/17/2020	MV-22B	168230	Aircraft	
11/20/2020	MV-22B	168819	Aircraft	
11/23/2020	MV-22B	168305	Aircraft	
12/3/2020	MV-22B	FTD	Simulator	
12/9/2020	MV-22B	168231	Aircraft	
12/10/2020	MV-22B	168228	Aircraft	
12/14/2020	MV-22B	168724	Aircraft	
12/15/2020	MV-22B	168228	Aircraft	
12/16/2020	MV-22B	168228	Aircraft	
1/5/2021	MV-22B	CFTD-1	Simulator	
1/7/2021	MV-22B	166687	Aircraft	
1/15/2021	MV-22B	TCLE	Simulator	
1/9/2021	MV-22B	167913	Aircraft	
2/18/2021	MV-22B	CFTD-6	Simulator	
2/23/2021	MV-22B	CFTD-6	Simulator	
2/25/2021	MV-22B	CFTD-1	Simulator	
3/1/2021	MV-22B	167918	Aircraft	
3/1/2021	MV-22B	168873	Aircraft	
3/19/2021	MV-22B	168818	Aircraft	
3/23/2021	MV-22B	168340	Aircraft	
3/23/2021	MV-22B	168228	Aircraft	
3/26/2021	MV-22B	168228	Aircraft	
3/29/2021	MV-22B	166687	Aircraft	
4/15/2021	MV-22B	168822	Aircraft	
4/21/2021	MV-22B	168802	Aircraft	
4/29/2021	MV-22B	168822	Aircraft	
5/7/2021	MV-22B	166687	Aircraft	
5/10/2021	MV-22B	168873	Aircraft	
5/20/2021	MV-22B	168228	Aircraft	
5/25/2021	MV-22B	168802	Aircraft	
5/27/2021	MV-22B	168228	Aircraft	
6/8/2021	MV-22B	167913	Aircraft	
6/13/2021	MV-22B	166687	Aircraft	
6/13/2021	MV-22B	167913	Aircraft	
6/17/2021	MV-22B	167913	Aircraft	
6/22/2021	MV-22B	168802	Aircraft	
7/13/2021	MV-22B	168305	Aircraft	
7/17/2021	MV-22B	CFTD-6	Simulator	
7/28/2021	MV-22B	168351	Aircraft	
7/29/2021	MV-22B	168230	Aircraft	
8/12/2021	MV-22B	168724	Aircraft	
8/12/2021	MV-22B	168305	Aircraft	
8/16/2021	MV-22B	CFTD-1	Simulator	
8/20/2021	MV-22B	CFTD-6	Simulator	
8/17/2021	MV-22B	168012	Aircraft	
9/20/2021	MV-22B	168724	Aircraft	
8/21/2021	MV-22B	167903	Aircraft	
8/24/2021	MV-22B	168614	Aircraft	
8/25/2021	MV-22B	168018	Aircraft	
8/27/2021	MV-22B	168225	Aircraft	
8/29/2021	MV-22B	168340	Aircraft	
9/30/2021	MV-22B	168230	Aircraft	
10/2/2021	MV-22B	168230	Aircraft	
10/5/2021	MV-22B	168243	Aircraft	
10/7/2021	MV-22B	168230	Aircraft	
10/12/2021	MV-22B	167903	Aircraft	

ENCLOSURE (5)

[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Simulator	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	CFTD-[illegible]	Simulator	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]
[illegible]	MV-22B	[illegible]	Aircraft	[illegible]

Career Totals		Hours										Landings																Approaches				
	[illegible]	1PT	FPT	CPT	ACMDR	ACT	SIM	NIGHT	[illegible]	[illegible]	TAC	#	F	9	0	P	J	6	2	N	M	S	O	L	R	W	K	1	2	A	B	E
Totals	All	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	8	[illegible]	6	[illegible]	[illegible]	[illegible]	4	[illegible]	18	[illegible]	[illegible]	[illegible]	[illegible]
	MV-22B	[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	[illegible]	[illegible]			[illegible]		[illegible]		[illegible]			[illegible]	[illegible]	[illegible]	[illegible]		[illegible]		[illegible]		[illegible]	[illegible]	
	T-44	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]																									
	T-6B	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible]																								
	TH-57B	[illegible]	[illegible]																													
	TH-57C		[illegible]	[illegible]																												

ENCLOSURE (5)

Capt TOMKIEWICZ, MATTHEW J - MV-22B Pilot
Crew Performance between 1/1/2015 - 3/18/2022
Generated on 03/24/2022 1044 UTC-04:00

Proficiency | ~~Satisfactory~~ | ~~Unsatisfactory~~ | Incomplete

Instructor Name	Event	Method	Needs Additional Training	Overview	Plan/Brief	Execution	Instructor Comments
	FAM(1)-1030						
	FAM(1)-1031						
	FAM(1)-1032						
	FAM(1)-1033						
	FAM(1)-1034						
	FAM(1)-1035						
	FAM(1)-1036						
	FAM(1)-1037						
	FAM(1)-1038						
	FAM(1)-1039						
	FAM(1)-1070						
	FAM(1)-1071						
	FAM(1)-1072						
	FAM(1)-1073						
	FAM(1)-1074						
	FAM(1)-1075						
	FAM(1)-1076						
	FAM(1)-1077						
	FAM(1)-1078						
	FAM(1)-1080						
	FAM(1)-1081						
	FAM(1)-1082						
	FAM(1)-1083						
	FAM(1)-1084						
	FAM(1)-1085						
	FAM(1)-1086						
	NAV(1)-1130						
	NAV(1)-1131						
	NAV(1)-1132						
	INST(1)-1230						
	INST(1)-1231						
	INST(1)-1232						
	INST(1)-1233						
	INST(1)-1240						
	INST(1)-1241						
	INST(1)-1242						
	CAL(1)-1330						
	CAL(1)-1331						
	CAL(1)-1332						
	CAL(1)-1333						
	CAL(1)-1340						
	CAL(1)-1341						
	CAL(1)-1342						
	CAL(1)-1343						
	FORM(1)-1430						
	FORM(1)-1440						
	FCLP(1)-1530						
	FCLP(1)-1540						
	NS(1)-1630						
	NS(1)-1631						
	NS(1)-1632						
	NS(1)-1633						
	NS(1)-1634						
	NS(1)-1640						
	NS(1)-1641						
	NS(1)-1642						
	REV(1)-1830						
	REV(1)-1831						
	REV(1)-1832						
	REV(1)-1840						
(b)(3), (b)(6), (b)(7)c	[redacted]	Baselined	No				Event Baselined
	FAM(2)-2030						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted a PAR at KNCA with good proficiency	Planned a PAR at KNCA	Execution of the PAR was good. Glideslope control was on point through out the approach. Good job on the use of the flight director and converting at the appropriate time.	See above.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Tac Form was flown in the W-122 area. Each aircraft in the section took the lead to conduct maneuvers. Break up and rejoin was conducted per ANTTP. All Tac Form maneuvers were conducted appropriately and within	Solid discussion and good demonstration of knowledge.	All the maneuvers were performed well. Good job executing the hard turns within parameters. All the maneuvers were conducted correctly. Good SA on when and how to turn. Basic air work was on point.	No issues of negative trends noted.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Trail form was conducted using the VR-084 route in order to demonstrate trail maneuvers. All maneuvers conducted in accordance with ANTTP. Brief was solid	Good brief	Good job calling turns and course intercepts. Remember that if stuff gets hairy in the clouds or you are vectored more than two turns in IMC just go ahead and break up the flight. It is important to be predictable to ATC and do not wait until you are with the terminal controller to break up a flight.	No issues or negative trends noted.
c, (b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	TACFORM executed in the W-122.	Good understanding of ANTTP and all required briefing items	Well executed. Good, aggressive maneuvering with limited coaching.	Keep utilizing the rest of the crew to build SA.
	CAL(2)-2230						

ENCLOSURE (6)

Capt TOMKIEWICZ, MATTHEW J - MV-22B Pilot
Crew Performance between 1/1/2015 - 3/18/2022
Generated on 03/24/2022 1044 UTC-04:00

