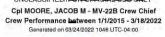
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Instructor Name	Event	Method	Needs Additional Training	Overview	Plan/Brief	Execution	Instructor Comments
	FAM(1)-1032		Flanmig				
	FAM(1)-1033 FAM(1)-1080	_					
	FAM(1)-1080						
	FAM(1)-1082						
	FAM(1)-1083			-			
	FAM(1)-1084 FAM(1)-1085						
	FAM(1)-1086			1			
	INST(1)-1240						
	CAL(1)-1340 CAL(1)-1341						
	FORM(1)-1440						
	FCLP(1)-1540			· · · · · · · · · · · · · · · · · · ·			
	NS(1)-1640					lannan an a	
	NS(1)-1641 NS(1)-1642	-					
	CARGO(1)-1730						
	REV(1)-1830						
	REV(1)-1831 REV(1)-1840		-				
	REV(1)-1840						
b)(3), (b)(6), (b)(7)c	CONTRACTOR OF	Logged	No	a section towards the VR-84. Entered LAT route at point B via tactical decent. once in the LAT enviorment we conducted multiple SO/TO/RO and multiple tac form manuvers, exited LAT route at point F via zoom	Departed KNCA at 1415L as a section towards the VR-84. Entered LAT route at point B via tactical decent, once in the LAT environment we conducted multiple SO/TO/RO and multiple tas form manuvers, exited LAT route at point F via zoom climb. headed to LZ BAT and conducted multiple bources as the lead and dash 2	Good SA of other plane and manuvers	Be louder on ICS, and more assertive when calling out other planes location
b)(3), (b)(6), (b)(7)c	P.8	Logged	No	conducted multiple bounces as the lead and dash 2 FCF A-card on a/c 07 with	Multiple landings to apex of Oak Grove, with extensive hover work at varying allitudes, modes, drifts, and even crew chief hover work. Approaches into Fayettville and TACAN 23 to KNCA.	Excellent calls all day, Responsive to minor guidance. Strong SA with 53 traffic on Rwy 5 at Oak Grove and 22 at LZ Emu. Good clearance calls with trees and	Well done. Stay in the books since flights will become more complicated an task management critical with additional CRM call requirements.
						drift.	no transfer and the second
b)(3), (b)(6), (b)(7)¢	(at 3) (cer	Logged	No	Departed KNCA to Oak Grove Complex. Completed 5 CALS at LZ BAT.	Departed KNCA to Oak Grove Complex. Completed 5 CALS at LZ BAT.	Student showed steady improvement through flight in distance estimation. Showed good situational awareness throughout.	Student needs improvement in standard terminology calls, and wind mitigat in mic while landing.
(b)(3), (b)(6), (b)(7)c	eAlmerer	Logged	No	a section towards the VR-84. Entered LAT route at point B via tactical decent, once in the LAT enviorment we conducted multiple SO/TO/RO and multiple tac form manuvers, exited LAT route at point F via zoom climb. headed to LZ BAT and	Departed KNCA at 1415 Las a section towards the VR-84. Entered LAT route at point B via taticial decent once in the LAT environment we conducted multiple SO/TO/R0 and multiple tac form manuvere, exited LAT route at point F via zoom climb. headed to L2 BAT and conducted multiple bounces as the lead and dash 2 position until training complete.	Good calls to deck	Work on wind noise mitigation, work on answering pilots quicker.
	IWO ISS STO	Waived	No	as the lead and dash 2			Event Waived
)(3), (b)(6), (b)(7) <mark>c</mark>	PAGENE	Logged	No	Flight Elvis 1-2 departed KNCA @ 1500 to conduct RVL training. Flight preformed 10 RVL's and RTB KNCA for full stop.	SNM was prepared but could have used more studying. SNM was knowledgeable on RVL's but there is always room for improvement.	SNM was told to communicate more and clearly. SNM had minor moments of silence in the RVL environment.	SNM could use work but is ready for further RVL training.
	10590 101 100	Logged	No	DEPARTED KABQ AS A	N/A	N/A	N/A
(b)(3), (b)(6), (b)(7)c	ALLER TISTIST	Logged	No	DEPARTED KNCA AS A	N/A Flight flown as briefed, SNM was	N/A Flight flown as briefed, SNM	N/A SNM had high SA and provided accurate distance estimation.
		Logged	No	Flight departed as a single flying down the blue line to LZ Gull where we conducted 6 CALS utilizing both	an active member of the brief and understood the plan.	was an active member of the brief and understood the plan.	
(b)(3), (b)(6), (b)(7)c	NAL INVEST	Logged	No	Flight departed as a single flying down the blue line to LZ Gull where we conducted 6 CALS utilizing both	Flight flown as briefed, snm was an active member of the brief and understood the plan.	Flight flown as briefed, snm was an active member of the brief and understood the plan.	SNM had high SA, distance estimation was accurate all night.
	NSLLL(2)-2382				-		
	NSLLL(2)-2383	Logged	No	Conducted Tail gun training in	Conducted single and section TG	Conducted single and section	Needs to work on making STAR calls.
3), (b)(6), (b)(7)c	100 501	Logged	No	the vicinity or BT-9 Conducted single and section	in the vicinity of BT-9 IAW T&R Conducted single and section TG	TG in the vicinity of BT-9 IAW T&R Conducted single and section	Needs to make better STAR calls while employing the M240
(3), (b)(6), (b)(7)c	INITIZAT	Logged	No	TG in the vicinity of BT-9 IAW T&R Conducted night system	in the vicinity of BT-9 IAW T&R Conducted night system single	TG in the vicinity of BT-9 IAW T&R Conducted night system	Needs to work on STAR calls
(3), (b)(6), (b)(7)c				single and section Tail Gun training in the vicinity of BT-9 IAW T&R	and section Tail Gun training in the vicinity of BT-9 IAW T&R	single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Number of the second seco
)(3), (b)(6), (b)(7)c	10001-5	Logged	No	Conducted night system single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Conducted night system single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Conducted night system single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Needs to make better STAR calls
b)(3), (b)(6), (b)(7)c	CWI Common	Logged	No	flight departed MCAS New River and cunducted LAT on the VR-084 LAT route the went to LZ BAT to finish out the flight with CALs until RTB	SUI understood all terms and the plan of the flight	SUI was able to cuduct all manuvers with good SA throughout the flight. All training was cunducted IAW MV-22B T&R manual	Keep in the pubs, work on wing mitigation

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ENCLOSURE (12)

Generated on	03/24/2022 1046	UTC-04:00					
(b)(3), (b)(6), (b)(7)c		Logged	No	a section towards the VR-84. Entered LAT route at point B via tactical decent, once in the LAT environment we conducted multiple SO/TO/RO and multiple tac- form manuvers, exited LAT route at point F via zoom climb, headed to LZ BAT and conducted multiple bounces as the lead and cash 2	section towards the VR-84. Entrered LAT route at point B via tackcal decent, once in the LAT environment we conducted multiple SO/TO/RO and multiple tac form manuvers, exited LAT route at manuvers, exited LAT route at point F via zoom slimb. headed to LZ BAT and conducted multiple bounces as the lead and dash 2 position until training complete.	Good calls	none
(b)(3), (b)(6), (b)(7)c		Logged	No	Flight conducted as briefed.	Execution occurred as briefed.	Flight departed KNCA and filew directly to the 042 LAT route where we conducted APLN LAT and conversion APLN LAT and conversion LAT to include a SO/TO/ and RO. Flight continued LAT until landing at mountain empire where we conducted a pilot hotseat. Once hotseat complete, the flight departed mountain empire and re- entered the 042 and continued LAT until the end of the route. The flight then flew directly to LZ Bat and performed a single CAL, then proceeded back to KNCA for a full stop.	SA was high throughout the flight. Good clearing calls. Areas for improvement include speaking up so you can be heard and more frequent updates on obstacles in the route.
b)(3), (b)(6), (b)(7)c		Logged	No	Flight departed as a section for theVR-084 IOT conduct	N/A	SNM shows good understanding of Crew duties	N/A
(b)(3), (b)(6), (b)(7)c		Logged	No	LLL LAT. Afterwards, flight Flight departed as a divison of 4 for the W-122 IOT	N/A	during LLL LAT. SNM showed good understanding of duties during	N/A
(b)(6), (b)(7)c		Logged	No	conduct Tacform. Afterwards, Flight departed as a divison of 4 for the W-122 IOT	N/A	DIV TacForm SNM Showed good understanding of duties during DIV CALs	N/A
(b)(6), (b)(7)c		Logged	No	conduct Tacform. Afterwards, Flight departed KNCA and conducted initial division CALs for a full stop at YGR.	Crewchief was knowledgeable going over the T&R and was prepared ahead of time for the flight. Was visible the crewchief understood the requirements expected of him.	Crewchief was able to conduct 5 initial ladings and safely get the aircraft on deck. SNM was able to conduct normal duties and be active in the CAL enviroment.	SNM needs to work on wind mitigation, at times it was difficult to understand what was being said.
(b)(6), (b)(7)c		Logged	No	Flight took off from Moron Airbase and proceeded to NAS Rota to conduct night systems FCLPs and Division	SUI was able to understand briefed plan and ask appropriate questions concerning the flight.	SUI was able to maintain communication with all aircrew on the location of all aircraft in the flight,	N/A
(b)(3), (b)(6), (b)(7) c		Waived Logged	No No		Completed IAW MV-22B T&R		Event Waived Completed IAW MV-22B T&R
b)(3), (b)(6), (b)(7)c	200103	Logged	No	Flight departed KNCA and conducted division LAT for a full stop at YGR.	Crewchief was knowledgeable during the T&R and was prepared for the flight.	Crewchief in the LAT environment was very aware and was able to preform all crew duties.	Crewchief is recommended to continue with training as is.
		Waived Waived	No No				Event Waived Event Waived
(b)(3), (b)(6), (b)(7)c	Concession in	Logged	No	Conducted GTR at the Navy DARE Range.	SNM understood the brief and plan. SNM did well in the walk through.	SNM understands the mechanics of GTR and is able to implement the techniques when presented with threats.	SNM will benefit from increased exposure to GTR. SNM should focus on the
	C= (1.3) C =	Waived	No				Event Waived
(b)(3), (b)(6), (b)(7)c		Waived Logged	No No	Departed KNCA as a single and conducted 5 FCLP landings at the LHD deck. Departed The LHD deck and conducted LAT on the VR- 084. Conducted L hour management into LZ Bat and conducted multiple CAL landings. Departed for RTB to	VR-084. Conducted L hour management into LZ Bat and conducted multiple CAL landings. Departed for RTB to KNCA.	SNM showed continual progression throughout time of flight. Had clear concise calls. Made concise and timely corrective calls to the pilots.	Event Waived SNM needs to work on being more confident in his abilities.
(b)(3), (b)(6), (b)(7)c		Logged	No	Flight took off from Moron Airbase and proceeded to NAS Rota to conduct night systems FCLPs and Division	SUI was able to understand briefed plan and ask appropriate questions concerning the flight.	SUI was able to execute clear and concise calls to the deck IOT execute a safe landing	NA
(b)(3), (b)(6), (b)(7)c	AL CONTRACT	Logged Logged	No No	conducted IAW T&R	conducted IAW T&R Completed IAW MV-22B T&R	conducted IAW T&R Completed IAW MV-22B T&F	conducted IAW T&R Completed IAW MV-22B T&R
	HEAL	Logged	Να	flight conducted a tactical scenario ivo moron air base	student postured well and took good notes as well as asked questions to help set himself up for the flight	student was able to back the pilots up well and take kay information from the comms passed, student was also able to recorfigure the plane to take litter bound troops, student was able to demonstrate knowledge of the rmws and when to employ it and its ground capabilities	
	(ATT DE RES	Logged	No	Completed IAW MV-22B T&	R Completed IAW MV-22B T&R	Completed IAW MV-22B T&P	Completed IAW MV-22B T&R
(b)(3), (b)(6), (b)(7)c				 International contraction of the second secon	the second se		

UNCLASSIFIED//FOR OFFICIAL USE ONLY Cpl MOORE, JACOB M - MV-22B Crew Chief Crew Performance between 1/1/2015 - 3/18/2022 Generated on 03/24/2022 1046 UTC-04:00

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)(3), (b)(6), (b)(7)c	AD(4)-4042 AD(4)-4043 AD(4)-4081	Logged Logged	Yes	Departed KNCA as a single at 1940 to LZ Kite for external operations. Conducted 3 externals then departed LZ Kite for ATB KNCA in time for hoteeat.	operations. Conducted 3	Student conducted 2 externals while giving calm,	Student needs to study voice signals for external operations before the next
(b)(6), (b)(7)c				at 1840 to LZ Kite for external operations. Conducted 3 externals then departed LZ Kite for RTB KNCA in time for	1840 to LZ Kite for external operations. Conducted 3	externals while giving calm,	
		Logged	N	intoda.	externals then departed LZ Kite for RTB KNCA in time for hotseat.	precise directional calls allowing for safe operations with the load, Student did howaver forget a couple calls during hooking and un- hooking of the load.	attempt of completing this code.
(b)(3), (b)(6), (b)(7)c			No	Opparted KNCA and proceeded down the blue line to LZ Albatrost to conduct initial day single point externals, Conducted 1 demonstration pick and five picks per student. Upon compiletion of external operations, departed LZ Albatross and RTB to KNCA for hotseat.	Conducted preflight T&B brief and preflight of alicraft hook system and pendants.		No Comment
	AD(4)-4082 AD(4)-4033	Logged	Yes	Cpl Moore attempted to complete his initial 4053X at LZ kite druing a NSI check with Cpl Halovich.	CpI Moore was well prepared for the T&R. SNM was able to be tested on his knowledge of the flights and know what the performance standards were. During the brief SNM was attentive, know the plan, and the SOM and had zero questions.	Due to the NSI check Cpl Moore did not get to inspect the load, or conduct 5 picks. SIM standard terminology was lacing during the word yomit of the EXT calls. SIM was getting better with every pick, but would leave out key calls to ensure the piots knew the hook was clear or hocked up.	Cpl Moore only conducted 3 picks. SNM will need to be shown the load to inspect it and ensure it is safe to pick up and will need to conduct a minimum 2 more picks. Trecommend SNM attempts this code again with no timeline the can get as many picks as time allows.
	AD(4)-4084		1				
	AIE(4)-4140				1		
	AIE(4)-4141				h	-	
	AIE(4)-4142						
	AIE(4)-4143	1.0000					1//4
(b)(3), (b)(6), (b)(7)c -	CLATIC ELL	Logged	No	DEPARTED KABO AS A	N/A	N/A	N/A
	DWS(4)-4240	Logged	No	DEPARTED KABO AS A	N/A	N/A	N/A
	DWS(4)-4241		-				
	DWS(4)-4242		-				
	DWS(4)-4243						
	DWS(4)-4244						
	DWS(4)-4245						
	DCM(4)-4340						
	CBRN(4)-4430	1					
	CBRN(4)-4431						
(b)(6), (b)(7)c	CONTRACTOR OF	Logged	No	Flight departed KNCA and transited to the USS Wasp for 1 and a half hours of CQ landings. Flight then RTB to KNCA for full stop.	SNM was knowledgeable on carrier operations and had very good discussion topics prior to the flight.	SNM was able to conduct clear, precise and safe calls. Was capable of maintaining composure and was overall a good crew member.	Work on wind mittigation.
	CQ(4)-4481						
	CQ(4)-4482 CQ(4)-4483						
	SEA(4)-4483		-				
	RVE(4)-4580						
	ADGR(4)-4640						
	BI(4)-4740					-	
	BI(4)-4741	-					
b)(3), (b)(6), (b)(7)c	AD(4)-4840	Logged	No	Departed LEMO as a section towards LERT. Once at LERT SNM tock his student to conduct a face to face brief with jumpmaster prior to conducting para ops. SNM ensure jumpers were embarked and safely	T&R his student before flight, explain expectations for flight, and ensure any questions the student had were answered prior to flight,	importance of pre-oping the	SNM is highly recommended for BICC and follow on instructor designation
	FRSCCI(5)-5140						
	FRSCCI(5)-5141						
	FRSCCI(5)-5142						
	FRSCCI(5)-5143 TGI(5)-5430						
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	LATI(5)-5630						
	LATI(5)-5630 LATI(5)-5631						
	LATI(5)-5630						

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Cpl MOORE, JACOB M - MV-22B Crew Chief Crew Performance between 1/1/2015 - 3/18/2022 Generated on 03/24/2022 1046 UTC-04:00

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	NSI(5)-5931		the second second				
	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	Real Provide P	Logged	No	FCF A-card acceptance for a/c 07.	FCF A-card. Solid CRM review	Nr sensor mismatch, failed GPS, EAPS functional failure	Strong SA
b)(3), (b)(6), (b)(7)c		Logged	No	Flight was completed in accordance with current T&R.	Student was instructed on the review of Emergency Procedures.	Student satisfactorily completed the Emergency Procedure Review in flight while retaining high S/A.	Student needs to review step 19 procedures for future flights to be comfortabl in the cockpit on start up.
	CRM(6)-6080		and the second second			3 3 5	
	CRM(6)-6091		and the second se	and a little of the second sec			
(b)(6), (b)(7)c	1042 - TOU	Logged	No	Conducted single and section TG in the vicinity of BT-9 IAW T&R	Conducted single and section TG in the vicinity of BT-9 IAW T&R	Conducted single and section TG in the vicinity of BT-9 IAW T&B	Needs to work on making better STAR calls while employing the M240
	te anoticatio	Logged	No		Conducted night system single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Conducted night system single and section Tail Gun training in the vicinity of BT-9 IAW T&R	Needs to work on making better STAR calls
	GAU-16(6)-6250	1					a second s
	GAU-16(6)-6251		11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and the second sec		1 La	the second
(b)(3), (b)(6), (b)(7)c	South 1-	Logged	No	Departed LEMO as a section out over international waters to conduct 50 caliber tail gunnery.	SNM was able to talk through T&R intelligently.	SNM was able to effectively employ weapon system and lay down some freedom.	Recommend SNM continues with syllabus to learn the ways of the GAU.
	GAU-21(6)-6351						
	TRK(6)-6700						
b)(3), (b)(6), (b)(7)c	APR 11	Logged	No	Departed KNCA@ 1500 for RVL training. Conducted 10 RVL landings then RTB	SNM was knowledgeable on RVL's.	SNM was told they could work on communication in RVL conditions	Could use work on communication and mitigation.
(b)(3), (b)(6), (b)(7)c	WHY COM	Logged	No		N/A		N/A

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Event Proficiency VMM-261 - MV-22B Crew Chief

Generated on 05/10/2022 1101 UTC-04:00

Days Until Expired as of 05/10/2022	>= 90 Days	60-89 Days	30-59 Days	< 30 Days	Expired
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"W" indicates Waived, "D" indicates Deferred

		Familiarizati	on (FAM(2))		Confined Area La	andings (CAL(2))		
	ACAD: Reference Publications	ACAD: Air to Air Refueling	LAB: Msn Aux Tank System	LAB: Cargo Loading	CAL: Single CAL	CAL: Section CAL	ACAD: LAT for EAC	ACAD: TAC Aircrew Considerations
	2012	2013	2020	2027	2240	2242	2610	2611
Permanent							-	
Cpl MOORE, JACOB M.	No Refly	No Refly	No Refly	No Relly	No Refly	03/17/2023	No Refly	No Refly

Low Altitude Tactics (LAT(2))					Air Logistics Support (ALS(3))		Requirement, Qualification, Designation (RQD(6))			
LAB: LAT Walk Through	LAT: LAT Maneuvers / Rte	LAT: Section LAT	NS LAT: HLL Section LAT	NS LAT: LLL Section LAT	ACAD: Six Functions	ALS: ALS Msn	NATOPS Open Book	NATOPS Closed Book	NATOPS Oral Exam	NATOPS Eval
2620	2640	2641	2642	2643	3011	3040	6010	6011	6012	6030

No Refly No Ref	v 03/17/2023	10/06/2022	07/06/2022	No Refly	03/16/2023	01/31/2023	01/31/2023	01/31/2023	02/28/2023
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Emergency Procedures (EP(6))	Crew Resource Management (CRM(6))					
6033	CRM Refresher	CRM Eval				
6033	6070	6080				

05/02/2022 01/31/2023 02/28/2023

V.MM-261 NATOPS AUDIT SmEET



ENCLOSURE (3)

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	ي. م	IANIE:	SPEEDY	DATE: 6JUNZI	AUDITOR:	(b)(3), (b)(6), (b)(7)c	
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# NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

# SECTION IA - REVIEW AND CERTIFICATION RECORD

NAME (Last, first, middle initial)	SSN	

- 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.

		RECORD	S OF REVIEW		
DATE		DATE	SIGNATURE	DATE	SIGNATURE
GJUNZI	(b)(3), (b)(6), (b)(7)c				
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		DETACHMEN	CERTIFICATION		
	DATE	SIGNATURE	UNIT	DATE	SIGNATURE
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IN REPLY REPER TO: 3710 DSSN 4 Nov 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: DAY LOW ALTITUDE TACTICS QUALIFICATION

Ref: (a) NAVMC 3500.11F

- (b) NAVMC 3500.14E
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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 NATOPS Logbook Entry M-SHARP

> ATRIMS TRANSFER DATA SUMMARY ENCLOSURE

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IN REPLY REFER TO: 3710 DSSN 24 Jun 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: M240D QUALIFICATION

Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual

(b) NAVMC 3500.11 MV-22B Training and Readiness

1. Per the references, and having demonstrated the knowledge, proficiency, and capabilities in the MV-22B tiltrotor, you are hereby M240D 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



IN REPLY REFER TO: 3500 DSSN 06 Sep 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: NIGHT SYSTEMS LOW LIGHT LEVEL QUALIFICATION

- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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

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> ATRIMS TRANSFER DATA SUMMARY ENCLOSURE

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IN REPLY REPER TO: 3500 DSSN 24 Jun 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: DAY TAIL GUNNERY QUALIFICATION

- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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

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

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UNITED STATES MARINE CORPS MARINE MEDIUM TILTEOTOR SQUADRON 261 MARINE MEDIUM TILTEOTOR SQUADRON 261 MARINE AIRCRAFT GROUP 26, 2D MARINS AIRCRAFT WING, FMF POSTAL SERVICE CENTER BOX 21016 JACKSONVILLE, NC 28545-1016 TSSON DSSN 17 May 21

> From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: NIGHT SYSTEMS HIGH LIGHT LEVEL QUALIFICATION

- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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

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> IN REPLY REFER TO: 1326 S-3 21 Sep 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Designated Personnel

Subj: ASSIGNMENT OF TEMPORARY-INDEFINITE NON-CREWMEMBER FLIGHT ORDERS

- Ref: (a) MCO 1326.2H
  - (b) WgO 1326.5B
  - (c) SqdnO 1326.1G

Encl: (1) VMM-261 Non-Crewmember Personnel Roster

1. Per the references, you are hereby ordered to duty in a flying status involving flights as a non-crewmember (MV-22B Aerial Observer). These orders are effective 1 October 2021 and will terminate on 30 September 2022.

2. If during this period you are discharged and reenlist at this station without a break in active service, this order will remain in effect for the period specified herein.

3. You are hereby notified that these flight orders and your flight status as per paragraph 1, above, will be terminated as of 30 September 2022 unless subsequently renewed.

4. These orders will be automatically revoked upon transfer from this unit.



# VMM- NON-CREWMEMBER PERSONN ROSTER

	RANK	LAST	NAME	FIRST	NAME	MI	EDIPI
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n 1 North States 1 North States	SSGT	SPEE	EDY	IAL	MES	W   13	85011012
			(b)(3), (b)	(6), (b)(7)c			



> IN REFLY REFER TO: 1326 S-3 3 Dec 20

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Staff Sergeant James W. Speedy 1385011012/0111 USMC

Subj: ASSIGNMENT OF TEMPORARY-INDEFINITE NON-CREWMEMBER FLIGHT ORDERS

Ref: (a) MCO 1326.2H

- (b) WgO 1326.5B
- (c) SqdnO 1326.1G

1. Per the references, you are hereby ordered to duty in a flying status involving flights as a non-crewmember (MV-22B Aerial Observer). These orders are effective beginning 3 December 2020 and will terminate on 30 September 2021.

2. If during this period you are discharged and reenlist at this station without a break in active service, this order will remain in effect for the period specified herein.

3. You are hereby notified that these flight orders and your flight status as per paragraph 1, above, will be terminated as of 30 September 2021 unless subsequently renewed.

4. These orders will be automatically revoked upon transfer from this unit.

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



> IN REPLY REFER TO: 1336 S-3 2 Dec 20

From: Staff Sergeant James W. Speedy 1385011012/0111 USMC To: Commanding Officer, Marine Medium Tiltrotor Squadron 261

Subj: VOLUNTEER FOR DUTY INVOLVING FLYING

- Ref: (a) MCO 1326.2H
  - (b) CNAF M-3710.7

1. I hereby volunteer and request orders for duty involving flying. I certify that this request is made of my own volition. This request is not based in any part on promises of special treatment or favors and is made free from duress of any kind. I understand that I must maintain those qualifications specified by the Chief of Naval Operations and the Commandant of the Marine Corps during the periods I am actively assigned to such duties. This agreement shall remain valid until such time as I rescind this agreement or that I am no longer qualified for such duties.

SPEEDY W

· · ·	MEDICAL RECOMMENDATI (Read Privacy Act State	ON FOR FLYING OR SPECIAL ement and instructions on back before of	OPERATIONAL	DUTY					
· · · · ·	1. TO:	2. FROM:		3. DATE (YYYYMMDD)					
	Commanding Officer: VMM-261	Flight Surgeon: MCAS NEW RI	geon: MCAS NEW RIVER						
	4. MEMBER NAME (Last, First, Middle Initial)	5. IDENTIFICATION NUMBER	6. GRADE	7. DATE OF BIRTH					
	SPEEDY, JAMES W.	1385011012	GYSGT/E-7	( <i>үүүүммдд</i> ) 19910609					
	8. ORGANIZATION	9. TYPE OF DUTY		CAL DATE (YYYYMMDD)					
	USMC	DIF AC/RW	(If applicable)	20220215					
	11. UP: THE ABOVE INDIVIDUAL HAS BEEN FOL	JND QUALIFIED BY MEDICAL AL	THORITY.						
	a. X one: X CLEARED AFTER (X): Temporary medical dis Reporting to new duty X CLEARED AFTER FLIGHT DUTY MEDICAL EXAMIN	station Waiver granted	ended (Not USAF)	Aircraft mishap Other (See remarks)					
	b. EFFECTIVE DATE (YYYYMMDD)	C. EXPIRATION DAT	E (YYYYMMDD)						
	20220215		20220630						
	12. DOWN: THE ABOVE INDIVIDUAL HAS BEEN FOUND DISQUALIFIED BY MEDICAL AUTHORITY.         a. X one:         TEMPORARY DISQUALIFICATION DUE TO (X):         Illness or injury         Alrcraft mishap         Other (See remarks)         MAY PARTICIPATE IN (X):         Simulator duties         PERMANENT DISQUALIFICATION								
	b. EFFECTIVE DATE (YYYYMMDD)		ATION OF GROUNDIN						
	13. REMARKS/LIMITATIONS           X         VISION CORRECTION DEVICES REQUIRED IN THI           X         MUST CARRY EXTRA SPECTACLES.	E PERFORMANCE OF FLIGHT DUTIE	s.						
	14. (X one): X FLIGHT SURGEON OTHER (Cc	ountersignalure raquired for Air Force and I∳a	vy yastiat						
	14. (X one): X FLIGHT SURGEON OTHER (Co a. TYPED NAME (Last, First, Middle Initial)	Duntersignature required for Air Force and Ma	1111	d. DATE SIGNED					
		b. GRADE C. PROVIDER SIG	1111	d. DATE SIGNED (YYYYMMDD) 20220215					
	a. TYPED NAME (Last, First, Middle Initial)	b. GRADE C. PROVIDER SIGN (b)(3),	Torikot	( <u>YYYYMMDD</u> ) 20220215					
	a. TYPED NAME (Last, First, Middle Inilial) (b)(3), (b)(6), (b)(7)c	b. GRADE C. PROVIDER SIGN (b)(3),	(b)(6), (b)(7)c	(YYYYMMDD) 20220215 TURE h. DATE SIGNED					
	a. TYPED NAME (Last, First, Middle Initial) (b)(3), (b)(6), (b)(7)c e. TYPED NAME (Lest, First, Middle Initial)	b. GRADE C. PROVIDER SIGN (b)(3), f. GRADE g. FLIGH, SURGE	(b)(6), (b)(7)c ON COUNTERSIGNAT	(YYYYMMDD) 20220215 TURE h. DATE SIGNED (YYYYMMDD) c. DATE SIGNED					
	a. TYPED NAME (Last, First, Middle Initial) (b)(3), (b)(6), (b)(7)c e. TYPED NAME (Last, First, Middle Initial) 15. MEMBER CERTIFICATION	b. GRADE C. PROVIDER SIGN (b)(3), f. GRADE g. FLIGH, SURGE	(b)(6), (b)(7)c ON COUNTERSIGNAT	(YYYYMMDD) 20220215 TURE h. DATE SIGNED (YYYYMMDD) c. DATE SIGNED (YYYYMMDD)					
	a. TYPED NAME (Last, First, Middle Initial) (b)(3), (b)(6), (b)(7)c e. TYPED NAME (Lest, First, Middle Initial) 15. MEMBER CERTIFICATION a. I certify that I understand the above recommendations an	b. GRADE C. PROVIDER SIGN (b)(3), f. GRADE g. FLIGH, SURGE nd that I: b. AIRCREW MEMBER	b)(6), (b)(7)c DN COUNTERSIGNAT	(YYYYMMDD) 20220215 TURE h. DATE SIGNED (YYYYMMDD) c. DATE SIGNED					

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# NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET

# SECTION IIA - FLIGHT PERSONNEL DESIGNATION RECORD

NAME (Last, first, middle initial)

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### NATOPS FLIGHT PERSONNEL TRAINING/QUALIFICATION JACKET OPNAV 3760/32D (4-90) S/N 0107-LF-009-7500

# SECTION IIB - MISSION QUALIFICATION RECORD

NAMË (Last, first, m	iiddle initial)			SSN
EFFECTIVE DATE	TYPE AIRCRAFT	MISSION QUALIFICATION	UNIT	REMARKS
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IN REPLY REFER TO: 3500 DSSN 06 Sep 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: NIGHT SYSTEMS LOW LIGHT LEVEL QUALIFICATION

- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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



IN REPLY REFER TO: 3500 DSSN 24 Jun 21

- From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC
- Subj: DAY TAIL GUNNERY QUALIFICATION
- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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