	CAL(2)-2231 CAL(2)-2240 CAL(2)-2241							
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Executed SEC Cals in oak grove after TACFORM	Proficient with all briefing items. Build standard LZ diagram.	Executed multiple landings in lead and -2 positions. Both CONV and high speed tactical approaches	Good landing procedures. Keep working on utilizing radius of turn to maintain position	
(b)(3), (b)(6), (b)(7)c	RVL(2)-2270	Logged	Yes	Event incomplete due to time : cyclic lost controllability. Sim conducted in CFTD-6. Flight departed KNCA: blue line for LZ Bluebird. Environmental conditions were night, clear skies, with	Plan and brief adequately prepared crew for scheme of maneuver and sequence of events. Parts were derailed with sim issues: loss of comms and loss of feel in the cyclic resulting in a system reset.	Insufficient time to run through approach mode profiles. Incomplete.	Next time	
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Completed automated RVL profiles that were incomplete in previous sim.	Good job reviewing the discuss items. Stay in the books.	Completed RVLs at LZ Falcon. Started with most automation and did an approach mode to hover coupled landing. It can be overwhelming looking at all of the OIDs on the PFD and overhead panel, just keep looking at the ANTTP and NATIP to get more familiar with what you are looking at on the glass. Even though George has the controls, always back him up in case he outs off and remember to get the gear. The next approach we did was the hover coupled. Remember to anticipate the hard deck that you set in the hover altitude box so that you don't go below it and potentially go in the cloud. Big thing to remember for these approaches is that you don't have to be in position hold IOT to alt ref down. As long as you are on a safe profile, alt reffing down in pos sel is fine. The last type of approach we did was assisted no hover. We spent the majority of time in the sim	Good job with your profiles, just watch your speed down low and don't be afraid to pull the controls out of detent to help George slow down.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Sim conducted in CFTD-6. Flight departed KNCA: blue line for LZ Bluebird. Environmental conditions were night, clear skies, with light winds from the North. Comms with lead were intermittent. Following a loss of cyclic control, repositioned to KNCA to complete training.	Plan and brief adequately prepared crew for scheme of maneuver and sequence of events. Parts were derailed with sim issues: loss of comms and loss of feel in the cyclic resulting in a system reset.	We started this portion of the sim with hover drills in LZ Bluebird (coming off section HLL CALs). Remember this is a technique for the sim, in the aircraft we don not want to spend excessive time in the dust. Your scan (inside and out) improved each landing, and you recognized your tendency to have a heavy left foot in the last 50 feet. Remember its an outside scan (pattern), transitioning to the glass as the dust begins to build. The sim takes you immediately from 0-100% obscurance, real world, you might have time to recognize. Also, call when you're transitioning to the glass. For the patterns, as lead you were a stable base. In -2 you recognized how deviations from the planned profile (getting slow, high) can jam up subsequent aircraft. Initially tending to be stepped up high, you corrected to a good -2 position.	Keep doing great things.
c, (b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Proceeded as section VFR from KNCA to LZ Emu IVO Oak Grove (13NC) established at EMU, student completed RVL training per the T&R. Training complete.	Landing plan and ingress appropriately and safely planned. Student was able to brief various profiles correctly as well as wave-off criteria and limitations.	All patterns, profiles, landings, and CAL/RVL work complete per the T&R.	Solid flight, progress.	
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Proceeded as section VFR from KNCA to LZ Emu IVO Oak Grove (13NC) established at EMU, student completed RVL training per the T&R. Training complete.	Landing plan and ingress appropriately and safely planned. Student was able to brief various profiles correctly as well as wave-off criteria and limitations.	All patterns, profiles, landings, and CAL/RVL work complete per the T&R.	Solid flight, progress.	
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Proceeded as section VFR from KNCA to LZ Emu IVO Oak Grove (13NC) established at EMU, student completed RVL training per the T&R. Training complete.	Landing plan and ingress appropriately and safely planned. Student was able to brief various profiles correctly as well as wave-off criteria and limitations.	All patterns, profiles, landings, and CAL/RVL work complete per the T&R.	Solid flight, progress.	

(b)(2)Low, (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted NS NVG SS CALS at LZ Bat. We conducted a few conv mode patterns, and one of each of the tactical approaches.	T&R brief was good. Good demonstration of knowledge	Overall solid execution of SS CALs. Each pass got progressively better. Make sure you keep scanning out to the 45 bearing to enhance your ability to visually acquire horizontal and vertical closure rates. It can be a little difficult with the 40 degree FOV on the NVGs but if you keep your visual scan moving, you can reduce the impact of a small FOV. Basic airwork was maintained well within parameters. HUD precision approach is a very good tool to use buy remember to shoot a visual approach to maintain safe distances from obstacles. Sensor integration can also help you here. Use a good scan between the HUD, visual scan, and the FLIR to help increase your SA in the night environment.	Overall solid event.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Sim conducted in CFTD-6. Flight departed KNCA, blue line for LZ Bluebird. Environmental conditions were night, clear skies, with light winds from the North. Comms with lead were intermittent. Following a loss of cyclic control, repositioned to KNCA to complete training.	Plan and brief adequately prepared crew for scheme of maneuver and sequence of events. Parts were derailed with sim issues: loss of comms and loss of feel in the cyclic resulting in a system reset.	Good recognition of the course rules and zone as we proceeded to LZ Bluebird. You elected to land abeam, and slightly reverse echelon of lead. With initially little contrast, this made it difficult to judge your position relative to his aircraft, but you safely picked a spot that granted you a clear landing and wave-off land. Your scan (inside and out) improved each landing, and you recognized your tendency to have a heavy left foot in the last 50 feet. For the patterns, as lead you were a stable base. In -2 you recognized how deviations from the planned profile (getting slow, high) can jam up subsequent aircraft. Initially tending to be stepped up high, you corrected to a good -2 position.	Overall, great work. Don't break the cyclic next time.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight conducted day into night out of KABQ. Sky was clear with light winds from the North. We departed for the auxiliary pad south of the airfield for day mat landings. After multiple conversion mode patterns, we were confined to straight-ins from the south due to boundaries surround the pad. After refueling, conducted night landings to the aux pad until c-130 paraops began in the area. We transitioned to double eagle airfield, a small towered airport north east of KABQ for the night mat and CALs.	Adequate for mission success.	You correctly interpreted and recognized the elevation changes, and used an appropriate dme margin to compensate for it. Conversion mode patterns were solid. For the straight-ins from the south, you flew the edge of the boundary to allow a good approach into the spot--well done. For the night MAT and CALs, you power pulls reflected a good understanding of high / hot / heavy conditions. Your communication was a little faint, which seemed to be predicated on the mic not overtasking. Ensure you are reading back calls from the back, and this approved as the night progressed. On one of the 180s into Double Eagle we had a quick, unintentional descent which you corrected and verbalized--good recognition. Keep forcing yourself to use the HUD when it works, but it is good you are not reliant on it.	Good work. ATFs will be identical for day / night mat and ss cal.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight departed VFR from KNCA and conducted HLL CALS in the local training	Landing plan and ingress planned appropriately and safely	All pattern, profiles, landings and HLL NS CAL work complete per the T&R	Solid flight, progress

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Capt LADHA, SHAFIQ WILLIAM	[redacted]	Logged	No	Flew from LZ Bat to VR-084 B-E. L-Hour into LZ Bat, followed by SS RVLs to Rwy 19, then joined with other sim to complete SEC Cals	Good job on discuss items, no major issues noted on mission planning products. Talked through different techniques on NAVLOG creation / utilization.	Flew as -2 for this portion of the sim to the VR-084. We talked about staying closer to lead so that we can pick up closure rate. It's a lot harder to do if you're more than an .3 away, especially in LLL conditions. Executed vertical maneuvers and TACFORM with no real issues. Good procedures and control inputs. We were passed an L-Hour and talked through different ways to work it. After initial landing at LZ Bat, we repositioned to RWY 19 as a single to conduct our NS RVLs. Overall good job tonight. Big thing we talked about was to get the aircraft in a trimmed state before giving it over to George. Help him help you, and by giving him a stable platform to start with, its less likely that we'll have to intervene and defeat the purpose of using automation. After we were complete with the RVLs, we joined lead at LZ Bat and conducted conversion mode, and low	Overall good job, it was a long sim with lots of codes but you stayed engaged and we were able to complete all of the training.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flew from LZ Bat to VR-084 B-E. L-Hour into LZ Bat, followed by SS RVLs to Rwy 19, then joined with other sim to complete SEC Cals	Good job on discuss items, no major issues noted on mission planning products. Talked through different techniques on NAVLOG creation / utilization.	Flew as -2 for this portion of the sim to the VR-084. We talked about staying closer to lead so that we can pick up closure rate. It's a lot harder to do if you're more than an .3 away, especially in LLL conditions. Executed vertical maneuvers and TACFORM with no real issues. Good procedures and control inputs. We were passed an L-Hour and talked through different ways to work it. After initial landing at LZ Bat, we repositioned to RWY 19 as a single to conduct our NS RVLs. Overall good job tonight. Big thing we talked about was to get the aircraft in a trimmed state before giving it over to George. Help him help you, and by giving him a stable platform to start with, its less likely that we'll have to intervene and defeat the purpose of using automation. After we were complete with the RVLs, we joined lead at LZ Bat and conducted conversion mode, and low	Overall good job, it was a long sim with lots of codes but you stayed engaged and we were able to complete all of the training.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed KNCA as a single, Northeast Creek Bridge to the redline, and ultmately LZ Gull. It was a LLL night, skies clear with light/variable winds. Conducted training to the Southern portion of the zone, varying using a waypoint and an IR chemstick for our landings. Returned via Redline to KNCA.	Plan / LZ diagram adequate for flight. Knowledge for brief demonstrated good preparation.	Tendency to let heading drift a little to the right 50° and below; you fought this throughout the night and were able to correct it quickly. You navigated a tricky zone (divets and holes throughout), responding to the crews feedback well, and finding a good spot. With the waypoint active, you flew a solid pattern, and flew smooth/appropriate control inputs in the endgame for landing. For our first landing to ITG (IR chemstick), we stalled out a little coming into the zone. Keeping your scan to the 45 and 90 will help you pick up that closure rate. Your subsequent landings without a waypoint were solid, as well as your tactical approaches. Overall, good work--you had a solid scan going and made corrections early.	Good work

(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed KNCA as a single. Northeast Creek Bridge to the redline, and ultimately LZ Gull. It was a LLL night, skies clear with light/variable winds. Conducted training to the Southern portion of the zone, varying using a waypoint and an IR chemstick for our landings. Returned via Redline to KNCA.	Plan / LZ diagram adequate for flight. Knowledge for brief demonstrated good preparation.	Tendency to let heading drift a little to the right 50' and below; you fought this throughout the night and were able to correct it quickly. You navigated a tricky zone (divets and holes throughout), responding to the crews feedback well, and finding a good spot. With the waypoint active, you flew a solid pattern, and flew smooth/appropriate control inputs in the endgame for landing. For our first landing to ITG (IR chemstick), we stalled out a little coming into the zone. Keeping your scan to the 45 and 90 will help you pick up that closure rate. Your subsequent landings without a waypoint were solid, as well as your tactical approaches. Overall, good work--you had a solid scan going and made corrections early.	Good work. Comments are reflected in 2380
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed KNCA as -2 and headed to VR-084. Conducted NAV route at 1500' doing TACFORM maneuvers. Proceeded to LZ BAT to conduct HLL CALS as -2 and lead. Early RTB due to WX.	no issues	Good job today. We had to call a knock it off during TACFORM due to close proximity with lead A/C. Talked as a flight about situation and continued training. For your CALS, no issues noted, good job keeping your scan outside and not fixating on one spot.	Press
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed KNCA as -2 and headed to VR-084. Conducted NAV route at 1500' doing TACFORM maneuvers. Proceeded to LZ BAT to conduct LLL CALS as -2 and lead. Early RTB due to WX.	no issue	Good job today. We had to call a knock it off during TACFORM due to close proximity with lead A/C. Talked as a flight about situation and continued training. For your CALS, no issues noted, good job keeping your scan outside and not fixating on one spot.	press
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Sim departed KNCA and followed Blue Line course rules from L-K. Rendezvous with KC-130J off coast of K. Day TAAR executed on both left and right hoses. Event complete IAW the T&R manual.	Knowledge was solid.	Remember to focus on flying form off the tanker. Don't stare at and chase the basket when making a play. Establish yourself in a stable astern before making your play. Once in the basket, focus your scan on maintaining the "T" with the hose and tanker's wing and adjust your position with the hose and the pod. When breaking contact, try and put the basket back where you found it.	Continue to progress.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Sim departed KNCA and followed Blue Line course rules from L-K. Rendezvous with KC-130J off coast of K. NS TAAR executed on both left and right hoses. Event complete IAW the T&R manual.	Knowledge was solid.	Remember to focus on flying form off the tanker. Don't stare at and chase the basket when making a play. Establish yourself in a stable astern before making your play. Once in the basket, focus your scan on maintaining the "T" with the hose and tanker's wing and adjust your position with the hose and the pod. When breaking contact, try and put the basket back where you found it. Utilize your probe light if necessary for better viz of the basket and hose.	Continue to progress.
	AAR(2)-2440						
	AAR(2)-2441						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Day TG to BT-11. SS/SEC for two crew chiefs day repunch. 1200 rounds 7.62.	Solid brief and discussion. Remember that base ROEs are consistent throughout an AO, however local commanders can be more restrictive. Weapons conditions, sectors of fire, STAR reports and fields of fire IAW ROE to ID POO and PID allows for brevity and responsive suppressive fires.	Good use of weapons commands, threat call-outs, and flying a stable platform.	Continue with syllabus. No discrepancies noted.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed KNCA to BT-9. LLL night doing TG over the water. 1+30, departed and proceeded direct to VR-084.	IAW TR.	See overview.	Good job keeping level platform for the guys in the back. We had a very important take away with making sure those guys are cleaned up prior to use executing our next phase of flight. Always ensure that those guys are set prior to going fast.

ENCLOSURE (6)

Capt TOMKIEWICZ, MATTHEW J - MV-22B Pilot
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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	The flight departed out of MCAS Yuma, and flew a LAT route north of the airfield. The LAT route was created by the student and was Pennsylvania routing.	Instructors briefed the route the students prepped. Students also prepared a NAVLOG that included a L-Hour into a designated landing zone.	The flight departed out of MCAS Yuma, and flew a LAT route north of the airfield. The LAT route was created by the student and was Pennsylvania routing. The flight executed the route originally as singles to conduct single ship maneuvers, then later joined up for section LAT. An L-hour was shot into an LZ designated by the students.	The student's knowledge on LAT conduct was well proficient.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	The flight departed out of MCAS Yuma, and flew a LAT route north of the airfield. The LAT route was created by the student and was Pennsylvania routing.	Instructors briefed the route the students prepped. Students also prepared a NAVLOG that included a L-Hour into a designated landing zone.	The flight departed out of MCAS Yuma, and flew a LAT route north of the airfield. The LAT route was created by the student and was Pennsylvania routing. The flight executed the route originally as singles to conduct single ship maneuvers, then later joined up for section LAT. An L-hour was shot into an LZ designated by the students.	The students' knowledge on LAT conduct, and CMS management, were well proficient.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flew from LZ Bat to VR-084 B-E. L-Hour into LZ Bat, followed by SS RVLs to Rwy 19, then joined with other sim to complete SEC CALs.	Good job on discuss items, no major issues noted on mission planning products. Talked through different techniques on NAVLOG creation / utilization.	Flew as -2 for this portion of the sim to the VR-084. We talked about staying closer to lead so that we can pick up closure rate. It's a lot harder to do if you're more than an 3 away, especially in LLL conditions. Executed vertical maneuvers and TACFORM with no real issues. Good procedures and control inputs. We were passed an L-Hour and talked through different ways to work it. After initial landing at LZ Bat, we repositioned to RWY 19 as a single to conduct our NS RVLs. Overall good job tonight. Big thing we talked about was to get the aircraft in a trimmed state before giving it over to George. Help him help you, and by giving him a stable platform to start with, its less likely that we'll have to intervene and defeat the purpose of using automation. After we were complete with the RVLs, we joined lead at LZ Bat and conducted conversion mode, and low altitude tactical approaches in	Overall good job. It was a long sim with lots of codes but you stayed engaged and we were able to complete all of the training.
	LAT(2)-2640						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flew Sec Lat on VR-084 with a L-hour into BAT.	Solid plan, student focused on building a detailed and thorough NAVLOG. Try building flexibility into your products to allow you to quickly analyze the mission and make changes on the fly.	Well executed tac descent, vertical maneuvers, and quick stop. Ensure to make use of the whole corridor where it makes sense to, we are not restricted just to the course line. Keep being assertive with crew call outs. L-hour management was successful, despite us having to roll L-hour once due to admin constraints. We talked through the benefits of rolling L-hour an minimally as possible vs. rolling it generously.	Well executed, continue progressing.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight departed KNCA and conducted HLL SEC LAT on the VR-084 from checkpoints B-F. L-Hour executed in to LZ BAT at MCOLF Oak Grove and SEC CALs followed. Event completed IAW the T&R Manual and all maneuvers executed IAW NATOPS and the ANTTP.	Knowledge was solid regarding discuss items. Remember to think about how the discuss items apply tactically IOT make the connection between our initial 2000 level events and follow-on mission codes. Everything builds on itself.	No major issues noted. We talked about the different ways to manage our position relative to our wingman IOT help us maintain visual. Staying ahead of the plane is critical IOT to continue to fight the formation down range and utilize the appropriate TACFORM maneuvers given the current position of the members within the flight.	Continue to progress!
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed as heavy division from KNCA as -3. Proceeded to VR-086 and conducted LAT as a section with -4. Joined on deck LZ Caledonia for the hotseat.	No issues noted.	Nice job tonight staying engaged with a flexible plan and flying with 3 squadrons. For the LAT portion, remember standard CRM calls keeps everyone on the same page with regards to where everyone is in the flight. No big issues noted for maneuvers. Talked about L-Hour management and also dealt with not having a RADALT. Overall nice job.	Nice job tonight staying engaged.