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

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



IN REPLY REFER TO: 3500 DSSN 17 May 21

From: Commanding Officer, Marine Medium Tiltrotor Squadron 261 To: Gunnery Sergeant James W. Speedy 1385011012/0111 USMC

Subj: NIGHT SYSTEMS HIGH LIGHT LEVEL QUALIFICATION

- Ref: (a) NAVMC 3500.14 Aviation Training and Readiness Program Manual
  - (b) NAVMC 3500.11 MV-22B Training and Readiness Manual
  - (c) A1-V22AB-NFM-000 MV-22B NATOPS Flight Manual

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

### CNAFINST 1542.7(Series) 2 MAY 2015

# CRM TRAINING & EVALUATION RECORD

1. NAME (Last, first, mlddle initial):	2. RANK:	3. EDIPI NUMBER:

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

CPM	IMM	Instructor	Course	4.	Date:
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5. Location:

## CRM FACILITATOR TRAINING

6. T/M AIRCRAFT	7. UNIT	8. DATE
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# 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 DAT
MVZZ	VMMZ61	6	T	28 AUG20	31AU621
MV2ZB	VMM261	G	R	31 AUG 21	31 Aug 22
MV22B	261	G	R	4 JAN22	31 JAN 23
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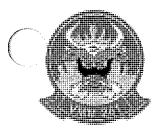
### EXTENSIONS

	15. T/M AIRCRAFT	16. UNIT	17. GROUND/ FLIGHT	18. AUTHORITY	19. EXPIRATION DATE
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Enclosure (3)

(REV 3/2016)

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# VMM-261 CRM

Topic: Annual Crew Resource Management

Date: _____ <u>31 August 2021</u>

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

	Last Name, Fl. Ml.	Rank	Signature
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Class: Annual CRM Ground Training

Date: 28 Aug 2020

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



Last Name, FI	Rank		Last Name, Fl	Rank			
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NATOPS FLIGHT PERSONNEL	TRAINING/QUALIFICATION	JACKET
OPNAV 3760/32F (Rev 4-90)	,	

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SECTION IIIB - OPERATIO	NAL PHYSIOL	.0GY & S	URVIVA	L TRAIN	ING									
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3. Norfolk, VA	3. Norfolk, VA		erry Poir	nt, NC				17. FA	SOTR	AGR	ULANT			
4. Corpus Christi, TX	4. Corpus Christi, TX		11. Whidbey Island, WA					18. M	CAS N	ew R	iver, NC			
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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 24 Nov 2020

From: Officer in Charge, Naval Survival Training Institute

### To: STAFF SERGEANT JAMES SPEEDY

Subj: NASTP TRAINING QUALIFICATION LETTER

Ref: (a) CNAF M-3710.7

1. In accordance with reference (a), STAFF SERGEANT JAMES SPEEDY has received AC INDOC CLASS 3 on 29 Oct 2020 at Aviation Survival Training Center CHERRY POINT.

2. STAFF SERGEANT JAMES SPEEDY received a grade of Q. All required modules were completed.

Dynamic training elements were conducted for the following modules:

#### • HYPOXIA LABORATORY C6

3. This qualification expires on 31 Oct 2024 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

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

By direction

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NAME Speedy, James W.	- ( )
FILE OR SERIAL NO. 1385011012	ENCLOSURE
DESIGNATION: NO. USINC DATE FEB 2021	ENCI
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# QUALIFICATIONS AND ACHIEVEMENTS A Antisticiant and, patrol plane commander, aircraft type, CarQual, etc.

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(In the eldned by Commanding Officer or authorized deputy)

SIGNATURE

### 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
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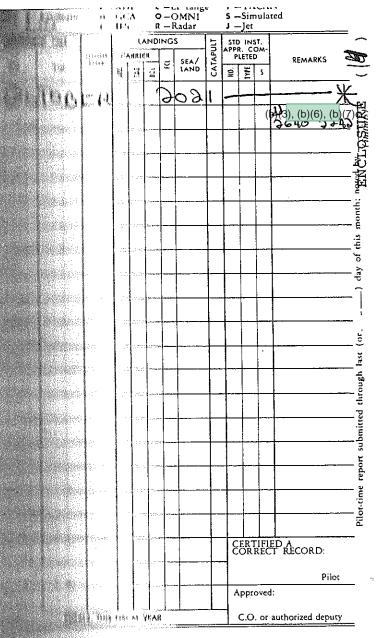
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# .og Book for GySgt SPEEDY, JAMES 2/1/2015 - 2/28/2022

#### Generated on 03/24/2022 1033 UTC-04:00

Date	Range T	otals				Hours					T&R			
	TMS	Device	Туре	TPT	SCT	NIGHT	HLL	LLL	T&R 1	T&R 2	T&R 3	T&R 4	T&R 5	NAVFLIR
Totals					78.4	21.7	11.8	9.3						
2/25/2021	MV-22B	166484	Aircraft		4				2040	2240				H4TQYNU
3/25/2021	MV-22B	168228	Aircraft		3.3				2240					<u>UKBF5WI</u>
3/30/2021	MV-22B	168228	Aircraft		4.3				2242					<u>IIL7EK7</u>
4/5/2021	MV-228	166687	Aircraft		3.3				2242					JPHP0WG
4/13/2021	MV-228	168622	Aircraft		2.3				2242					3FMBYOH
5/7/2021	MV-22B	167913	Aircraft		2.8				2242					<u>V7L6R9E</u>
5/11/2021	MV-22B	168673	Aircraft		3.3				2242					F1SAR59
5/17/2021	MV-22B	166687	Aircraft		2.6	2.6	2.6		2340	2341				ZIIMEIK
5/24/2021	MV-22B	166687	Aircraft		3	3	3	Í	2340					VC8NXE5
5/27/2021	MV-22B	167913	Aircraft		4				2780	2781	3040	6033		<u>U24UI20</u>
6/2/2021	MV-228	166687	Aircraft		4	0.1			2240					5QH8R7B
6/17/2021	MV-228	166687	Aircraft		4				2242					QUQTF2A
6/24/2021	MV-22B	168673	Aircraft		4				2242	2540	2541	6150	2140	0D58504
7/1/2021	MV-22B	168228	Aircraft		3.3	3.3		3.3	2380	2381				6ZZGD0W
7/5/2021	MV-22B	168673	Aircraft		3.8				2242	2282			1	1KOKQ3K
7/16/2021	MV-22B	168622	Aircraft		3.5	3.5	3.5		2340	6033		1		0K32SN0
8/16/2021	MV-22B	167913	Aircraft		3.5				2242	2282				SMQ8LOX
8/30/2021	MV-22B	167913	Aircraft		3.7				2242	6033				IWW83K5
9/6/2021	MV-22B	168622	Aircraft		3.5	З	···	3	2382	2383				13JUS1B
9/7/2021	MV-22B	168228	Aircraft		3.2	3.2	0.2	3	2383					1GZKMOI
9/15/2021	MV-22B	167913	Aircraft		2.7	1			2242				1	QRWYH39
9/20/2021	MV-22B	166687	Aircraft		3	3	2.5		2782	6033	1			EJHS8XL
11/4/2021	MV-228	166724	Aircraft		3.3				2640	2242	2641			STYCDAS

Career	Totals			Hours		
1	TMS	ТРТ	SCT	NIGHT	HLL	LLL
Totals	All		78.4	21.7	11.B	9.3
	MV-22B		78.4	21.7	11.8	9.3

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GySgt SPEEDY, JAMES W - MV-22B Aerial Observer/Gunner Crew Performance between 1/1/2015 - 3/18/2022 Generated on 03/24/2022 1045 UTC-04:00

Instructor Name	Event	Method	Needs Additional	Overview	Plan/Brief	Execution	Instructor Comments
	TH Sela	Logged	Training	Departed KNCA at 1230L as	Conducted IAW T&R	Conducted IAW T&R	Conducted IAW T&R
	net? Som	Logged	No	Conducted IAW T&R	Conducted IAW T&R	Conducted IAW T&R	Recommend continue with syllabus
(b)(3), (b)(6), (b)(7)c 🔚	20 ° e	Logged	No	Departed KNCA at 1230L as	Conducted IAW T&R	Conducted IAW T&R	Conducted IAW T&R
		Logged	Na	Flight departed LEMO to conduct section tanking off the southern coast of Spain. Following the successful join up and AR with the tanker we	CONDUCTED IAW T&R	CONDUCTED IAW T&R	SNM was attentive with tracking -2 and keeping the pilots informed on their position. SNM has improved in the course of a few lights to where he is comfortable and proficient at partorming call andings without strict supervision. SNM is still very new and should continue to fly to improve skill and proficiency other areas. Event Waived
(b)(3), (b)(6), (b)(7)c		Waived Logged	No No	outlaw 1-1 flight departed moron afb at 1800L and preformed section rvts law mv22 t&r.	Student was attentive during brief and posed good questions to set himself up for success in the zone.	Student preformed calls to the deck in rvf conditions to a reasonable margin of error and required little input from the instructor to preform his duties. Student is fully capable of executing section rvfs on	Instructed student how to keep ground reference in rvf conditions
b)(3), (b)(6), (b)(7)c		Logged	No	Conducted numerous single ship HLL CALs ivo Moron air base followed by numerous	Conducted a thorough brief and discussion of T&R items followed by an NVG lab.	his own with a proficient crew. Conducted numerous single ship HLL CALs ivo Moron air base followed by numerous contine CALs in Moron air	GySgt. Speedy required only few instructor inputs and was able to make corrections and adjustments to distance estimation and wind mitigation errors. Overall GySgt. Speedy had good situational awareness but required some hal when it came to nicht systems operations and general crew duties. Continue
		Logged	No	section CALs ivo Moron air base. Conducted numerous single	Conducted a thorough brief and	section CALs ivo Moron air base. Conducted numerous single	with training. GySqt. Speedy required only lew instructor inputs and was able to make
(b)(3), (b)(6), (b)(7)c		roğged	110	ship HLL CALs ivo Moron air base followed by numerous section CALs ivo Moron air base.	discussion of T&R items followed by an NVG lab.	ship HLL CALs ivo Moron air base followed by numerous section CALs ivo Moron air base.	corrections and adjustments to distance estimation and wind miligation errors. Overall GySgt, Speedy had good situational awareness but required some helj when it came to night systems operations and general crew duties. Continue with training
b)(3), (b)(6), (b)(7)c		Logged	No	Departed LEMO as a section shortly after EENT, en route to NAS Rota. Once established at LZ Bull ring we	None,	SNM was able to provide accurate and timely calls, as well as clear the aircraft in LLL environment.	Continue working on scan and building confidence and experience on googles
(b)(3), (b)(6), (b)(7)c	(eps) ann	Logged	No	Departed LEMO as a section shortly after EENT, en route to NAS Rota. Once established at LZ Bull ring we	None.	SNM was able to provide accurate and timely calls, as well as clear the aircraft in LLL environment.	Continue working on scan and building confidence and experience on googles
b)(3), (b)(7)a, (b)(7)c		Logged	No	Outlaw 3-1 flight of two conducted brief, T&R brief, followed by a hotseat from Outlaw 5-1 flight departed directly into the GB-500, conducting 1.5 hours of IFR flight and multiple instrument approaches into NAS Rota. Orea complete at NAS Rota. Outlaw flight proceeded Exhc. Upon termination maneuvers between points Whisky and Exhc. Upon termination maneuvers. Outlaw 3-1 flight proceeded	Flight thrief was conducted followed by a through T&R brief with GySgt, Speedy, SNM clearly undratood all topics which were covered and his duties throughout the flight.	high situational awareness throughout the light. GySql. Speady provided limely input to the pilota as to the position of the wingman at all times. SNM was instructed on techniques to aid in distance estimation in low light level condition. SNM was aliso instructed to open the crew door earlier prior to landing. SNM corrected deliciencies effectively.	ervirorment, to include tactical formation maneuvering. GySgt. Speedy is always open to critiques and is constantly looking to improve, continue with training!
(b)(3), (b)(6), (b)(7)c		Logged	No	Outlaw 3-1 flight of two conducted brief, T&B brief, followed by a hotseat from Outlaw 3-1 nad 2-1. Outlaw 3-1 flight departed directly into the GB-500, conducting 1.5 hours of IFR flight and multiple instrument approaches into NAS Rota. Once complete at NAS Rota. Outlaw flight proceeding at MAS Rota. Outlaw flight proceeding at MAS was did for Moron AB. Once at point Whisky. Outlaw 3-1 flight conducted numerous tactical formation maneuvers between points Whisky and Eacho. Upon termination of Latekal formation maneuvers	Flight brief was conducted followed by a thorough T&R brief with Gysgt. Speedy. SNM oleathy understood all topics which were covered and his duties throughou the flight.	procedural knowledge of Confined Area Landings under low light level conditions, maintaining high situational awareness throughout the flight. GySgt. Speedy provided timely input to the pinots as to the position of the wingman at all times. SNM was instructed on techniques to aid in distance estimation in low light level conditions. SNM was also instructed to open the craw door earlier prior to landing. SNM corrected deficiencies effectively.	Gyagi, Speady is an affactive crewmember in the night environment, under a light level conditions. GySgt. Speedy is recommended for Night Systems Qualification. Continue with training.
(b)(3), (b)(6), (b)(7)c		Logged	No	Departed LEMO at 1745L as a section reroute to go feet wet over Mediterranean Sea. Once established feet wet and in a clear area we	SNM was able to properly pre flight weapon, name major assemblies, cycle of operations. As well as explaining weapons emergencies, and limitations.	SNM was able to effectively and accurately employ weapon system, with minimal input from instructor.	Continue with syllabus.
(b)(3), (b)(6), (b)(7)c		Logged	No	Departed LEMO at 1745L as a section reroute to go feet wet over Mediterranean Sea. Once established feet wet and in a clear area we	SNM was able to properly preflight weapon, name major	SNM was able to effectively and accurately employ weapon system, with minimal input from instructor,	Continue with syllabue.
	TG(2)-2542	-	-				
b)(2)Low, (b)(6), (b)(7)c	TG(2)-2543	Logged	No	Departed KNCA as a section to the VR-084, then split up a singles to conduct single ship lat then joined back up as a section to do section lat. Afte completion of the VR-084 we met our L-Hour into LZ BAT to conduct section CALS an conducted several tactical and high speed atraight-ins a	s for brief and T/A brief r	Conducted several vertical maneuvers and TAC-FORM maneuvers as a section as well as single ship SNM maintained good CRM throughout entire flight and gave pilots good calls on wingman's position and other aircraft in the working area.	none