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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Day MAT conducted at Bridgeport	Overall T&R brief was good with no deficiencies in knowledge noted. MAT ACADs completed prior to sim so knowledge was fresh	We executed multiple landings at Bridgeport in the MAT environment. Remember the name of the game is power required vs power available!! Don't forget that planning and calculations in real time are critical to safety of flight. Keep working the CMS and honing those skills. Overall aircraft performance suffers at altitude so waveoff early, slow down sooner and scan the FFR gauge in conv mode.	Overall great sim
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Same SOM as 2730 but now in the night environment!	Brief was solid. MAT ACADs completed prior to the sim	See debrief notes from 2730 ATF. All these notes apply here. Remember what is different, difficult or dangerous about flying in MAT at night. What is different is distance estimation. Distance estimation is degraded so make up for it using your instruments. Seeing minor deviations in slope can be difficult and dangerous at night. Make sure you are scanning outside to pick up on this. Overall the name of the game is still power available vs power required.	No issues noted.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	Yes	Sim was conducted at Bridgeport in conjunction with 2730 and 2730. Overall recommend Lt Tomkiewicz get some more reps on high hot and heavy operations due to available sim time. We hit the requirements but it would be beneficial to keep practicing.	See notes from 2730 and 2731	Overall good sim, just a bit rushed. ALWAYS double check your numbers on the CMS. Remember garbage in = garbage out. If you are operating on the wrong numbers (i.e. power available, gross weight, altitude, temp) you may put the aircraft in a dangerous situation where you can not recover. This is the key concept to take away from ths sim. Know the aircraft and know your operating environment and plan accordingly	No deficiencies noted, good sim event overall. Recommend more practice sims
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Event conducted in conjunction with DIVCAL initial event. Flown as -2 division lead by Capt Lazoritz (VMM-264). DIV TACFORM in the W-122. CALS in LZ Falcon	Plan was to execute form on the VR-084 at altitude, div cals in Falcon. Flexed to TACFORM in the W-122. Briefed by div-lead, Capt Lazoritz	1stlt Tomkiewicz was at the controls for much of the flight during his DIV CAL/FORM initial. He is confident in his tacform, which is rare for copilots of his experience, and he has well-above-average airmanship when maneuvering in airplane mode. However, he sometimes was sucked and long during conversion mode, which created problems during pattern work.	Coachable, average SA, above average airwork in the TACFORM. Push.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Event conducted in conjunction with DIV FORM event. Flown as -2 in a three ship division. Conducted DIV Form in w122, div cals in LZ Falcon.	Briefed by actual division leader, Capt Lazoritz of VMM-264. 1stLt Tomkiewicz has a good knowledge base regarding the division formations.	Departed as a section initially while -3 troubleshot, which was good opportunity to warm up. After div form, we returned to falcon for CALs. As -2 or -3, you have to always be conscious of where youre putting -3 or -4, respectively. Being wide, sucked, high, fast, etc. can set you up for a bad end game, which is where our mission is most critical. Your pattern work was average, and has room to improve, but you are safe in my eyes. Just watch out for some of the off-normal conditions like being 10 degrees nose up at 80 Nacelle, and trying to slow below 140 while still on the downstops.	Ready to proceed to HLL div CALS

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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight conducted in conjunction with a 5331 Division Lead event. The flight executed section and single ship training at Rota before the division rejoined and departed. The flight executed division trail enroute to Moron followed by division CAL training at Moron until the flight's land time.	Mission products were adequate for mission success. The PUI had a good understanding of the discuss items and was able to back brief the CAL training plan after the flight brief.	The HLL Division CAL training was conducted during the last hour of the flight window. Multiple conversion mode patterns were flown to the departure end of RWY 20 with the PUI in the -3 position. The flight then transitioned to tactical patterns, this time to the approach end of RWY 02. After the final pattern, the flight was complete and taxied back into the line at Moron.	You were consistantly high during your conversion mode patterns throughout the night. Remember that once you have your approach line, get yourself to a solid glideslope as quickly as possible. You want to make the big corrections early in the approach so that you make the end game that much easier. It would also help if you utilized the "hubs on the horizon" technique to match your descent with the other aircraft in the flight. You were within performance standards by the end of the night, and your tactical approaches were the highlights of your performance. Keep working on your conversion mode sight picture and stay in the books.
(b)(3), (b)(6), (b)(7)c	[redacted]	Deferred	No				Event Deferred	
	[redacted]	Logged	No	LLL Cals as part of a tactical event with sister squadron PUI planned with adjacent unit and occupied the -last position for CALS. CALs conducted at Bladen Lakes.	Event planned to depart KNCA for Bogue to PZ required troops, then fly via MRR (VR-042) to LZ Bladen Lakes. Event briefed by DLUI. T&R brief with PUI showed no deficiencies. PUI assisted in the creation of planning/briefing products.	Flight sequence ran as briefed. At Bladen Lakes the DL had to RTB for a malfunction leaving the remaining 3 planes in the zone. CONV and APLN mode CALs completed from the last position. Tendency was to remain too high around the pattern and sucked with lead to a long final with too much energy at the end. Improvements made throughout.	Continue in stage.
(b)(3), (b)(6), (b)(7)c	[redacted]	Deferred	No				Event Deferred	
	[redacted]	Logged	No	Flight was conducted in conjunction with VMM-162 as a flight of three. Div Lat was conducted on the VR-084.	In the brief we discussed the responsibilities of the aircrew and the CRM required during division tac form.	Division LAT was executed as a three ship. Multiple maneuvers and tac form maneuvers were conducted IAW the NTTP.	Great job, ready to continue to the airplane.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Event completed in conjunction with Section GTR sim and GTR walkthrough. We started with the brief in the ready room, walked to the hangar to talk through GTR comms and range procedures. Sim followed with Capt Zingler and 1stLt Scott in the wingman sim. Sim execution took place at KNYL ranges with threats across the spectrum, including small arms, ZPU, ZSU, SA-9, SA-6 and MANPADS.	Good knowledge of the ASE installed, remember to chair flight your profile to make the most of the range time.	1stLt Tomkiewicz demonstrated a standard/fair performance during the single ship GTR sim. He was slow to produce the correct maneuver and intraflight CRM call in response to the threats. Needs work on memorizing the line numbers before the GTR flight. While not proficient by the end of the sim, this represented a good first exposure and 1stLt Tomkiewicz is in-line with his peers for progression through the core skills.	Ready for follow on GTR events.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Follow on sim to 1stLt Tomkiewicz GTR syllabus. Event conducted with Capt Zingler and 1stLt Scott in the wingman position on the Yuma GTR ranges. Threats included variety of RF (SAM	Good discussion regarding systems, training for GTR VS actual GTR, and the difficulty of acquiring proficiency in this skill. Fair knowledge of NTTP procedures and CRM cadences.	Conducted following the single ship sim and GTR walkthrough, we performed all the GTR line numbers against simulated threats in the Yuma ranges.	Its a difficult set of skills to master, but the surface-air-threat counter tactics matrix, if read and understood, will greatly aid in your progression. It's fair to say that you are limited in your ability to individually execute GTR due to experience and knowledge. Your flight will help in building your comfort with the CRM and procedures, but should drastically retract your confidence in our ASE equipment. Ready to proceed to GTR flight.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Day VFR section to Atlantic with both RF and IR emitters. Winds 280/7.	Brief conducted by WTI. PUI assisted in the creation of planning products. PUI demonstrated sufficient knowledge in the T&R brief for flight execution.	Flight departed as a section from KNCA to 12NC. Conducted lines 1, 5, 6, 9, 10, and 11. PUI has a firm grasp of both the functions of the ASE and the maneuvers required to successfully react to a threat. Control inputs and expendable releases were IAW the ANTTP and likely would have resulted in successful disengagement.	PUI is well prepared to continue in syllabus.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Executed multiple landings to LHD and LPD in simulator.	Discussed CQ considerations and T&R items.	Dropped an LHD and LPD SE of point K. Executed multiple breaks and practice approaches to multiple spots on each ship with winds changing throughout the flight. Also demoed single engine failure and discussed general emergency procedure considerations at the ship.	All learning objectives achieved.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted night CQ on LHD off California coast. Conducted Type A and B conversion mode approaches.	None noted.	Remember that on your base turn to final, you're only having to lose ~200' of altitude vice the normal 300' for normal CALS, so don't set the same ROD you normally do or you'll end up shallow like we saw today. Your lineup and speed control were good al night,just work on the glideslope. You'll see that in the plane. CC calls will help tremendously with drift and line up over the spot.	Nice job.

ENCLOSURE (6)

Capt TOMKIEWICZ, MATTHEW J - MV-22B Pilot
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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Took off KNCA to do FLCPs at N. Davis. brc 190. Completed multiple charlie patterns, landings, STOs, and reveiwed tax procedures. We went through all the normal	Completed	Above average stick skills over the spot. On the STO, student tends to pitch up too much during the 'capture 3-5 deg nose up' portion of the STO. No other issues notes	Good brief, stay in the books and always reveiw the boat book before going to the boat
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Elvis21 was SL for flight of 2 departing/returning to KNCA. Wx marginal VFR with occasional showery gusts, winds 220@25G40, vis 3-6 SM, HLL night with OVC layer near 6-8k, intermittent SCT layer near 1k. Weather conditions were a definite factor during planning and execution of this hop, and PUI handled them well given low 30/60/90 day flight time and first goggle flight in >50 days.	Elvis 21 was intended to be -3 of 4 ship division w/ VMM-266. Due to maintenance, VMM-266 backed out of division, so a hasty plan/brief was passed and executed to capture FCLP X's in both aircraft. PUI did a good job adapting to a short-notice change in the mission plan in order to maximize training value. Of note, PUI participated in the planning and creation of division work products at 266 (though they ultimately were not utilized).	Elvis 21 flight departed KNCA for the red line to Davis N FCLP deck, where they executed approximately 20 FCLP patterns (PUI had 13 as the PF). PUI and IP utilized on deck periods to discuss real world considerations (securing POS lights once on deck, communications with tower, LSE position, LLL vs HLL considerations, etc.) Elvis 21/22 acted as tower for each other in order to help build/replicate the correct CRM cadence. Once complete with FCLPs, section conducted a Tango to Kilo transition over surf city in conversion mode to transition to LZ Bluebird. At this point, weather became temporarily marginal due to band from a nearby tropical storm passing through, on top of the gusty winds (40 Knots at pattern altitude). Section conducted 6 conversion mode patterns in to LZ Bluebird before returning to KNCA for a section breakup and 2x GCAs.	PUI showed strong improvement throughout the night. Initially, PUI had tendency to stall at deck edge OR cross with excessive closure, resulting in large amplitude control inputs over the spot. Once PUI had closure/sight picture under control, the focus was on the mechanics of the "nose-left tail right." Remember, it is fine to come completely over the spot and execute that nose turn. As you become proficient and experienced, you can combine your forward closure with the realignment in order to minimize time over the spot. Nice job. Slightly above average event. PUI is well qualified to proceed to conduct NSCQ. The difficult winds and weather conditions experienced during this event were great preparation for actual conditions at the boat.
Maj TORRES, MANUEL ANTONIO	[redacted]	Logged	No	Division flight executed IVO Fort Bragg ISO 3rd BCT and exercise Panther Storm II. Flight departed New River for PZ operations at in the R-5311. PAX and MRZRs loaded onto the aircraft at LZ Jessica and inserted into LZ Sicily. The flight returned to Jessica to pick up a second wave and inserted them into a separate landing site in LZ Sicily. After 2nd insert, a	Capt Tomkiewcz performed well in mission planning during the day of the mission with managing product development and gaining additional exposure to the assault support planning process.	Flight was executed as planned within the R-5311 ASTACSOP objective area calls and tactics were reviewed prior to the first iteration of PZ operations. A total of 48 PAX and 1 MRZR4 were picked up at LZ Jessica and inserted into two separate landing sites within LZ Sicily, supporting the recon force's scheme of maneuver in the AO.	Good work staying engaged throughout mission planning and during the execution of the mission. While the execution did not provide a definitive example of how the Marine Corps executes assault support, it was useful to see how the army/joint force executes air assaults. Continue to ask questions and maximize what you can learn when participating in large, complex exercises like Panther Storm. I believe it was great exposure for you, so do your best to share what you've learned with your peers.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted multiple CASEVAC drills while posturing for both alert 5 and alert 15 in the local airspace of MCAS New River. DASC	Brief was conducted by a WTI	PUI demonstrated a high knowledge of the CMS and quickly inserted information as required to minimize our response time.	No issues, progress.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	HASTY TRAP EVENT EXECUTED AS PART OF LOCAL SECTION READINESS. MORON, SP.	PLAN: PER ASTACSOP, WITH SIMULATED UAS AS OSC AND RESCORT. USING CHECKPOINT BRAVO AS IP/HA. AUTHENTICATION COMPLETE BY OSC, AND USE THE SNATCH METHOD. BRIEF PER ASTACSOP AND BRIEFED BY SECTION LEAD.	PER ASTACSOP, WITH SECTION LEAD RUNNING THE EVENT. EXECUTE FROM CHECKPOINT BRAVO, WITH A SNATCH METHOD.	NONE.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight conducted as a TRAP mission within the Imperial Valley area originated from Tuscon.	Flight brief conducted as a chalk talk emphasizing the communications and information flow from all personnel recovery players to the rescue vehicle and then emphasized objective area mechanics.	Executed as planned.	Capt Tomkiewcz did a great job maintaining SA and ensuring the information flow in the cockpit kept everyone informed.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	LLL LAT and CALs as part of a tactical event with sister squadron. PUI planned with adjacent unit and occupied the -last position for CALS. CALs conducted at Bladen Lakes. Mission was to insert a force with escort from RW CAS and RPA aircraft.	Event planned to depart KNCA for Bogue to PZ required troops, then fly via MRR (VR-042) to LZ Bladen Lakes. Event briefed by DLUI, T&R brief with PUI showed no deficiencies. PUI assisted in the creation of planning/briefing products.	Flight departed as fragged and transited to PZ Bogue. Remamber, with a real boat or real PAX, don't plan anything less than 45 mins when you're PZ'ing a flight of four or more. Timing was constructive for this event. DLUI elected to depart later due to planned excess time for a flight join. Flight entered the VR route as planned and flew LAT without incident. Remember there are no scenarios where the MV-22s will be the only ones around. Provide position updates, reach out for mission SA, and generally engage with the rest of the team more than happened in this event. RPA and RW CAS painted a variety of technical threats and attrited prior to V-22s coming on station. Good job staying on course line during the approach, be sure to include the altitude into your scan, we ended up with too much energy at the end and had to let down to the landing. At Bladen Lakes the DL had to RTB for a malfunction.	Continue in stage.