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Page 2 of 3

)(2)Low, (b)(6), (b)(7)c	03/24/2022 1045 U	Logged	No	Departed KNCA as a section	GySgt speedy was well prepared	Conducted several vertical	none
(μζ) <b>Εύ</b> ω, (b)(δ), (b)(7)ς				to the VR-084,then split up as an an a	for brief and T/R brief	maneuvers and TAC-FORM maneuvers as a section as well as single ship SNM maintained good CRM throughout entire flight and gave pilots good calls on wingman's position and other aircraft in the working area.	
	LAT(2)-2642 LAT(2)-2643						
b)(3), (b)(6), (b)(7)c	LA1(2)-2043	Logged	No	Departed Moron Air Station and conducted Division TACFORM formation maneuvers in the vicinity central Spain. Then	SNM was knowledgeable and prepared for the T&R. We discussed the different maneuvers and there limitations.	Conducted Division TACFORM over central Spain. SNM made accurate calls on the location of dash at all times.	Made good calls, maintained situational awareness of Dash 2 and Dash at a times. Needs to make calls more often. Overall did a good job and I recommend that you proceed further in your syllabus.
b)(3), (b)(6), (b)(7)c		Logged	No	Performed division low- and medium-altitude tactical approaches, landings, and departures at Moron air field.	Discussed division low- and medium-altitude tactical approaches, landings, and departures to a confined area. SNM was prepared for the T&R brief. SNM was knowledgeable and discussed accurately the limitations and procedures for each portion of the T&R.	conducted division tactical approaches back to Moron air	Mada consistent calls to the deek and maintained SA. Continue to work on v mitigation to keep your calls clear. Your distance estimation calls are improv use the sounds of the rotors and your visual ques to help with your estimation call. Overall you did well and I recommend that you continue progressing in t syllabus.
(b)(3), (b)(6), (b)(7)c	DIV(2)-2783	Logged	No	Outlaw 1-1 flight of three departed from Moron AB, proceeding to conduct the GB 500 in a clockwise manner in IFR trail. Once reaching NAVSTA Rota, Outlaw 1-1	Flight brief was conducted following a thorough T&R brief. GySgt. Speedy clearly understood all concepts.	Execution of flight was in accordance with brief. Outlaw 1-1 was in the lead position for the entirety of the flight.	GySgt, Speedy maintained good situational awareness throughout the flight and showed significant improvement on calling out wingman position during manuvering. SMM was instructed on improving his wind mitgation, which improved throughout the flight. SMM was instructed on opening the crew do earlier and impriving his scant include more reference points in order to improve distance estimation call accuracy. Continue with training.
(b)(3), (b)(6), (b)(7)c	DIV(2)-2784	Waluad	No				Event Waived
	GTR(2)-2840	Waived	No				
(b)(3), (b)(6), (b)(7)c	THE ADDRESS	Waived Waived	No No				Event Waived
	FCLP(2)-2940	Walved					
(b)(3), (b)(6), (b)(7)c	FCLP(2)-2942	Logged	No	Conducted air logistics support in a low-threat environment in the vicinity of Moron air field.	SNM was prepared for the T&R and demonstrated knowledge about general cargo handling and securing, cabin loading and unloading, and passenger handling.	a simulated forklift loading	Continue to work on wind mitigation and I recommend that you continue you syllabus.
	AE(3)-3140 TRAP(3)-3340		-				
	CAT(3)-3440 CAT(3)-3441						
	AD(4)-4041						
	AD(4)-4042 AD(4)-4043						
	AD(4)-4081						
	AD(4)-4082 AD(4)-4083		1				
	AD(4)-4084		4 ]				
	AIE(4)-4140 AIE(4)-4141						
	AIE(4)-4142 AIE(4)-4143						
	MAT(4)-4180						
	MAT(4)-4181 DWS(4)-4240						
	DWS(4)-4241						
	DWS(4)-4242 DWS(4)-4243		-				
	DWS(4)-4244						
	DWS(4)-4245 DCM(4)-4340	-	-				
	CBRN(4)-4430 CBRN(4)-4431						
	CQ(4)-4480	1					
	CQ(4)-4481 CQ(4)-4482	-		-			
	CQ(4)-4483 SEA(4)-4540						
	RVE(4)-4580						
	ADGR(4)-4640 BI(4)-4740	-					
	BI(4)-4741						
	AD(4)-4840 NTPS(6)-6030		-				
(b)(3), (b)(6), (b)(7)c		Logged	No	SNM complied with MV-22 NATOPS procedures and demonstrated knowledge about how to handle different situations that may occur	SNM was prepared for T&R and discussed emergency procedure accurately.	Departed Moron air field and s conducted CALS at Moron air field. SNM maintained good SA through out the flight.	Continue to work on wind mitigation and I recommend you practice drills p your mask on so that you can build muscle memory; you will be faster and efficient.
(b)(3), (b)(6), (b)(7)c	CRM(6)-6080	Logged	No	Conducted day single ship and section TG.	Conducted IAW T&R.	SNM conducted single ship and section tail guns in day	Recommend continuation with TQ syllabus.

UNCLASSIFIED//FOPTOFFICIAL-USE ONLT-GySgt SPEEDY, JAMES W - MV-22B Aerial Observer/Gunner Craw Performance between 1/1/2015 - 3/18/2022

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UNCLASSIFIED//FOFOFFICIALTUSE OTNLT GySgt SPEEDY, JAMES W - MV-22B Aerial Observer/Gunner Crew Performance between 1/1/2015 - 3/18/2022 Generated on 03/24/2022 1045 UTC-04.00 GAU-38(0)-48251 GAU-38(0)-48251 GAU-38(0)-48251 GAU-38(0)-48351 GAU-38(0)-48351 RVL(e)-6900

### ENCLOSURE (lS)

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### Event Proficiency VMM-261 - MV-22B Aerial Observer/Gunner

Generated on 05/10/2022 1111 UTC-04:00

Days Until Expired as of 05/10/2022	>= 90 Days	60-89 Days	30-59 Days	< 30 Days	Expired			
"W" indicates Waived, "D" indicates Deferre	ed							
						Far	niliarization (FAM	(2))
	ACAD: CRM	ACAD: NITE LAB	ACAD: Reference Publications	ACAD: Air to Air Refueling	LAB: Msn Aux Tank System	LAB: Flight Line Fire Ext	LAB: Ingress/Egress	LAB: Start Up / Shutdown/ Taxi
	2010	2011	2012	2013	2020	2021	2022	2023
Permanent								
GySgt SPEEDY, JAMES W.	No Refly	No Relly	No Refly	No Refly	No Refly	No Retly	No Refly	No Refly

ltitude Training (L	Low Altitude Tra			andings (CAL(2))	Confined Area La					
LAT: LAT Maneuvers / Rte	LAB: LAT Walk Through	ACAD: TAC Aircrew Considerations	ACAD: LAT for EAC	CAL: Section CAL	CAL: Single CAL	FAM: Fam Flight	LAB: Cargo Loading	ACAD: Eps	LAB: ALSS Equipment	Lab: Mooring Lab
2640	2620	2611	2610	2242	2240	2040	2027	2026	2025	2024

No Refly	06/02/2022	11/04/2022	No Refly	No Relly	No Refly	No Refly				
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AT(2))			Air Logistics S	Support (ALS(3))	NATOPS(NTPS(6))				Emergency Procedures (EP(6))	Crew Resource (CRM	
LAT: Section LAT	NS LAT: HLL Section LAT	NS LAT: LLL Section LAT	ACAD: Six Functions	ALS: ALS Msn	NATOPS Open Book	NATOPS Closed Book	NATOPS Oral Exam	NATOPS Eval	6033	CRM Refresher	
2641	2642	2643	3011	3040	6010	6011	6012	6030	6033	6070	
11/04/2022			No Retly	05/27/2022	-				32/19/2021	01/31/2023	

#### ∋ Management ⁄/(6))

CRM Eval

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#### First Interview: 30 March 2022

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

Name/Rank:

#### Operational Background:

Commanding Officer of VMM-261. In Oct 2020 I took command of VMM-261, was previously at VMM-365 where I did time as the maintenance officer, deployed on the MEU, and participated in TRIDENT JUNCTURE in Trondheim, Norway in 2018.

My qualifications include WTI/AMC, I spent time at Pax River as an MV-22 test pilot. I was originally a CH-46 transition, V22 since 2009, about 2500 total hours and 1800 hours in the Osprey.

### What kind of higher level guidance was given for preparing for COLD RESPONSE in terms of training and education?

Guidance from Wing- to make sure pilots few an adequate number of hours prior coming out to CR. We had been going through a dry spell with flight time and the general wanted to make sure that we had adequate flight time and proper warm ups prior to operations in Norway.

Guidance from MAG was to fly, to operate, and find a way to contribute to the mission and scenario.

# What was your operational approach to preparing the squadron, academics, SOPs, crawl/walk/run, equipment, etc?

Preparation started in earnest back in MCAS New River in January 2022, our Standardization Board talked about weather minimums, IMC procedures with terrain. We went through several iterations of procedure for dealing with terrain and weather, we then demoed it in simulator. All pilots went through at least one sim where we went through what to do in IMC out in Norway. We also went through several icing protection system classes, discussed limts and knowledge. We also went through grooming of aircraft for operations in icing conditions as much as we could. The goal I set for the squadron was to have aircraft capable of operating in temperatures down to -20*F penetration capability. Which in Chapter 4 of NATOPS has very specific components needed for that.

# Did you write any separate and distinct standard operating procedures for COLD RESPONSE? No

**Read and Initials?** Yes. The one you've probably heard about is the Bodo Reversal, which was how to turn around in a fjord if weather is encountered and at what point to turn around . We practiced and published via Read and Initials. We also had a summary of weaher minimums in the training, including 3710 (NATOPS), General Planning, and other documents as a one-stop-shop.

#### What was you guidance on weather minimums for your aircrew:

The standard weather minimum for Airplane mode was 1000' / 3 mi visibility. If it dropped below that, conversion mode is how we'd proceed to no less than 500' / 1mi visibility, and below that would be "No-Go" unless we were instrument meteorological condition capable. Our instrument minimums were based on lowest available approaches at whichever airfield we were operating at.

#### Can you expound on the Bodo Reversal?

Organized way to turn flight around in small area. Once weather began to degrade, aircraft would organize into a trail formation. If an aircraft lost site of the aircraft in front of them, or lost sight of 3 ground references... we would conduct a simultaneous reversal for flight, swapping the tactical lead of the flight from the original front to the original last aircraft, and expedite on the escape heading. Single

would be same idea, reverse course and exit the valley the way it was entered. We practiced in the simulator, conducted verbal briefs, and published via Read and Initial.

We you properly manned per the Training and Readiness manual to execute a detachment (reduced)? Yes, we were properly manned to operate as a det and had sufficient legal crews to operate. I did not sign any deferrals or waivers to enable us to meet our manning requirements.

Were there any additional SOPS published from the MAG to execute COLD RESPONSE? No, Not from MAG.

Was there any conflict between preparing for COLD RESPONSE and the MAG-26 Campaign Plan regarding meeting flight hour goals? Were they adequately separated to allow aircrew to be empowered to cancel due to weather.

No- no conflict between the two, they were adequately separated.

Were there any directives/orders by MEF or Winggiven to fly when below planned mins? No

Were there ever any immediate tasking orders (ASRs/JTARS) to fill that were inside plan/brief cycles? Yes.

#### How did you mitigate those risks?

The cutoff for immediate tasking was whether crews were already scheduled to conduct unit level training. If tasking came up late the night prior or morning of, we would reassign a crew from a ULT flight to fulfill the movement of passengers. The movement of these passengers was from normally runway to runway, across standard routing, or from a familiar LZ that did not require detailed and deliberate planning in advance. Usually around 12 hours prior to event.

Did you talk about the crew of GT31 during your Human Factors Councils?

Yes, we discussed everyone during HFC, nothing stands out from the GT31 crew.

#### Did you certify the A/B/C routes in your mind, were they LAT routes?

"We treated the certification as a LAT route. And so before we flew it for a unit level training flight, our WTI and our ASO... actuall (b)(3), (b)(6), (b)(7)c . they went out and they flew these routes day-VMC ahead of time to look for obstacles that may not be on the map. And that was our way of vetting the route."

#### How did you do the administrative portion of the route certification?

We did the certification flight, above an altitude that wasn't LAT. And then we used that route to send up through the NAOCI believe, because when we do low altitude training here we have to send a very specific route through the Norwegian system for them to approve it.

#### Which aircraft did you bring over?

Six aircraft, 1 x C MCOI, rest were Block B. AC14- that would have been a Bravo. All of the aircraft were icing capable to some degree.

Did you receive any guidance on flight hours for your pilots to achieve prior to executing COLD RESPOSNE? What about from MAG or MAW?

Enclosure (16)

The guidance that got to my team came through me was a specific number of flight hours augmented with simulator hours.

If we compare your table of organization to the Training and Readiness detachment model, are you missing any qualifications or personnel? I think we are in alignment with the T&R

Do you have a standard policy for empowering aircraft commanders to cancel flights, once the aircraft is theirs, what is your policy of canceling flights for whatever reason?

My policy is to set weather minimums before launch, and then stick with those minimums to take emotion out of decision.

Same with maintenance? Regarding MESMS, etc? .

Maintenance is quality over quantity.

Did you have any specific guidance for round robins or stopping at other airports for crews to take fuel or get weather updates? No

What is your PED policy in the aircraft? To fly with those devices that are approved. MAGTABS.

What is your crew rest policy?

In accordance with CNAF 3710.

#### What were your sources of weather for flight crews to utilize?

ODO still pulls weather from standard sources that we used back in CONUS, the METARS websites. That has been augmented with regional sources for prognosis charts and local area weather forecast sources. To the best of your knowledge are there any ways to update weather in flight? No

**Concerning the MAGTABS, did you update the publications for Norway?** We did update them for Norway, updated since arriving.

For weight and power, did you use the MAGTAB tool?

Weight and power-used standard tool in JMPS. Our pilots were encouraged to check on glass before takeoff. Standard was to print, sign, and leave copy with the ODO.

What ORM worksheet did you use? Ford the ODO briefs we used the MAG-26 template RAW.

### To the best of your knowledge, did you waive any events for the crew of GT31?

Correct, I waived no events for mishap crew.

#### Why did you deploy with Block B's vs Block C's?

We deployed with the aircraft that we could, with the aircraft we had on hand.

Was it common to fly with NVG's on all flights?

#### Were dry suits mandated for every flight?

Dry suits are requried every flight, no exception when critical phases of flight over water such as shipboard or tanking over water. Mandated wear for the first two weeks.

# After flying over the A/B/C route, was there any traffic sent to Wing or MEF to request use of the routes for LAT?

I will have to check with my operations folks.

#### Second Interview of (b)(3), (b)(6), (b)(7)c Commanding Officer VMM-261

-Conducted soley by (b)(3), (b)(6), (b)(7)c Investigating Officer

- 1. Would you please re-state your squadron's policy for the use of personal electronic devices (PED) while operating USMC aircraft? Are you aware of the CNAF policy on PED useage, 2d MAW PED policy?
  - a. PED operation in allowed while on deck to check weather and communicate with squadron operations to maintain situational awareness of the flight schedule. I am not aware of the CNAF policy, but our squadron policy mirrors 2d MAW.
- 2. Have you flown with any aircrew while the Commanding Officer when they have used PEDs during the flight?
  - a. No.
- What is your reaction to hearing there was a GoPro found in the wreckage of GH31?
   a. 1 am disappointed and surprised.
- 4. Talk me through your understanding of the Training and Readiness Manual Volume One's definition of the Low Altitude Tactics flight regime ?167367
  - a. Less thank 500', significant terrain. (b)(3), (b)(6), (b)(7)c talked through considerations and had solid understanding of V22 LAT requirements and restrictions from both T&R and 2d MAW SOP.)
- 5. What is your approach to mitigating risks associated with LAT training?
  - a. Proper route scheduling, legal crew scheduling, adhering to currency requirements.
- 6. Are you aware of the 2d MAW Ops SOP requiring route and altitude minimums to be published on squadron schedules authorizing LAT regime flights?
  - a. No
- 7. What was your understanding of how the Norwegian MTRs (e.g., A, B, and C routes) were designated and/or certified?
  - a. That they were used by the host nation for the training of military aircrew and that the Norwegians mandated a "no lower than 500' AGL" along the routes.
  - b. They were chummed and ready for our digital maps.

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No

- 8. Did you sign schedules with LAT codes with the intent to fly LAT?
  - a. Yes, though the original schedule we did not fly was to give an opportunity to my LAT/WTIs to recon the route to certify.
- 9. How did you certify the LAT training areas you eventually used?
  - a. We did not properly certify them IAW with T&R and 2d MAW Ops SOP.
- 10. How did you mitigate the risk of conducting LAT in uncertified LAT training areas?
  - a. I mandated no lower than 500' AGLalong the routes and LAT wx mins of 3000/5.
- 11. Did you have any risk mitigation criteria for junior aircrews (non-BIP TACs and below) operating in Norway?
  - a. Stay within local area defined by bag of gas (distance?) and day VMC.

First Interview 30 March 2022 Name/Rank/Billet: (b)(3), (b)(6), (b)(7)c

**Qualifications and Experience:** NSI/Div Lead/NI, AARI, LATI,- 2100 hours, CH-46 transition around 2013 3 MEUs, (2xFrog, 1xV22), SPMAGTF Spain with VMM-264, MRF-D with VMM-268 Okinawa 2 squadrons, VMM-264 East coast, VMM-268 Hawaii, back on East Coast, 5th squadron now with VMM-261

What guidance did you give the Maintenance Department for prepping to support COLD RESPONSE? The big-ticket item, we used the VMM-365 TRIDENT JUNCTURE after-action. We ensured Marines were taken care of for cold weather gear, both aircrew and maintainers. We purchased 8 containers of survival gear, if aircraft land in the field we have tents, all the things to survive overnight.

# Did the CO or you, or the OPSO give guidance for aircrew to land if they encountered unmitigable icing conditions...i.e. if weather becomes insurmountable were crews authorized to land and utilize that survival equipment?

Yes, and we got the same information from the Norwegians. It's normal practice for poor weather for aircraft to land. No real SOP, but developed robust training plan to prep for COLD RESPONSE. We did Sims- cold weather type sims to simulate what Norway would look like. We practiced a reversal procedure that we developed which works well with canalizing terrain. All of the pilots went through the verbology and mechanics to see it before having to do it for real.

#### Did you sign any deviations for operating in cold weather?

No CNAF deviations. We did do more pre-heater quals. Plenty of those available. We did more training focused on cold weather options, pre-start checklist items, shop level discussions, etc.

# Were any waivers or deferrals that you know of issued to get qualified crews to support COLD RESPONSE?

As far as the Ops side of things I wasn't tracking any of that.

# From Training and Readiness perspective, how does your maintenance team match against manning requirements?

We are good, we brought our A-tea(n)(3), (b)(6), (b)(7) maintenance control was hand picked, our best controller. Our QA chief is out here as well. All of the quality personnel out here at the sacrifice of RBE.

#### What MAW or MAG directives were guiding in what you did preparing for COLD RESPONSE?

30% goal for FMC is the WING CG goal. My goal was to get as close to that as possible. However, we transferred six of our best aircraft to VMM-365 to support their NARF deployment. Then we accepted 5 aircraft from Nov-Dec 2021 from around the MAG. Our focus was on making those aircraft mission capable vice reaching FMC.

Did that goal of 30% FMC take away you desire or efforts to make safe, mission capable aircraft? No, mission capable aircraft came first.

Did you sit on Human Factors Councils? Were any of the crew discussed? Yes, we talked about each aircrew personnel. Nothing of note.

Did you ever fly the A/B/C?

I flew that specific route the day prior. The route I flew the day prior was VMC, 9000' ceilings, perfect weather, as a NAV route. It's not New River, it's not flat. It's what we consider mountainous terrain.

#### Any obstacles on route that would cause deviation from OPNAV or NATOPS rules? No

#### Have you ever given guidance to deviate from MESM? No

If it's not withing MESM, then you won't release the aircraft correct? Right, and my controllers wouldn't safe the aircraft.

Has the icing capability been an impact to flight ops? Lack of minimum equipment? No, been able to mitigate equipment degradation with flight planning or profile management.

#### Are you aware of any mandated flight hour minimums prior to arriving to COLD RESPONSE

There is a number, I don't remember what it was. Believe it came from the MAG CO. As we got closer to execution the MAG CO asked other squadrons to help out to make sure we were at the flight hours we needed. DOn't remember what the number is off the top of my head.

#### Any specific COLD RESPONSE SOPS from VMM-261 or MAG-26?

No, but did publish the Bodo Reversal, I might call that an SOP.

#### What is you understanding of your weather minimums?

Depended on mission, for a local NAV route the consensus was 1000'/3mi (VMC). Pretty much what we went with every day.

# Have you experienced guidance or direction from higher to launch if weather was not within minimums?

Weather is very volatile, can launch with great weather and then 30 min weather changes... you can hit fiords and changes... if it's not your minimum then you turn around. Nothing forcing us though.

#### Have you ever been questioned or pressured from higher for cancelling flights due to weather?

There have been flights that have cancelled for weather below IFR minimums. No question from higher.

#### What was you understanding of the PED policy?

Nothing personal... no photographs, videos, etc. Primarily used MAGTABs. No usage of personal devices in flight.

#### How did you address crew rest and acclimatization to Norwegian timezone?

Did it by nature... by the time aircraft arrived we were already acclimatized. One flight with the aircraft coming off of the boat. After that we went into cold weather training.

#### What was NVG policy? Take on every flight?

Few of later flights, brought with us just in case. As a practice day for VFR flights crews were not checking out goggles.

#### When did planning start for COLD RESPONSE? RFI- lead time to groom aircraft?

VMM-266 was teed up for this mission and then the TEEP changed. Around October timeframe, we got tasked. Around November 2021 was when we started deliberate planning regarding what aircraft we were accepting and how to get in position to support. Bulk of squadron deployed in mid-February. Flash to bang came off deployment in October, got nod in November, deployed in February, roughly 105 days. Aircraft had to be ready ealier due to onload, black-bottom, timeline happening early January.

#### What was goal for the aircraft regarding icing capability?

-20*F was goal... IPS condition tracked daily, where aircraft stand, and the way forward. Took a lot of deliberate effort from Avionics.

#### Do you remember anything specific about Aircraft 14?

No

Did you ever have to pull or suspend any qualfications? No suspense or pulling of quals.

# Capt Tomkiewics had maintenance and weather issues during TAC syllabus, of which you instructed one of the events, can you elaborate on it?

There were a lot of maintenance delays that night... we like to give on call ASRs or a tactical scenario. With the time left available, there wasn't sufficient time to give him a fair evaluation and go through all of the learning objectives.

#### First Interview 11 April 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c VMM-261 OPSO

**Qualifications and Experience:** Came in as the OPSO mid-November 2021. Was at VMM-261 for 5 years, then at VMMT-204 as an instructor for two year, then back to VMM-261. I'm an NSI and was NATOPS program manager at VMMT-204.

#### What role did you have in the syllabus for prepping the squadron for COLD RESPONSE?

I worked with my PTO to help develop the plan knowing what was going to be coming up. Our initial plan included a detachment to West Virginia that ended up being cancelled for some pretty bad weather up there. So what we came up with was our syllabus, with the key training goals to help expose the pilots to things they would expect there. It's a methodical syllabus on what we can duplicate here in the simulators. That was our primary way to prepare the squadron, given by senior instructors.

#### **To your knowledge, everyone who deployed to COLD RESPONSE completed the syllabus?** Yes

#### Were you tracking any deficiencies with any of the aircrew of GT31?

I didn't get to fly much because of having to get refreshed coming off of the MEU. The experience I did have with them there was no concerns with their performance. Capt Tomkiewicz was progressing well, got him through his syllabus as planned. Nothing was rushed, he was prepped, and while it seems like it took a while because of the weather, it was not due to flight performance.

#### How would you describe Tomkiewicz's in his ready room demeanor and flight preparation?

He liked to joke around but when it came to flying he took it seriously. Shouldn't confuse his demeanor with how he took his flight planning or prep for flights.

#### Any issues with Capt Reynolds or Cpl Moore?

Capt Reynolds was solid, solid copilot. Very smart and helped out with mission planning stuff. Good head on his shoulders, had no issues. Was fairly young but progressing normally.

#### Did you ever review either pilot's NATOPS or APR, audit them yourself? No

### **Did you ever discuss Energy Maneuverability diagrams when discussing the Bodo Reversal?** I did not participate much with that because I still had to go through my refresh at the time.

The month of January was solely focused on prepping the aircrew for COLD RESPONSE, took most of the flight time and sim time to get them ready with what we had.

#### What you had, what were you missing?

Up aircraft, because we had to black bottom 6 of our aircraft early January. Then try to fly the 6 planes we had left. We had a lot of issues, I think about 5 gearboxes and lots of heavy maintenance impacting flight hours. We also reached out to other squadrons to help meet our requirements of 10 flight hours and 5 sim hours prior to deploying.

#### Who established that metric?

Myself and the Ops shop. Felt that was the most achievable metric

Enclosure (r)

#### What science delineated that number?

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Numerous sources, Commandant's planning guidance, MAG-26 campaign plan, etc.

#### Was Capt Tomkiewicz next in the shoot for section lead?

No, there was a couple ahead of him.

First Interview 31 March 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c MMCO, VMM-261

Qualifications and Experience: 6092, Intermediate level Airframes, CDI, taught at the schoolhouse, A-school instructor, production control at MALS-26, 4-5 years MV-22 time. Selected in 2020, TBS 2020. 6077 AAMO WTI

#### When was the last squadron maintenance inspection?

Last year prior to NARF, Wing inspection- passed.

#### Do you remember anything specific about the mishap aircraft?

Aircraft 168330- received November 2021 from PMI, during PMI got painted/weighed, and phased. Flew for a week, then went into Modifications. One anomaly coming from PMI- CVG binding on one engine. Went through conditional, lubed, no issues since then. No serialization issues, changed a bunch of parts but MX admin said was good during acceptance.

Went into depot level modifications: AC-bus tie mod, an Irridium attenna mod, rudder mount modification, and engine thermocouple upgrade.

#### Was the aircraft a Block B or Block C?

Block C, already had weather radar.

#### What did you do to get aircraft back ready to fly out of modification?

Out of mod... C-card for rudder actuators being removed and replaced. ALL TDs was incorporated. Sent on 30 day no fly. No issues with flight. We did fly a little post modification.

When you offloaded the black bottom transport, what was your biggest challenges? No significant challenges, ones of the planes had an issue coming off the boat. The issue was on A/C 14. Was a unstowing issue. Not long to incorporate into daily schedule.

Did you see any weather impacts to maintenance operations in Norway? Aircraft or personnel? Plenty of time to acclimatize, no significant stand out leaks. Researched weather impacts to maintenance. We experienced average MAF/WO generation.

Personnel had obvious issues with dexterity. Maintainers were briefed to come inside, or we put preheaters in the area. Cpl Wallace signed the A-sheet, Cpl Moze did the daily and turn around. No memory of issue with them.

#### Any issues with unscheduled maintenance?

No, aircraft have been pretty good here. Aircraft 16 has only flown one flight, due to a pitch change bearing.

Anything that keeps you up at night? No, we have a pretty solid group with us

#### Are you still conducting tech training?

Yes, more so hands-on tech training, we take time to do it.

#### Any pressure for aircraft generation?

Out here? No, the aircraft have behaved pretty well. Aircraft availability hasn't been an issue.

#### What's your work day?

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Maintenance generally works around 0900-1900, 10 hour days. We flex with the schedule but maintain 10 hour days.

#### Any ongoing documentation issues?

No, no real long term issues with maintenance documentation.

First Interview 1 April 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c MV-22 FLSE Program Coordinator

**Qualifications and Experience:** Nearly 8 years fleet flying, 2 squadrons, 2 MEUs, DISCA deployment, 1500 flight hours, Hold every flight leadership designation and instructor designation with the exception of DCMI. No longer ANI, doesn't fit in my role, don't have NI.

#### Describe your role with VMM-261.

Augmenting VMM-261. PCA'd from VMM-261 August 21 to MATTS NR. At time of PCA- I participated in Cold Response PDSS. CO personally requested I augment the squadron in an attempt to manage deployment to dwell time. I didn't not go to Spain deployment, myself and (b)(3), (b)(6), (b)(7)c did not deploy. I'm currently TAD in excess to 261.

#### Are you familiar with general proficiency of pilots in VMM-261?

Yes, VMM-261 is amalgamation of VMM-261/264 proper. Very top heavy instructorship layout. Lots of NSIs. All of GT31 is from VMM-261 proper. Few mid level quals and a large amount of copilots. At one point over 21 copilots, vice normal batch of 8-13.

The squadron had not done a lot of challenging flying- repeat deployments to NARF. Deployment model is based in Spain, does not allow VFR flying- majority of flying IFR at altitude. That has been the deployment model for the past 6 years for VMM-261. Relatively safe to say that this is the first time most of aircrew have seen challenging weather and actual significant terrain.

#### Was there a predeployment training plan to augment that?

YEs, a Training and academic plan was developed by then (b)(6), (b)(7)c Training plan developed to handle academic (icing, nav) and simulator package to mitigate shortfalls. Out of that came TTPs like the Bodo Reversal, and all was required for participating aircrew prior to execution. I participated in some of this training.

#### Is it verified that the aircrew understood the Bodo Reversal due to the Read and Initial? That is my understanding, but I have not checked the signatures.

#### Were enlisted aircrew involved in the academics and the training?

I don't know. Enlisted aircrew do not normally go into the sim. The MCAT at NR is not operational, was not available or funded for this training.

#### You are augmenting in an Ops capacity to the squadron, correct?

Yes, that's my background, I was originally left as AOPS, and was OPSO for  $RB(\underline{b})(3)$ , (b)(6), (b)(7) is replacement. I was coming to lend extra qualification and maturity to the ready room, which is young. My understanding was the CO was concerned that the exercise impacts of constantly needing a WTI to answer staff questions, there was a need for another WTI to fill the gap in the ready room)(3), (b)(6), (b)(7)c worked out MV-22 exercise integration into COLD RESPONSE. Turned into very large number of VIP/DV movements, almost all of which met 2star or larger equivalent for support. I moved into take roll addressing those to  $\frac{10}{2}$  (b)(6), (b)(7) c won scenario and training of squadron.

# Before departing for COLD RESPONSE, we discussed at MAG the concept of LAT training with embarked troops? Why?

LAT is defined as flight where terrain avoidance is a significant factor and intended flight below 500' AGL. I wanted to potentially discuss a waiver for troops is because of the extreme rugged nature of Norwegian terrain and the climatology. Norway is lots of fjords, with severe weather, and we worked through the routing for that waiver. We ended up not doing it, because the flying typically was between 1000'MSL-3000'MSL, which corresponded to AGL often over the water in the fjords. While there were mountains are both sides, generally had a mile on either wing, and we did not feel that the profile met the same intent as the LAT we did at home. Otherwise, if you expansively interpreted the definition then every flight would have been LAT. We were not flying at extreme low altitude or down near the dirt to avoid threats in a way that we though would happen prior to arrival.

The scenario has a number of RF threats, but the execution of the scenario means the MV-22 has no interaction with those threats. No tactical reason to fly at that low level. Didn't continue to press the waiver, got through G-3 at 2d MAW CONUS, but was recommended to continue in Norway. Determined that we did not need it based on profiles that were being flown.