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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	ELVIS 1-3 EVENT COMPLETE DURING HUNTER AAF DFT IVO SAVANNAH, GA AND R3007. OP TOWNS VEGAS ISO 165TH ASOS JTAC (18X). PZ HUNTER, LZ SONGBIRD. OBJ AREA MECHANICS, AND CONTINGENCIES.	PLAN: DEVELOPED THROUGHOUT THE WEEK WITH 165TH. FOCUSING ON MUTUALLY SUPPORTIVE TRAINING OBJECTIVES. SIMPLE PLAN TO INSERT, CONDUCT LOW ALTITUDE MRR BACK TO OBJECTIVE FOR MULTIPLE OBJECTIVE AREA FLOW TO INCLUDE CASEVAC 9LINES. EXTRACT A PORTION OF THE 18X FORCE THEN RTB FOR COLD FUEL AND HOTSEAT. BRIEF COMPLETE BY DIVISION LEAD VIA PPT. ADEQUATE FOR MISSION SUCCESS.	STTO AND INGRESS WAS IAW BRIEF. INITIAL LZ WAS UNTENEABLE (FOULED). FLIGHT SHIFTED TO ALTERNATE LZ AND INSERT WAS COMPLETE (L-HOUR MISSED DUE TO LZ CONDITION). FLIGHT DEPARTED THE RANGE TO COMPLETE DIV LAT AND CAL HOWEVER 1-3 EXPERIENCED AN ELS FAIL AND RTB'D. AFTER TROUBLESHOOTING, FLIGHT REJOINED AND ATTEMPTED TO COMPLETE LAT/CAL. HOWEVER 1-1 RTB'D DUE TO OIL LEAK. 1-2 AND 1-3 CONSTITUTED THE SECTION AND COMPLETED REMAINING TRAINING FLIGHT. JOINED ON DECK FOR COLD FUEL AND THEN DEPARTED AS A DIVISION FOR THE OBJECTIVE AREA. JTACS "VENOM" MADE MULTIPLE OBJECTIVE AREA CALLS AND EACH AIRCRAFT (OR AS ELEMENTS) WERE CALLED INTO AND OUT OF	PUI WAS WELL ENGAGED IN MISSION PLANNING AND PRODUCT CREATION. DURING EXECUTION, PUI MAINTAINED A SAFE LEVEL OF SITUATIONAL AWARENESS AND WAS ACTIVELY PARTICIPATING IN THE MISSION EXECUTION. PUI'S BAW WAS NOT IMPACTED BY CHANGES IN THE PLAN OR DISTRACTING MISSION COMMS
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted PARAOPS at DZ Pheasant at North Davis	This is something we don't do very often so when planning on JMPS, break out the AD guide its a separate JMPS manual that deals with this exclusively	Flew from KNCA to DZ Pheasant to conduct face to face brief. Talked through the TPG brief and importance of covering all of the checklist item. Took off and climbed to 10,000' MSL to conduct MFF. Big thing here is to be smooth and precise on the controls. You don't want the guys in the back getting sick or injured with abrupt control inputs. We talked through using the checklist and how those are your bid to success in making sure you are set up appropriately for the evolution. conducted several iterations with you flying and running checklist. No issues.	Press.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Event conducted in support of squadron FRAG with 3rd Marine Raider Bn conducting LLSL and MFF operations. PUI was -2 CP.	PUI participated in all aspects of planning, to include: building a chute from ballistic data, planning a no-wind CARP/winded CARP, winded HARP, and building brief/brick products. PUI is commended on his level of participation. PUI came well prepared to discuss AD checklists and walked away from T&R with a solid grasp on how to accomplish the event.	PUI was responsible for PNF duties throughout the conduct of the event, which he accomplished successfully. PUI was responsible for conducting Load Comp on CMS, running AD checks, and maintaining SA on status of lead aircraft to ensure adequate deconfliction in the DZ for jumpers.	PUI was well prepared for event. Knowledge was good, SA and Comms as PNF were also solid for PUI's position in syllabus. Only feedback was to be more directive with conduct of checklists following the AD drop. As the PF, I am concerned with the position of the flaps so that we can speed up and get out of the DZ. PUI is well qualified to conduct this code as a member of a proficient crew.
	AD(4)-4042						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Conducted External Operations in a confined landing zone	Plan and brief IAW the NTTP, T and R, and NATOPS.	Conducted multiple External picks and drops IAW the NATOPS and T and R	na
	AD(4)-4081						
	AD(4)-4083						
	AIE(4)-4140						
	AIE(4)-4141						
	AIE(4)-4142						
	AIE(4)-4143						

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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight conducted day into night out of KABQ. Sky was clear with light winds from the North. We departed for the auxiliary pad south of the airfield for day mat landings. After multiple conversion mode patterns, we were confined to straight-ins from the south due to boundaries surround the pad. After refueling, conducted night landings to the aux pad until c-130 paraops began in the area. We transitioned to double eagle airfield, a small towered airport north east of KABQ for the night mat and CALs.	Adequate for mission success.	You correctly interpreted and recognized the elevation changes, and used an appropriate dme margin to compensate for it. Conversion mode patterns were solid. For the straight-ins from the south, you flew the edge of the boundary to allow a good approach into the spot--well done. For the night MAT and CALs, you power pulls reflected a good understanding of high / hot / heavy conditions. Your communication was a little faint, which seemed to be predicated on the mic not overtasking. Ensure you are reading back calls from the back, and this approved as the night progressed. On one of the 180s into Double Eagle we had a quick, unintentional descent which you corrected and verbalized--good recognition. Keep forcing yourself to use the HUD when it works, but it is good you are not reliant on it.	Good work. ATFs will be identical for day / night mat and ss cal.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Flight conducted day into night out of KABQ. Sky was clear with light winds from the North. We departed for the auxiliary pad south of the airfield for day mat landings. After multiple conversion mode patterns, we were confined to straight-ins from the south due to boundaries surround the pad. After refueling, conducted night landings to the aux pad until c-130 paraops began in the area. We transitioned to double eagle airfield, a small towered airport north east of KABQ for the night mat and CALs.	Adequate for mission success.	You correctly interpreted and recognized the elevation changes, and used an appropriate dme margin to compensate for it. Conversion mode patterns were solid. For the straight-ins from the south, you flew the edge of the boundary to allow a good approach into the spot--well done. For the night MAT and CALs, you power pulls reflected a good understanding of high / hot / heavy conditions. Your communication was a little faint, which seemed to be predicated on the mic not overtasking. Ensure you are reading back calls from the back, and this approved as the night progressed. On one of the 180s into Double Eagle we had a quick, unintentional descent which you corrected and verbalized--good recognition. Keep forcing yourself to use the HUD when it works, but it is good you are not reliant on it.	Good work. ATFs will be identical for day / night mat and ss cal.
	DWS(4)-4242						
	DWS(4)-4245						
	DCM(4)-4330						
	DCM(4)-4340						
	CBRN(4)-4430						
	CBRN(4)-4431						
	CQ(4)-4470						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Departed out of LEMO as a PAX and hot seated into the left seat while at spot 2. Conducted 7 initial landings at various spots on the Spanish ship "Juan Carlos". Executed a VFR departure back to LEMO where we conducted instruments and pattern work.	Plan was more than adequate for mission success. Discuss items were previously briefed in several attempts to complete the X in the past. We still covered the briefing items and you were very prepared for the flight. Remember to review the LH-2 and other instrument procedures before going to a US ship.	Once in the left seat at the Juan Carlos, I demonstrated the first takeoff from spot 2 and re-positioned to spot 6. You then conducted 4 landings to spot 6 then a landing to spot 5. I then took a pattern and then you completed to additional landings before executing the departure back to LEMO.	You were not able to execute the initial approach to the boat due to hot seating into the aircraft. I suggest the next time you go to the boat that you ensure you are able to do this. Once in the left seat I demonstrated the first landing. You made the standard calls as we approached the flight deck and did all CRM required items as the pilot not flying. As the flying pilot your takeoffs and side stepping from the flight deck were very strong. Just remember not to exceed 75 nacelle prior to 40 knots. Your basic air-work was on point. The hardest part about landing on the boat is the last .2- 1 on final. As the flight progressed your perception of closure rate and altitude above the flight deck greatly increased. When approaching the last 5 feet above the spot, make sure to stick the landing with a good rate of descent to avoid the lateral drift. Overall, great flight!
	CQ(4)-4481						
	CQ(4)-4482						
	CQ(4)-4483						
	HTT(4)-4490						