# Weather minimums that were understood were 1000' / 3mi because the routes that were being flown were not considered LAT.

Correct, the flight was not intended to typically use LAT.

#### Have you ever seen LAT on the schedule?

I'm not sure, I can go look.

To address the weather minimum thing. The rules of conduct for LAT have you fly at 3000' / 5mi when flying LAT, when you are not flying LAT you can fly down to VFR mins of 1000' / 3mi. However, you can take that down to 501' AGL in theory, that's not the intent, but you can find that in the black and white of how you want to interpret that. There is a prudence in sort of, pay attention to what you are doing.

The definition is relative short for LAT, the squadron is based in a flat open coastal area of the US and their deployment experience was in flat open areas around the Mediterranean.

# Based on your experiences as a WTI and your knowledge of required briefing items from publications, do you feel that the products met the intent for execution/mission accomplishment? For the profiles being flown?

Yes, I think it was. I wasn't there for the flight briefs so I can't speak to that. But historically, the level of detail put into just flying NAV or an ASR or just CALS is higher than it is CONUS for the specific reason of needing to mitigate terrain in the area. Almost all of the briefs incorporated DTED breakout to illustrate terrain and it was discussed.

#### How were line of sight comms and familiarity with other airfields?

Aircrew were very familiar with other fields in the area and line of sight communications have been surprisingly good. Generally radar contact in many areas that you may not expect, and have communication with ATC.

#### How would you describe the weather in Norway?

Rapidly changing and unpredictable. We pull METARS and TAFS and you will typically see multi-layer cloud decks, intermixed with showers and snow or rain, and it is very spotty. It's possible to see three distinct meteorological patterns within one half of the sky.

Have you encountered that weather in flight?

Absolutely, was flying in good weather to another site out here, and when I turned around to come back the weather was untenable from the surface to 9000' MSL. That's just how it is here.

#### Have the developed procedures worked?

Yes, I've actually used it before. I was lucky that I was able to see that we weren't going to make it through and called it early. Often dealing with 3-5mi visibility, and hard to pick out the weather gradient. Very similar color shading to everything, terrain, aircraft, water, etc.

#### Do any external agencies give you weather updates?

You can ask, but generally only have access to weather within their control zone.

#### Any pilot to metro type services?

No, and PIREP usage is low.

### The squadron did not deploy with any radios to deploy with an ANW2 network correct?

Correct, we did not deploy with them.

#### In your opinion are MAGTABS the only devices used in the cockpit?

No, generally on the deck you can sometimes get cell service to get METARS, generally best way to get weather for next leg of flight.

#### Has weather radar on aircraft been helpful?

No, because we are surrounded by high terrain and the way the radar interacts with the terrain generates lots of returns and has trouble discerning between the two. I have tried to use it an it is not useful in this terrain.

#### Any issues maintaining currency with cancelations?

No, spread load of flight hours is good and readiness has been pretty good as well. Total number of hours and experience is still relatively low. Recency can be high compared to stateside crews, but total maturity can be lower. Personnel are qualified and legal to fly. For example, the mishap crew was totally qualified to fly, but were young.

To your knowledge, the use of simulator time to augment flight time in order to meet 450 flight hours and 50 simulator hours is common and authorized per the Training and Readiness manual? It is accepted, and much more palatable now than 5 years ago. Result of low cumulative flight hour production. Other flight leadership billets have hours requirement and are not waiverable.

#### **To your knowledge, was there a plan to progress Capt Tomkiewicz to section lead?** Yes

First Interview 1 April 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c WTI, EATM,

Qualifications and Experience: With VMM-261 for 4 years. SPMGAFTF, Spain and West Africa WTI; NI: CDI/PC 310

#### Can you tell me about your daily duties?

I primarily work scheduling, managing crew chief prerequisites, crew chief and AO training plan,

#### How do you do your training plan?

Bi-weekly, I figure out what events will work on the next couple of flights and try to work them in.

#### Were the mishap crew members part of that plan?

Not particularly. Another crew chief was the EATM before coming out to Norway. I didn't really have a training plan prior to coming out to Norway- primarily worked in flightline. (b)(3), (b)(6), (b)(7)cEATM with training plan].

Is it safe to say that you weren't involved in the training plan for either the mishap Crew Chief or AO? No, because once we came out here my goal was to get him up as far as I could to his LATI syllabus.

To the best of your knowledge, were both crewmembers proficient to be operating in the flight the day of the mishap?

Yes

### Anything that gave you or any other instructors professional pause about the mishap crew chief or AO?

No, no abnormalities or significant deficiencies.

#### How are you integrated with Flight O/ PTO in integrating aircrew onto schedule?

I normally talked to AOPS/OpsO... more than helpful with aircrew training. They bring up a point to get training done, and are very helpful in getting it done. They think about crew chief training.

#### How do you transfer names onto the flight schedule?

MX quals can be a point, if we are going on a det. But not particularly needed for Norway. We do look at experience to determine crews, experienced crew to fly by themselves, etc. . Not just having prerequisites for the day. MARLOG, not many prerequisites needed. As far as I know the aircrew had all of the prerequisites.

#### Do you recall the flight hours for the mishap aircrew?

Moore had about ~400 hrs... estimated.

#### Did you sit in on Human Factors Council for the crew chief portion? Any issues?

No factors for Gunny Speedy, excited to fly again. Nothing in particular for Cpl Moore. All he did was talk to (b)(6), (b)(7)c attitudes never seemed different.

#### Can you tell me about your understanding of Crew chief PED policy use?

Don't have PEDs... (PEMAs) don't really take on flights unless going for dets. Used to bring PEMA on aircraft for inflight troubleshooting. We sometimes do it on dets.

#### What about personal cell phones?

For communication we do take cell phones with us. Nothing in SOP about not taking cell phones. Some don't take them at all?

#### Is PED use briefed in flights?

Depends on mission set, briefed not to have cell phones on us in flight for sigint reasons. Up to crewchief on whether to "take" phones into aircraft.

#### Any issues with the mishap aircraft?

Flew on AC 14 day prior. Nothing of specific note. I reviewed the aircraft's book, nothing significant. Just some icing issues, spinner dome, etc. "average MV-22 ADB".

#### Is it SOP for the survival kits to be on aircraft? Tracking?

Yes, installed by Flight Equipment and MAF'd.

#### What's the policy on taking NVGs on flights?

Normally take if landing within an hour of sunset. Prebriefed by TAC. Up to TAC if just flying daytime, take back up at night.

#### Did you see on any previous flight any systems for pilots to obtain in flight weather?

Some of the pilots have used some systems, possibly. They would call back home, radio back for weather updates, but don't always have that ability. For the most part, pilots use MAGTABS or cellphones to get updated weather.

#### Can you describe weather pattern on day you flew?

Weather will be clear... almost always moving south. It changes rapidly. The day I flew we attempted to fly south, but weather wasn't agreeable, so we stayed at alocal LZ.

#### Were CC's getting enough hours?

Getting more than enough to remain proficient.

#### What was pre-deployment guidance for crew chiefs.

Mainly who was core skill complete? Moore was considered one of the more "senior" crewchiefs, already core skill complete. No particular sim training before coming, just normal night and LAT flights. We did cold weather training once we were out here.

#### Are vou aware of any crew rest issues for the mishap crew chief or AO?

(b)(3), (b)(6), (b)(7)c Anytime I came back from night flight he was asleep. I believe he had enough sleep based on personal experience. (b)(3), (b)(6), (b)(7)c Flt E would have awareness on Gunny Speedy.

#### Were pilots trying to gather weather in flight? Or on deck via cell phone?

Most of the time I've seen they've gathered weather on the deck via cellphone... I can maybe name a few instances on a NAV route or flying IFR where it occured. Just a quick weather update with solid crew coordination to ensure look out doctrine is followed.

#### Any inflight discipline issues with crewchiefs?

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Most of my crewchiefs, especially out here, have not had issue with complacency.

#### Do you feel like your crewchiefs are being listened to or can speak up to pilots on concerns?

Some of my younger crewchiefs feel like they are overspoken by some of the pilots. Pilots are wanting to push and say "we're wanting to make it". There can be disagreements and sometimes they feel overspoken.

#### Any addressing with PTO or OPSO?

No, usually ends with crewchief point being made, but just takes longer for crew chief account to be taken in and listened too.

The CRM environment is conducive to training? Yes

How would you characterize Capt Tomkiewicz's ability to listen to crew input? He was one of better pilots for CRM inclusion..

#### How would generally describe in decision making, new MV-22 TACs?

They're normally afraid of dropping a flight or dropping training. SOme of the decision making is lacking, but that means they use the crew more for input.

### Would you say their attitude is more conservative or cavalier?

More conservative?

### Which would describe Capt Tomkiewicz?

He'd fit the more conservative mold.

#### When you fly LAT? Do fly down to 500' AGL or more around 1000'?

When we are inside the terrain its normally 1000' in airplane mode, when we don't have 1000' / 3mi, we will slow down and convert.

# With the terrain of Norway, where you can be at 1000' AGL and still have terrain high around you, was the application of the LAT weather minimums of 3000'/ 5mi ever discussed?

I believe it was discussed at some point, it's been brought up. But not sure if it's been a discussion for the whole unit or not.

### First Interview 6 April 2022

Name / Ranke / Billet: (b)(3), (b)(6), (b)(7)c /MM-261 XO

**Qualifications and Experience:** VMM-261 in Summer of 2020 from being a MAWTS-1 IP. Most of time on west coast and Okinawa. MEUs until Spain deployment in 2021. Been XO since November 2021. 1700 total hours, 1300 Osprey. I also did resident PME EWS and MAWTS only gets about 150 a year.

# Are you a member of the Human Factors Board (Council)? Were the mishap crew ever singled out during them?

Yes. The mishap crews were not singled out for specific issues. Copilot was recently  $b_{0}(6)$ , (b)(7) cTAC had beet  $b_{0}(6)$ , (b)(7) c Neither singled out to be a significant human factor. Nothing specific about enlisted aircrew.

#### Can you talk about preparation for Cold Response? Aircraft, aircrew?

(b)(3), (b)(6), (b)(7)put together a small T&R to develop a sequential model to focus on preparation to get the most training in the available time. Very deliberate on aircrew going to COLD RESPONSE and backup personnel. Very direct on specific things from CO direction. Reviewed icing classes, NATOPS and INST checks focused on icing. Focused on mountain area terrain type stuff, not just landing. We created Bodo Reversal. Developed based on IMC reversal, and some feedback on Trident Juncture VMM-365 after action- and CO experience. We used collective experience to verify with senior instructors. Made tweaks. Implemented in sim events, MAT events, with icing, degrading visibility, and set it up under duress to test it. We used the –200 NATOPS performance supplement for turn radius information. Performed and demonstrated in different modes, evaluated in different speeds/modes, climbs/decents, etc. Used trend dots a big focus. Flying in conversion mode allows us to shrink our turn radius. The R&I graphic is the result of what we came up with and what stemmed from our development.

#### Can you speak about how the syllabus was developed?

It was designed like T&R using codes that already exist for MAT and LAT training. The third code was high/hot/heavy- designed as progression. Daytime high altitude, night time, worked through Bodo Reversal. The codes mirrored T&R current codes, but went through specific COLD RESPONSE deliberate discussion items. Integrated degraded engine due to engine anti ice, NATOPS, performance, etc. Layed existing T&R framework over expecting operating conditions. The discuss items were the bigger meat of the training.

When you fly through mountain ranges do you consider that LAT training? Yes, terrain is a significant factor.

#### So does that mean that any time you flew in Norway you were conducting LAT?

That's what we talked about, but to be honest I didn't look at the schedule every day to see how they were logging it. There were certain ASR runs to like Bardufoss that were probably at altitude. They were also trying to get a LAT route certified. Not sure if that route included consisted with a part of the route flown by GT31. I know they were attempting to certify the route.

#### How can we confirm that the route was certified?

(b)(3), (b)(6), (b)(7) was attempting to get it certified before they left because there was input from other units out there.

If you go below the mountain line, would that be LAT?

Enclosure (17)

So, below 500' AGL, and then caveat with significant terrain. All of that stuff exists like MSA and ESAs.

#### For a skid guy, what's the line of embarkation between LAT and NAV?

Terrain avoidance. Specifically, if you are doing LAT training for the code, purposely trying to increase crew comfort by putting yourself in that environment. When I think of the code for LAT we are specifically doing the training for the T&R. When I think of mission, LAT is a means to an end, not the mission if we are doing a mission.

I've had multiple conversations in the MAWTS-1 building regarding this definition and how we utilize and delineate LAT from other profiles.

Without contingency or combat operations, you need 3000' / 5mi to conduct LAT correct? If you are training for LAT, yes for fixed wing airplane mode LAT. In conversion we have lower minimums.

#### Can you talk to the crew's performance in the squadron?

Capt Tomkiewicz was an even keeled guy in Ready Room. If given a task- he got it done, was light hearted, smart, direct. If he was nervous, you wouldn't know it. If things were down- he'd lift people up. If given a task he'd get it done. Mostly in maintenance when he was in Spain then worked in Ops. He was average, but had a noteworthy program on the SACO CGI. He wasn't one to cut corners. Capt Reynolds checked in when we got out the door, S5 and then to Ops. Given a task and he got it done. He was hardworking, motivated. Organized and deliberate- became NAVO/MAGTAB SME. He was a young guy who got along with the ready room.

Cpl Moore- quiet, always a hardworker. He was working on instructor quals. Part of a peer group of 4-5 as achievers, ear marked to move through instructor quals.

Gunny Speedy, knew his role, was a "gunny" in the squadron, not just admin chief.

#### Can you talk me through your interpretation of the PED policies you know of?

PED policy- my understanding is they are not supposed to be used by aircrew. COMSTRAT and others have their own rules. MAGTABS can be used in cockpit- cell phones can be in bags with the understanding is not coming out and taking pictures.

#### Do you think there is a holistic problem in Naval Aviation with PED usage?

Yes, because you see it all the time on social media. And it's tough coming from MAWTS because we had different rules with COMSTRAT and maybe people see that as "well if MAWTS is doing it...". But here locally and aviation wide it's probably a problem.

We rebuilt Gunny Speedy's APR jacket over the last couple of days, generically. The quals and designations letters were made, but unsigned. We think he took his original out there with him and it's with his personal gear.

# Capt Tomkiewicz had three night reviews prior to his TAC check, weather and maintenance impacts causing incompletes. Can you confirm the decision to execute the review in the sim was in the spirit of keeping him moving in syllabus?

Yes, we incompleted him multiple times due to weather and maintenance and our flight hour generation capability was not doing him any favors. We decided to challenge him in the sim at night and worked through a scenario and felt comfortable that once demonstrated all of the required metrics and met the CO's guidance that he was complete. We did not want him to stall out due to lack of aircraft.

#### Have you seen anyone at VMM-261 fail any review flights? Process after?

Yes, I have failed one (a)(d), (b)(6), (b)(asc failed one. We hosted a Human Factors Board after for my individual. We debriefed, I gave the shortfalls and wrote the ATFS. I then went to the PTO and said to develop a training plan. What we came up with was essentially to fly 50 more hours, and then they would restart the syllabus. It worked out because they were at 450 hours, and then we came back here. They would then get a day and night warm up, and put them in the sim for the day review to do all the emergency procedures. We didn't get to the night review. We did a Human Factors Board when we got back because the instructors and Safety felt that there was some lingering anxieties outside of performance issues. They never made it to a TAC check. The squadron is not afraid to identify sub-par performance and seeks to resource aviators with assistance.

Another thing we started looking at after identifying some issues due to lack of flight time was deliberate simulator utilization and mentorship/instruction prior to syllabus checks. Part of the instructor standardization meetings is we would write ATFs on people even if it wasn't a coded event. If a copilot on an instrument check shoots a bad approach, we would write an ATF on that pilot to document for future tracking. Wasn't all bad, we also wrote on noteworthy events. We started doing this after looking back at this one individual and seeing issues in flight school and VMMT-204 flights.

#### First interview 30 March 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c SFF/MC Controller

**Qualifications / Experience:** Maintenance Control for 2 years, SFF for 1.5 year- 19 months. Never revoked. V-22MX for 5.5 years at VMM-261, one deployment and COLD RESPONSE 22

#### What procedures do you follow when you safe a book?

We utilize a locally generated SFF checklist, same one used for each aircraft, derived from min requirements for SFF from Ch5 of the CNAF 4790. All paperword is printed if we can and placed in a contingency binder like the one seized by another controller. I did not touch any records after knowledge of the mishap. Normally print everything we have, but limited here. S6 hasn't provided everything, so we print bare essentials. Printed in case we have to go to a contingency mode.

#### What kind of maintenance guidance did you receive to prep aircraft for COLD RESPONSE?

We just transferred large number of planes out, plus received a number of aircraft from PMI. BUNO 168330 was a relative new plane to the squadron, where we received it either in December or Janurary straight from PMI at Cherry Point where they did PMI and a phase inspection. We did not have that plane in hand very long before shipping over to COLD RESPONSE. PMI conducted post PMI FCF, we groomed the aircraft to best of our abilities. Multi shop effort to receive it. MX admin, control, QA received aircraft, can't recall if there were any discrepancies.

#### Was there any guidance to look real hard at MESM? What is the guidance?

Guidance was to provide most mission capable aircraft as possible. FMC is not very common. Hard line between PMC and NMC, do not flirt with that line.

What shop did you work in before control? Flight equipment by trade.

Aware of any additional MX SOP to support COLD RESPONSE? Not that I'm aware of.

Aware of any orders to violate the 4790 to get aircraft flying? No

Any aircrew using phones or PEDs on the way to the aircraft. No

#### Are Aircrew very well versed in writing up MAFs?

Yes, they are good at it. Occasionally have late MAFS, but that is dealt with quickly by maintenance leadership, MMCO/AMO.

#### If a plane captain says "the bird is down" do you listen?

Yes, we ask questions to gain more SA, but we listen and ensure the appropriate shop is notified about the issue. We then take the aircraft off the flight schedule.

Anything unusual about leading up to the launch of the mishap aircraft?

No, it was a normal day, and normal flight. It took off, I watched when they came back and fueled. I heard them on the line, poked my head outside, asked if anything was wrong. The ODO said they were just fueling and going back out.

What's you work day look like? MX works 10 hours.

### ODO's ever call down asking for things to be done outside of 4790?

No, the ODOs are in receive mode...

#### Any quals suspended or revoked?

no plane captains suspended quals.

#### How are discrepancies that are found outside of schedule inspections treated?

If the plane is down the plane is down. Our team is very good at writing up things that are wrong, regardless of if they are outside of their interval or not. There's no stigma attached to that?

#### Did the mishap aircraft have the most recent software load?

No, we had a deviation for the JASS load to be corrected within 90 days of returning to CONUS. All of the COLD RESPONSE aircraft have the deviation due to the timing of the software drop.

Enclosure (ידי)

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c Flight Line Division Chief

**Qualifications and Experience:** Former F/A-18 Airframes, IA machine gunner. LAT moved here to MV-22. 2 x Iraq, 1 x Afghanistan, SPMAGTF SPAIN, MEU.

#### How quickly did the Marines adapt to maintenance in Norway?

They adapted very quickly... mainly about ice. I can't speak about flying. But maintenance wise the first time personnel slip they learn to wear PPE.

#### Have you had to discipline for any malpractice maintenance wise?

No... the only difference out here is mainly the cold weather stuff. Mostly morale issues trying to keep Marine's heads up, keep them engaged.

#### You were roomates with Gunny Speedy? Any human factors issues? Yes, and no issues that I'm aware of.

In your opinion, did Gunny Speedy adhere to crew rest regulations? I am familiar with those requirements and to my knowledge he did.

#### First Interview 31 March 2022

Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c DDO day of 18 Mar,

Qualifications and Experience: Single deployment NARF 2021, MV-22 copilot, NSQ, LATQ, AAR, core skill complete

#### Can you tell me about the date of the mishap?

On the Morning of 18 March I took over as ODO, arrived at the squadronsquadron 0730. The flight brief was at 0900, ODOs normally arrive 30 min prior. I arrived earlier due to some new procedures in place for operations during COLD RESPONSE. Exercise was just kicking off and new procedures in place from NAOC for ACMs, hot air spaces, mission secret, Norwegian NOTAM system. Got early to access and be able to brief to crews.

I entered the ready room and pulled up my laptop, opened the ODO template. Prepared ODO brief, checked the flight schedule, added a snap shot of schedule, brief roll call, added temps/max/da/pa, utilized the Air Force weather website (Airforce weatherweb.mil), and used the IPPC.no website which we've found have the most accurate weather radar pictures of country/regional/local. The picture was similar to 70% of days, scattered precipitation, scattered cells moving throughout the area. Rapidly changing weather patterns. METARS/TAF (aviationweather.gov, backed up on af site). NOTAMS for Bodo, Bardufoss, Evenes, Trondheim. For the airspace portion- that's mission secret- pulled the ACMs. Briefed very similar to 31 Mar brief. Signed RAW that I had. (Initialed RAW on the computer, not certificate). Not that I recall any mx issues.

I generally knew the mishap route of flight. I flew with Capt Tomkiewicz the day prior. On the 17th, lwe anticipated flying the route but received last minute tasking about 30 min prior to takeoff, that tasking fell through before launch. We planned and brief to fly the route, did local CALS instead, and entered a portion of the route at an alternate checkpoint. Entered just north of Rosval and flew south to north. I believe we overflew the site of the mishap.

#### Which route were you on?

It was the Bravo route that we received from the NAOC as a verified route that we were allowed to fly. They didn't name the checkpoints, so we named them according to the ASTACSOP.

#### Are those checkpoints what you reported on Helo Common?

We reported that we were entering the Bravo route north of Moyrana and Rosvall over Helo Common and Rosval radio.

#### Did you have line of site comms with anyone?

No, made calls in the blind over Rosvel that we were not entering their zone, but were trasiting in the area. Did not recevie anything back.

#### Can you describe terrain, how you flew the route?

Weather was at 7000' overcast, so we were flying over the terrain. I don't remember the MSL altitude, it was my first time flying to route.

#### Did you brief weather mins?

Yes, briefed 5000' / 5mi because of the terrain in that area.

Enclosure (17)

Anything unusual with the brief? No, sounded extremely similar to other briefs.

Did crew turn in RAW/ and load comp? Yes, I received both.

**Did you listen to flight brief?** I was within earshot, but not attentively listening.

Any issues with aircraft? No

What aircraft? Aircraft 14

Is Aircraft 14 Block B or C? Believe it is a Block C

What does Block C mean to you? "Stick aircraft"... has modifications.

Any procedures for using onboard weather radar? Yes sir, we use it.

Have aircraft commanders ever forgotten to sign the RAW with it being on the computer? Not to my knowledge, very well adhered to.

During your flight on the 17th, did you experience any of the changing weather? No, there were high ceilings, none of the normal cells in the area.

Do you remember if the Bodo reversal was briefed? Any other weather issues on the 17th? Not briefed every flight due to extensive predeployment training.

**Do you remember the last communications you had with GT31 on 18 March 2022?** They came back for hot fuel at half-way point, I actually walked outside to watch them taxi and takeoff.

#### Did the crew ask for any weather updates?

I walked outside and told them that the weather updated was still scattered in the area. THey had been flying for 3 hours before fuel.

#### What was their route of flight?

First half was going north up the coast, don't remember exactly where. I was submitting 1801s filed through the HN website. The second half was meant to be south along bravo route.

#### What kind of communications do you have with the aircraft?

Just the PRC-152. Crews will often brief cell phones as a tertiary means of communication on deck. No SATCOM was available.

#### Is the lack of printing products a resource issue?

Yes, we are still creating all of the products, but have to use MAGTABs to take pictures to bring the products with us. We had printers but they have failed. Primarily use pictures vice .pdfs on the MAGTABs.

#### Any ability to upload electronically vice taking pictures?

I don't know. I don't believe we had that capability.

#### Do feel comfortable enough in the current system to fly with?

I don't feel any less comfortable walking to the aircraft with the products as we have them.

#### Any formal or informal SOP on battery life for MAGTAB?

TACs will generally check battery life.. Informal rule that 80% should last day or two. Plenty of opportunity to charge.

#### Any issues keeping AERO APP updated? No

Mission change on day of GT31 event?

No sir, no need for mission change.

### To your knowledge, does anyone keep their own device on hand in case the MAGTAB fails? IPAD with Foreflight?

I believe some pilots may use foreflight... I don't use anything besides MAGTAB.

#### **Did Captain Tomkiewicz every use an IPAD on the preivious flight with him?** No, not that I remember.

### Any issues with aircraft regarding no having DTED?

No, generally briefed as mission essential equipment

#### Pretty standard for aircrew to use Height Above Terrain in flight?

Yes

First Interview 31 March 2022 Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c QA Chief

**Qualifications and Experience:** Plane Captain, QAR 310 (Flightline), V22 since 2009, 5 deployments, 261-2009, CNATT, VMM-262 2012, NARF/AFG, MEU, 31st MEUs

Were you aware of any perceived pressure to prepare the aircraft for COLD RESPONSE beyond normal cycle of preparation, to cause shortcuts? No

Were there any deviances or anything you perceived going on in the maintenance department that required you to take administrative or punitive action?

No, not with Aircraft 14 or for COLD RESPONSE. We did have to pull (b)(3), (b)(6), (b)(7)c CDQ qualification prior to deploying. He had to work through the syllabus again and be signed off by specified personnel in flightline. Qual was actually suspended and not pulled... required additional training through a syllabus.

**Do you recall the plane captain the day of the mishap on AC 14?** No, I was in Narvik on a site survey. (b)(3), (b)(6), (b)(7)c was running the QA shop.

Once I returned from Narvik I received a text message about Aircraft 14 not having returned yet. So I went back to the squadron, and when I arrived that's when things started unraveling. Shortly after the CO broke the news.

#### When was your last major maintenance inspection?

Last year we had a MALS and a Wing inspection come in. Results weren't bad.

#### Do you remember anything specific about Aircraft 14?

Workin with icing on it a lot... it was a player to be as close to FMC as possible.

From: To: Cc: Subject: RE: J Date: Tues:

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

RE: JAGMAN Information Tuesday, April 19, 2022 1:48:41 PM

Sorry for the delay sir, I was flying last night. I'll answer as best I can.

1. Yes he was my roommate.

2. I know that he was sick on and off throughout the time we were there with a head cold. I believe I remember him being congested the night prior. I flew the night prior and then slept in so he and I were off cycle so I couldn't tell you his status the morning he woke up. Other than that, I know that he had just settled on a house and had received the keys so that was an exciting time but not anything I would say affected his ability to fly/focus.

3. Per my above comments, he was fighting some congestion but was managing just fine. I think I likely woke him up when I came back from my night flight. I landed at 2300 and probably got back to the room around 0030 - 0100. His brief time the following day was at 0900. Breakfast ran from 0530-0800. Not exactly sure when he woke up but it was likely in time to get breakfast and then prep the last minute items before the brief.

I have cc'd the ASO and senior member of the AMB just cause I know that my role in answer questions for the JAGMAN and participating in the AMB is a bit touchy. The guidance I have received is that I am allowed to disclose factual information and then stuff that I was personally responsible for and aware of prior to my role as an AMB member. I hope this helps but please let me know if you need anything else.

Very Respectfully,

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

-----Original Message-----From: (b)(3), (b)(6), (b)(7)c Sent: Monday, April 18, 2022 8:53 AM To: (b)(3), (b)(6), (b)(7)c Subject: JAGMAN Information

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

Good morning, I am assisting the JAGMAN IO in regards to GT31 and hoped you could answer a few questions for us regarding your Norway roommate, Capt

Reynolds.

Before I begin, we do not suspect anyone at this time of any wrongdoing and are therefore not offering 31B rights. These questions are in regard to the JAGMAN investigation and therefore do not fall subject to any privileged information considerations.

1. Can you confirm that your roommate was Captain Ross Reynolds?

2. To your knowledge, were there any human factors associated with Captain Reynolds that may have been affecting him prior to 18 Mar 22?

3. To you knowledge, did Capt Reynolds have any issues regarding achieving the required crew rest the night before 18 Mar 22? Or crew day?

Thank you for your assistance.

V/R,		
	(b)(3), (b)(6), (b)(7)c	

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

 To:
 RE: JAGMAN Information

 Date:
 Friday, April 22, 2022 2:45:21 PM

Good Afternoon Sir,

My apologies for the delay in response, but I have no problem in answering your questions below.

1. My roommate was indeed Capt Tomkiewicz.

2. To my knowledge, I wasn't aware of any personal/human factors associated with Matt during the exercise in Norway or during the time leading up to the squadron leaving.

3. As far as I know, Matt didn't have any issues with achieving crew rest from the scheduled events the day prior. Additionally, I did not note any issues with his crew day on 18 Mar 2022 as well.

If you'd like me to expand on anything further, feel free to reach out to me on my cell at (b)(6), (b)(7)c and I'd be happy to clarify anything if need be.

V/R,

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

-----Original Message-----

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

 Sent: Monday, April 18, 2022 8:57 AM

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

Subject: JAGMAN Information

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

Good morning, I am assisting the JAGMAN IO in regards to GT31 and hoped you could answer a few questions for us regarding your Norway roommate, Capt Tomkiewicz.

Before I begin, we do not suspect anyone at this time of any wrongdoing and are therefore not offering 31B rights. These questions are in regard to the JAGMAN investigation and therefore do not fall subject to any privileged information considerations.

1. Can you confirm that your roommate was Captain Matthew Tomkiewicz?

2. To your knowledge, were there any human factors associated with Captain

Enclosure (17)

Tomkiewicz that may have been affecting him prior to 18 Mar 22?

3. To you knowledge, did Capt Tomkiewicz have any issues regarding achieving the required crew rest the night before 18 Mar 22? Or crew day?

Thank you for your assistance.

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V/R,	
	(b)(3), (b)(6), (b)(7)c

Enclosure (17)

First Interview 1 April 2022 Name / Rank / Billet: (b)(3), (b)(6), (b)(7)c VMM-260(3), (b)(6), (b)(7)c

To the best of your knowledge, was any of the mishap aircrew on any prescribed any medication? None of the aircrew were on any standing medications for any chronic medical conditions.

## Were you aware of any outstanding human factors that may have affected decision making processes of the aircrew?

Not that I'm aware of.

#### Did you do the flight physicals of the aircrew?

I did not do Gunnery Sergeant Speedy's, I don't recall if I did any of the other crew's.

## As a medical professional, did you see any differences in the way aircrew were reacting in the cold weather?

Everyone was adapting very well, the dry suits took some getting used to, but by the time of the mishap flight most people have become accustomed to it.