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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	PUI assisted a PWTI division lead for a heavy division launching and recovering from the ship under on period of darkness. Mission required the timely insert and extract of personnel and vehicles IOT sabotage an ally's power plant. This event preceded TLAM strikes on several dams and bridges to destabilize an allied countries newly elected government. PUI assisted in the mission planning cell, but the PWTI briefed and led the flight. Exercise Control executed from NECC.	Plan required a four ship to launch from naval shipping along a training flight route to the insert location. Post insert, the flight moved to Holtsville to continue "training" while waiting for the extract call. After extracting, the flight recovered to the ship via MRR, in EMCON, at night. DL elected to recover the flight via the LH-2 with CCA finals. All briefing products and mission loads sufficient for mission success.	Flight launched on time, inserted as expected, and then was called to extract prior to expected timeline. Small mobility assets like dirt bikes and MRZRs have an outsized effect on the speed of missions. In this case, the customer even had enough time to kill a camel to augment MIDRATs. Above on headwork. DL stepped out of the scenario during the EMCON retrograde to request ASE demos for each of the crews. Excellent use of the training time allotted to increase the proficiency of the aircrews assigned.	Well prepared to continue in stage.
	R/E(4)-4580						
	ADGR(4)-4640						
	B(4)-4740						
	AD(4)-4840						
	AC2(4)-4940						
	BIP(5)-5030						
	BIP(5)-5031						
	FRSI(5)-5130						
	FRSI(5)-5131						
	FRSI(5)-5132						
	FRSI(5)-5133						
	FRSI(5)-5134						
	FRSI(5)-5135						
	FRSI(5)-5136						
	FRSI(5)-5137						
	FRSI(5)-5138						
	FRSI(5)-5139						
	NSFI(5)-5150						
	NSFI(5)-5151						
	NSFI(5)-5152						
	FRSI(5)-5170						
	FRSI(5)-5171						
	AARI(5)-5330						
	AARI(5)-5340						
	LATI(5)-5630						
	LATI(5)-5631						
	LATI(5)-5632						
	RVLI(5)-5730						
	RVLI(5)-5731						
	RVLI(5)-5732						
	DCMI(5)-5830						
	DCMI(5)-5831						
	DCMI(5)-5832						
	NSI(5)-5930						
	NSI(5)-5931						
	NSI(5)-5932						
	NSI(5)-5933						
	NSI(5)-5934						
	NSI(5)-5935						
	NTPS(6)-6030						
	NTPS(6)-6031						
	NTPS(6)-6032						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	EP review complete for real time handling of ECS off overtempt flying IVO R5306 and LZ Gull.	EP review complete for real time handling of ECS off overtempt flying IVO R5306 and LZ Gull.	EP review complete for real time handling of ECS off overtempt flying IVO R5306 and LZ Gull.	EP review complete for real time handling of ECS off overtempt flying IVO R5306 and LZ Gull.
	INST(6)-6060						
	INST(6)-6061						
	CRM(6)-6080						
	CRM(6)-6091						

(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Event was a single ship ASR out of Yuma (KNYL) in a theoretical medium threat scenario. PUI was tasked with assisting the MACCS and MWSS in establishing security and communications as well as providing fuel for a HERS bladder within hostile territory in support of establishing an EABO. Mission assets were 1 x V-22, 1 x KC-130J (TAAR) and 1 x MQ-9 (Recon/Escort). Enemy threat situation included SA-15 and SA-21 RF threats, as well as EW radars will low proficiency (read: no IADS). SMARMS and MANPADS were threat considerations as well. Genesis of the problem for PUI to tackle was RGR coordination/planning, tight fuel and power margins, and red threat mitigation tactics. Specified task was ALS with implied tasks of theater CASEVAC and TRAP.	PUI had the opportunity to brief this event during his oral TAC board. This brief was a definite improvement given some of the initial feedback. Briefing ability was strong for a pilot at his hours with very few "briefisms" and a logical flow. General brief feedback: PUI did a good job with "god, man, me" orientation on relevant map chips, but remember to expand on why that matters for us as the aircrew. Is the mountain range identifiable ITG? Is it a catching feature, or is a blue risk to force? Why do I care about MSRs paralleling our flight path from point a to point b? Draw out the relevance in your god/man/me so that it helps build SA during the flight event. Risk to force/mission: This requires more thought on the part of the PUI. What are we doing that is different/difficult/dangerous? If it is "more of the same" (thorough NATOPS brief, use CRM), then think again. What are you going to implement as that is unique and objectively mitigating the	PUI was initially slow to get out of the chocks and was easily distracted during normal checklist flow. As a result, a couple things were missed: updating the aircraft BW in the ACFT INIT page, late to acknowledge a PRGB CHIP BURN advisory, and a misdiagnosed comm fail when his selector switch was on comm 3. PUI faced several EPs during the en route portion: PRGB CHIPS (memory), FCC 1/2 FAIL (memory), and ECS OFF-OVERTEMP. These EPs were all handled promptly (from memory as required) and thoroughly. I was pleased with PUIs decision-making during these evolutions. PUIs shortcomings on this event came from a couple CRM items that were below expectations of an aircraft commander, specifically assertiveness and communication. PUI allowed	PUI has not flown in 40 days and I think this showed. He was a bit rusty with basic aircraft tasks, checklists, CRM (assertiveness, communication, and flight leadership). However, his situational awareness was generally high, telling me that he prepared for the tactical event while not accounting for how his low currency might affect his performance. This event was executed without any clear "safety of flight" issues, but a re-emphasis on proper CRM during critical phases of flight was necessary during the debrief. PUI passed this event due to his solid knowledge, brief preparation, and situational awareness during a unique scenario. He was admittedly below expectations on some basic prospective-TAC core skills as PF/PNF. I do believe that given a more consistent schedule in the aircraft and simulator that this would have been much less of a factor in this scenario. I recommend at least one flight at night, preferably two flights (one day and night) prior to evaluation in the aircraft for a night TAC review. This will allow him to dust off the cobwebs, improve his PNF "flow" and refine PNF CRM tasks during critical phases of flight. Tomkat- This was a novel planning scenario and you handled it well. Don't forget about "brilliance in the basics" by overthinking the task at hand. Landing the RVL in the next 15 seconds matters more than the SA-21 you'll have to mitigate in the next 15 minutes. Walk away from this event knowing that you have room to grow but confident in your underlying abilities and experience in the aircraft. I fully expect that you will do well on a night TAC review given the opportunity to get back in a steady training rhythm.
(b)(3), (b)(6), (b)(7)c	TAC(6)-6131	Logged	Yes	Weather prevented the bulk of the part task training events that would make the evaluation a better measure of the students capability.	SNM assisted in preparing a LLL division LAT/CAL flight with another squadron and had a plan for our own single ship work to include a troop lift FRAG. Due to weather, the division never brief and SNM conducted a TPG brief for the new plan. The TPG brief was adequate. Remember to focus on the crucial phases of flight and identify friction points. What is different, dangerous, or difficult about this phase of flight and brief to it. Eventually weather continued to degrade, driving a decision to simply conduct an IFR round robin flight.	SNM acted as the aircraft commander and PNF for the duration of the flight. Remember to pull information from ATC until you are confident of what your aircraft is doing in time and space and why.	Needs a more thorough Night TAC Review than an IFR flight.
(b)(3), (b)(6), (b)(7)c	TAC(6)-6131	Logged	Yes	Flight planned as Dash 2 with LLL LAT / CALS IVO KNCA. Planned to kiss off IOT complete the TAC Review post section work. Due to Mx delays, the instructor only had an hour remaining to conduct the evaluation. Logged incomplete due to insufficient observation time. Wx was VFR with winds out of the North.	PUI was the Dash 2 T2P. PUI was heavily involved in the Flight Planning process and assisted the Section Lead as the prospective TAC. The training plan was sound, however, I do not recommend planning to conduct LAT to a TOT using 240KCAS in the climb / enroute, and 220KCAS on the route. Its not physically possible for the aircraft to do that #1 and you are guaranteed to miss L-Hour. Sure you could cut legs, but you may not always have that option. Review your lighting conditions and switchology again, prior to conducting this event again.	Hotseat was conducted without issue. A little slow on the checklist, but the important thing is that you didnt skip anything. Dont get rushed getting out of the chocks, as Pre-taxi breakdown was largely skipped due to Lead pushing us to the pits. This resulted in not having your A/A TACAN squared away and comms all set up for taxi. Dont get bullied into taxing rushed, but also get more efficient with the checklist so that we can taxi on time. It is ok to have your T2P monitor the fuel taking hot gas, but you should definitely have the page pulled up as well, as it will be your fault when you burst a bag. Always Always have ground up in a radio when conducting the RIO in the pits. You have to play the radio swap game, but they will be very upset with you if there is an emergency and cant get ahold of you. We rolled to the other aircraft IOT get something out of the flight. Be careful with switchin	Incomplete. Recommend cleaning up the listed discrepancies and completing the evaluation at the next available opportunity.

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Crew Performance between 1/1/2015 - 3/18/2022
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(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	THIS EVENT COMPLETES THE PREVIOUS AIRCRAFT 6131 INCOMPLETE DUE TO MX. MISSION - SINGLE SHIP ASR FROM USS SHIP(LHD) TO CAMP BILLY MACHEN (R2507W). 6XPAX AND CARGO (~3500#). WX SHIP-BKN010. ENROUTE-MULTIPLE CLOUD DECKS WITH LT-MOD ICING. LZ-270/15 SCT-BKN025 BLDU.	PLAN: PER THE MISSION OVERVIEW AND MET INTENT OF THE ASR. ALL PRODUCTS SUPPORTED MISSION SUCCESS TO INCLUDE AN ABOVE AVERAGE NAVLOG. HOWEVER ONE DISCREPANCY WAS THE LACK OF DIVERT FUEL DATA FROM SHIP TO SHORE - PUI WAS ABLE TO SPEAK TO IT. BRIEF: HALF POWERPOINT/HALF TABLE TOP WITH LZ DIAGRAM AND MAP-ADEQUATE FOR MISSION SUCCESS. CRM BRIEF WAS CLEAR AND CONCISE WHICH ALLOWED FOR DELIBERATE TASKING OF THE CREW. PUI NEEDED MORE EMPHASIS ON COMM FLOW AND CONTINGENCIES	DEPARTED THE SHIP WITH GPS FAIL WITH A PLAN IN PLACE TO UPDATE INS ALONG THE WAY (UNFORTUNATELY THE SIM DID NOT REPLICATE THIS ACCURATELY AND CAUSED CONFLICTING MAP INFORMATION - PROCEDURES WERE SOUND). AFTER DEPARTURE ENROUTE TO THE SHORE, AIRCRAFT EXPERIENCED A NAC BLOWER FAIL. DUE TO PROXIMITY TO THE SHORE (MIRAMAR) AND LACK OF NIGHT SHIP EXPERIENCE, PUI OPTED TO PROCEED DIRECT TO THE AIRFIELD FOR A RCL. RESET AC AND DEPARTED FROM KNKX ENROUTE TO LZ. DURING THE ENROUTE PORTION AIRCRAFT HAD MODERATE ICING WITH AN ADS/AOA IPS FAIL (WITH ADS 2 FAIL). ADDITIONALLY CENTER FORCED A CLIMB AND REROUTE. PUI WAS ABLE TO MANAGE THE REDUCTION IN ICING	PUI IS READY FOR THE AIRCRAFT. STRENGTH: CRM (ASSERTIVENESS/DECISION MAKING) - PUI WAS ABLE TO CLEARLY TASK THE CREW TO EXECUTE DURING A DYNAMIC MISSION. PUI'S DECISIONS WERE SOUND AND ALIGNED WITH EXPERIENCE AND COMFORT LEVEL. PUI'S RM WAS ABOVE AVERAGE - CONSERVATIVE AND SAFE. PUI ERR'D OF THE SIDE OF CAUTION DUE TO LACK OF EXPERIENCE DURING PARTICULAR SCENARIOS. PUI'S ABILITY TO ARTICULATE INTENT, REASONING, AND PLAN OF ACTION WAS COMMENSURATE WITH LEVEL OF EXPERIENCE. WEAKNESS: BAW - PUI WAS RUSTY IN THE LOW ALTITUDE AND RVL ENVIRONMENTS. IN ALL CASES, PUI WAS SAFE HOWEVER LACK CONSISTENCY IN APPROACH CHECKPOINTS. SOME OF THIS WAS DUE TO OLDER SIM VISUALS WHICH WAS A DISTRACTION. CONFIDENT THIS WILL NOT BE AN ISSUE IN THE AIRCRAFT.
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Day IMC flight to Columbia Regional from MCAS New River followed by NATOPS maneuvers at KCAE and IFR return to KNCA. PUI sat right seat and performed all aircraft commander duties without instructor assistance.	PUI planned an IFR route outside of the local area to mitigate a second weather cancellation. Mission-style brief was delivered via PowerPoint followed by a standard NATOPS brief and risk assessment.	Takeoff was significantly delayed for GPS troubleshooting. During the transit to the working area, we discussed whether or not the GPS would have been necessary for this flight. IFR navigation was accomplished via the waypoint set vice TACAN/Airway navigation. PUI maintained good SA and resource management throughout this phase and the rest of the flight. NATOPS maneuvers at KCAE were the PUI's first time at the controls on this flight. The first couple landings to the runway were a little rough (<10 kt x-wind), but PUI quickly warmed up and improved on subsequent patterns. On departure, PUI was given a simulated hung gear scenario and simulated PRGB HOT caution, forcing him to transition to APLN mode below 150 kts. Although slow, his basic aircraft control was very precise and accomplished this non-standard maneuver without error. The flight recovered to	Good aircraft control and basic air-work. We knew we would be short on time due to the late takeoff and would not have had the time to execute a planned CLJN complex round-robin on the backside. Although we flew over numerous VFR runways between KNCA and KCAE, PUI elected to continue to the planned destination. More adaptability/flexibility on the PUI's part could have accomplished all NATOPS maneuvers at a closer airfield and preserved the opportunity to run through the restricted areas on the way home. All in all, a good check. PUI will be just short of 450 hours after this flight due to the late takeoff. He is ready to be an Aircraft Commander once that threshold is crossed.
	SL(6)-6230						
	SL(6)-6231						
	SL(6)-6232						
	SL(6)-6233						
	SL(6)-6234						
	SL(6)-6240						
	DL(6)-6330						
	DL(6)-6331						
	DL(6)-6332						
	DL(6)-6333						
	DL(6)-6340						
	FL(6)-6430						
	FL(6)-6440						
	AMC(6)-6530						
	AMC(6)-6540						
	FCP(6)-6630						
	FCP(6)-6631						
	TRK NS SS						
	TRK STRAT						
(b)(3), (b)(6), (b)(7)c	[redacted]	Logged	No	Abandoned mining complex IVO KCRW. Charleston WV	SNM was well prepared for RVL procedures and approaches	SNM conducted the landings under day time conditions. Excellent training opportunities due to complex terrain and approach profiles	Good to progress

ENCLOSURE (6)

Event Proficiency VMM-261 - MV-22B Pilot

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Days Until Expired as of 05/10/2022 | >= 90 Days | 60-89 Days | 30-59 Days | < 30 Days | Expired

"W" indicates Waived, "D" indicates Deferred

	Familiarization (FAM(2))							
	ACAD: MV-22 SINCGARS	ACAD: MV-22 SATCOM	ACAD: MV-22 Tablet Fam	LAB: Radio Demo	LAB: Tablet Fam	SFAM: FAM	SFAM: INST	ACAD: CAL Procedures
	2010	2011	2012	2020	2021	2030	2031	2210
Permanent								
Capt TOMKIEWICZ, MATTHEW J.	No Refly	No Refly	No Refly	No Refly	No Refly	No Refly	03/11/2023	No Refly

ENCLOSURE (9)

Confined Area Landings (CAL(2))					Low A					
SCAL: Single CAL	SCAL: Section CAL	CAL: Single CAL-Visual	CAL: Single CAL-Wypt	CAL: Section CAL	ACAD: LAT I	ACAD: LAT II	ACAD: LAT III	ACAD: Ps E/M	ACAD: Tactics in Night Env	LAB: LAT Walk Through
2230	2231	2240	2241	2242	2610	2611	2612	2613	2614	2620
No Rolly	03/17/2023	No Rolly	No Rolly	03/17/2023	No Rolly	No Rolly	No Rolly	No Rolly	No Rolly	No Rolly

ENCLOSURE (6)

Altitude Tactics (LAT(2))							Mountain Area Training (MAT(2))			
SLAT: LAT Maneuvers / Rte	SLAT: Section LAT	SNS LAT: NS Section LAT	LAT: LAT Maneuvers / Rte	LAT: Section LAT	NS LAT: HLL Section LAT	NS LAT: LLL Section LAT	ACAD: High Altitude Ops	ACAD: Advanced MV-22 Aero	SMAT: Day MAT Sim	SMAT: NS MAT Sim
2630	2631	2632	2640	2641	2642	2643	2710	2711	2730	2731
No Rally	03/17/2023	01/25/2023	No Rally	03/17/2023	09/22/2022	07/24/2022	No Rally	No Rally	02/02/2023	01/05/2023

ENCLOSURE (9)

	Air Logistics Support (ALS(3))		Requirement, Qualification, Designation (RQD(6))				Emergency Procedures (EP(6))	Instrument (INST(6))		
SMAT: High/Hot/Heavy SIM	ACAD: ALSO Intro / Planning	ALS: ALS Msn	NATOPS Open Book	NATOPS Closed Book	NATOPS Oral Exam	NATOPS Eval	6033	IGS	Instrument Exam	Instrument Oral Exam
2732	3010	3040	6010	6011	6012	6030	6033	6040	6041	6042
02/02/2023	No Rally	03/11/2023	08/31/2022	08/31/2022	08/31/2022	02/22/2023	05/31/2022	07/31/2022	07/31/2022	07/31/2023

ENCLOSURE (9)

	Crew Resource Management (CRM(6))		TAC(6)			
INST Eval	CRM Refresher	CRM Eval	Oral TAC Board	TAC Review	Night TAC Review	TAC Check
6060	6070	6080	6110	6130	6131	6132
07/31/2022	01/31/2023	02/28/2023	No Refly	No Refly	No Refly	No Refly

ENCLOSURE (6)