First Interview 6 April 2022 Name / Rank / Billet: (b)(6), (b)(7)c VMM-261 DSS

Qualifications and Experience: Deployed to Kuwait,VMM-268 SPMAGTF 2016, two MRF-Ds 2017/2018, DFT to Korea/Phillipines 2019 I went to Resident EWS, and just got back from NARF April-Jul 2021 I attended WTI in the fall of 2021. Flt lead, AMC, 1450 total hours

#### What billet do you hold in the squadron?

I'm the Director of Safety and Standardization, but am not an ASO.

DO you participate in Human Factors Councils? Did you discuss any of the mishap crew in detail? None of the crew members were discussed as having issues during last 3 months of councils.

Have you seen any trends in the squadron as the DSS? Running beyond the capabilities? Common topic discussed during councils was on working towards aircraft grooming and flight hour management in preparation to deploy. And than a lack of distribution of flight hours due to that focus on readiness.

## What steps were taken on the maintenance side to ensure you had mission capable aircraft to take to COLD RESPONSE?

I can't speak to specifics of the maintenance department. I wasn't aware of anything like shortcuts or any other specific issues in getting the aircraft ready.

Can you speak on some of the mitigating steps taken to make sure that pilots got hours, academics, training coming back from the NARF and into preparation for hazardous mountainous terrain? The first focus was getting people back into the aircraft consistently during Oct-Dec 2021. From late December to January there was the PTO developed training syllabus that was sim driven due to inability to replicate locally. Syllabus consisted of 3 sim events on LAT in MAT, one to discuss icing system, one to expose crews to "white outs". A crawl-walk-run method. Academics- built like a T&R event. It included discussion items, required readings. Pulled out required reading and publications to resource instructors. NSIs and above were the instructors, leveraged experienced aviators.

#### Do you have a record of the training? Owned $by_{(b)(3), (b)(6), (b)(7)c}$

Were Crew Chiefs required to participate in the training? CCs were encouraged but not required.

Was the Ready Room receptive to the additional training in preparing for COLD RESPONSE? Ready Room was receptive to training. Required reading pulled out of NATOPS, ANTTP, pulled out limitations and icing concerns.

## Was any of the syllabus focused on Energy Maneuverability diagrams and maneuvering inside of terrain?

Yes, more directed to the Bodo reversal numbers. Part of heavy detailed planning.

Who reviewed the Bodo reversal Read and Initial?

**Can you talk about how the Bodo Reversal was introduced to the squadron?** Worked into syllabus that was discussed, part of the sim training plan.

#### Where were the simulator events conducted?

We went to Bridgeport was for one of the sims in order to simulate terrain. Did not use Norway because it was not modeled very well.

#### What is the squadron PED policy and you understanding on it?

We don't have a squadron policy, we fall in on the MAG policy. The policy dictates the use of PEDs for the purposes of mission planning and to aid in enroute structure navigation/procedures with an official PED. As far a personal PED, I'd have to get as far as discretion of where the personal PED falls uner. Driven off of understanding that PEDs should not be distraction or hinderance with flight operations.

What do you know or understand to be an accepted practice by crew chiefs on the PED policy? Don't think I can speak well on CC following policy.

As a culture, does the command work hard to control the utilization of unauthorized PEDs in flight? Not sure I can expound anything beyond our current policy.

#### In your own flights, do you brief the usage of PEDS or how to employ them?

Not specifically part of my NATOPS brief before every flight. During execution I heavily emphasize use of the MAGTAB and if we are going to use it make sure we have a way to secure it. Anytime someone is heads down, we vocalize to ensure that the crew is aware and that someone can pick up the scan outside.

#### Can you describe Capt Tomkiewicz's discipline with planning, briefing, execution?

Capt Tomkiewicz was a great person to have in ready room, average performing pilot. Based on flying with him and being around the ready room and understanding who putsl in lots of time planning vs who is looking to stray away. He was in the middle.

## Did you ever fly with Capt Tomkiewicz as an instructor? How did he deal with events when things changed?

For mission skill events and for one or two night system events. The majority of events I flew with him were PTT type events, not much for me to judge decision making, etc.

## Capt Tomkiewicz had three attempts at his night review syllabus; for various external reasons. Does VMM-261 ever fail a person on a review flight? And if so, what happens next?

Yes, the squadron has failed personnel on review flights. If it's a single event that's failed it requires a detailed ATF, to draw out weaknesses. Instructor makes coordination with Operations and Safety to discuss remediating a specific skill before being evaluated again. Ops and Safety take the recommendations and if necessary conduct additional events to address weaknesses.

Is it common to see MV-22s squadron have pilots utilize the 50 simulator hours to fulfill 10% of the required 500 flight hours to make TAC?

Yes, common in VMM-261 and in other squadrons on the east coast. Less common in Hawaii and on the West Coast.

Enclosure (17)

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Interview of (b)(3), (b)(6), (b)(7)c 5FF/ Maintenance Controller.

Interviewed by(b)(3), (b)(6), (b)(7)con April 20th 2022.

When were you signed SFF? Has been SFF since December 2021.

Any Maintenance Guidance for CR? "Nothing out of the normal."

Procedure to safe an aircraft for flight? Followed the same procedures as we did at home. Biggest issue was computer and printer assets. We only had 3 maintenance computers and one printer.

Is a checklist used? "We used a local generated safe for flight checklist".

What is the usual fuel load amount required for flight? "Around 11K."

Hot pit on the way out? "Yes, hot pits were available if needed on the way out."

Any pressure to get aircraft turned back around for the flight schedule? "No abnormal pressure to get the birds out".

Anyone taking short cuts to meet the flight schedule? "Not that I am aware".

How was the icing systems as a whole in CR? "We did what we could to fix the icing gripes on the aircraft when they were not on the flight schedule."

How were the working conditions on the aircraft? "Was cold, but maintenance personal had covered area on the flight line to get out of the elements when needed."

Are you a 200 CDI or 200 work center supervisor? No.

MCN: 28T088A. Did you sign the CDI block of the Worker hours, initials AMV? Yes. "Avi shop said they were ATAfed and were walking out the door. I signed the CDI block so the MAF would be M3".

Did you ATAF the tool box? "I did not inventory the tool box prior to signing the CDI block on the MAF".

-Ended Interview-

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#### VMM 261 Aircrew Interviews conducted 25 April 2022 in VMM 261 Conference Room

**VMM 261 interview**(3), (b)(6), (b)(**Crew Chief, 2Mar2022 flight with MAC** (b)(5), (b)(6), (b)(7)c (b)(5), (b)(6), (b)(7)c

- 1. CC, PC, BIC, NARF, CR.
- 2. Do you know the policy for the use of PED in Marine Aviation?
  - a. Don't take them. (not accurate understanding of PED policy)
- 3. Were you familiar with authorized LAT training areas or MTRs in Norway used for CR?
  - a. I can't recall.
- 4. Do you remember flying with MAC on 2 Mar 2022?
  - a. Yes, but nothing stands out.
- 5. Do you remember any parts of the flight brief that was given significant attention?
  - a. I can't remember.
- 6. What about minimum altitudes or weather?
  - a. I can't remember.
- 7. What about MAC's attitude prepping for and during flight execution?
  - a. MAC enjoyed teaching, had good CRM, never felt unsafe.
- 8. How often on other flights not with the MAC in Norway did you operate below 500' AGL and what, if anything drove you low?
  - a. I can't recall for sure.
- 9. Did you ever operate in the LAT regime?
  - a. Yes, but stayed above 500' AGL.
- 10. If you were above 500' AGL, why do you say you were in LAT?
  - a. WX, terrain.
- 11. Was there a general minimum altitude you operated at?
  - a. 1000' AGL.
- 12. Did you ever witness anyone using PED on one of your flight?
  - a. Yesp)(3), (b)(6), (b)(7) took pictures with a camera.

 VMM 261 interview(p)(3), (b)(6), (b)(7)
 Grew Chief, 2Mar2022 flight with MAC
 (b)(5), (b)(6), (b)(7)

 (b)(5), (b)(6), (b)(7)
 (b)(5), (b)(7)
 (b)(5), (b)(7)
 (b)(5), (b)(7)

- 1. CC, PC, BIC, CDI, NARF, CR.
- What type of demeanor did the MAC have when prepping for a flight or during execution?
   a. Down to business, I don't remember specifics of the flight brief or flight.
- 3. Do you recall the profiles you flew over water or feet dry?
  - a. I don't recall exactly, I can't remember, it was almost two months ago.
- 4. Do you recall how LAT training areas/routes were certified in Norway?
  - a. I can't remember.
- 5. Do you recall if minimum altitudes were ever briefed to the aircrew of 261?
  - a. Ya, but I can't recall.

## VMM 261 interview (b)(3), (b)(6), (b)(7)c Co-Pilot, 2Mar2022 flight with MAC (b)(5), (b)(6), (b)(7)c (b)(5), (b)(6), (b)(7)c

- 1. CP, NARF, CR
- 2. Did you ever fly in the LAT regime in Norway?
  - a. No, I never did LAT.
- 3. What about your flight with MAC?
  - **a.** We conducted an area fam within 25NM of Bodo, sight-seeing, doing CALS, never left Bodo airspace.
- 4. What were your profiles for this flight?
  - a. We generally were at 1500' AGL with exception of CALS or conversion mode 120kts/200'
- 5. Were you aware of any routes certified for LAT training?
- a. I am not sure about being certified but we used the "Hoth" route to the south.
- 6. Was the "Hoth" route the same as the "B" route?
  - a. I think so, not sure.
- 7. How was MAC to fly with?
  - a. He was fun to fly with, not on the controls much.
- 8. When you flew with him did he brief any key risk mitigations?
  - a. Yes, we planned to stay close to Bodo and avoid weather.
- 9. When you mission plan, do you do map studies of your routes?
  - a. No, I don't do intermediate check points.
- 10. How would you describe the culture of the 261 ready room?
  - a. Great place to be, I enjoy being here.
- 11. Did you have a go/nogo for weather in Norway?
  - a. Yes, 1000' cloud deck.
- 12. So, was the 1000' cloud deck a CO imposed restriction?
  - a. No, it was generally up to AC.

 VMM 261 interview
 (b)(3), (b)(6), (b)(7)c
 works in Ops, Co-Pilot, 5Mar2022 flight brief with)(3), (b)(6), (b)(7)c

 Division leads
 (b)(5), (b)(6), (b)(7)C
 (b)(5), (b)(6), (b)(7)c

- 1. CP, NSQ, NARF, CR
- 2. Were there certified LAT areas in Norway?
  - a. Yes, the A, B, and C routes.
- 2. How were the LAT areas certified?
  - a. We built them in JMPS, looked at MSA, built a brief to push to highest(3), (b)(6), (b)(#200k care of pushing up.
- 3. Since the NAOC pushed you the A, B, and C routes did the NAOC certify them? Can the Norwegian military certify a LAT area for USMC?
  - a. Yes, the NAOC routes were certified (b)(5), (b)(6), (b)(7)c
- 4. Did you fly with MAC on 17Mar22?
  - a. Yes.
- 5. What did you do?

- a. Last minute tasking changed our plan.
- 6. How?
  - a. Instead of doing an ASR we flew to the south?
- 7. What did you do?
  - a. We flew the B route.
- 8. Did you ever fly below 500' AGLon the Broute?
  - a. Maybe, not sure.
- 9. How did you plan the route, did you conduct a detailed route study for significant terrain?
   a. Followed ANTTP guidelines, with checkpoints 30-60 KM apart.
- 10. Any more stringent added to cockpit brief (looking for discussion of terrain, winds, ect..)
  - a. Nothing outside the usual weather concerns.
- 11. Were any altitude restrictions briefed during mission brief?
  - a. I don't remember (LAT ROC not briefed?).
- 12. How would you describe MAC's approach to planning and briefing?
  - a. Funny and go lucky up until it is time to work.
- 13. How would you describe the MCP?
  - a. Hard worker.
- 14. Is PED use authorized in USMC aircraft?
  - a. Yes, but I don't recall the exact policy.
- **15.** At end of interview_b)(3), (b)(6), (b)(7) stated that he probably flew below 500' AGL but couldn't state how often or why.

## VMM 261 interview, (b)(3), (b)(6), (b)(7)c FOPSO, DLUI, 5Mar2022 flight brief with (3), (b)(6), (b)(2)c lead, LAT scheduled (b)(5), (b)(6), (b)(7)c

- 1. Sec Ld, NARF, CR.
- 2. You were schedule for LAT on 5Mar22, but didn't execute the flight. Did you specifically brief the LAT portion and the ROC? Were there certified LAT areas in Norway?
  - a. I didn't brief LAT ROC or anything specific to LAT. I was completely focused on the DLUT portion of the mission.
- 3. What were the certified LAT training areas in Norway?
  - a. I am not sure.
- 4. What flight profiled did you generally fly in Norway?
  - a. 1000-2000' AGL, VMC. I never descended into the LAT regime.
- 5. For your DLUT, did MAChelp you prepare?
  - a. Yes, he was a solid member of the ready room.
- 6. Did you ever fly with MAC?
  - a. Yes, I flew several hours with MAC, good aviator, no issues, plenty of experience.. he made good decions.
- 7. So, you never operated in LAT regimes while in Norway?
  - **a.** No.
- 8. How many times did you fly in Norway?
  - a. 8-10 times.
- 9. Did you ever fly with MCP?

- a. No.
- **10.** Do you know the squadron's PED policy?
  - a. Yes, MAGTABs are authorized. Not sure about others.
- 11. Did you ever fly below 500' AGL for any reason?
  - a. I can't remember.
- 12. Did you ever hear about pilots using GoPros?
  - a. No, I have not.

## VMM 261 interviewb)(3), (b)(6), (b)(7)AMO, Acting XO in Norway, 17Mar2022 flight brief with MAC indash two , mission section CALS/LAT (senior pilot, leadership)(6)(5), (b)(6), (b)(7)c

- 1. Squadron AMO, second interview.
- Were you aware that there were no certified LAT areas in Norway?
   a. No, I assumed if they were on the schedule they were vetted through operations.
- 3. Did you operate in LAT regimes while flying on 17Mar22?
  - **a.** Yes. S00' AGL, 200kts. We did a handful of times. No intent to fly below 200' AGL. We were really aiming for LL 500-1000 feet AGL.
- 4. Had anyone flown the route (B) before you flew it?
  - a. I am not entirely sure.
- Did you ever fly in the LAT environment outside of 17Mar22?
   a. No.
- 6. Were you aware of any briefed altitude restrictions for Norway?a. No.
- 7. Are you aware of the PED policy for the squadron?
  - **a.** Yes, MAGTABs, other devices powered off and stowed.
- 8. Did you brief LAT ROC for your 17 Mar22 flight?
  - a. No, I did not. LAT scheduling was used to help mitigate risk.

#### VMM 261 interview, (b)(3), (b)(6), (b)(7) dinterview 26 Apr (interviewed to ask about GoPro)

- 1. Do you know the PED policy for 261.
  - a. Yes, MAGTABs are authorized.
- 2. Have you heard of conversations where 261 aircrew talked about the use of recording devices?
  - a. Yes, I am also aware that MCP had a GoPro.



## COLD RESPONSE 22 SIMULATOR EVENTS + STUDY GUIDE

Please return this binder to the PTO desk when complete with your event.

Icing/EP Sim	2.0		D	S	2	FFS/FTD
Goal: Introduce s	tudent to icing sys	tem, standard operation	ation, li	mitations, and	I failure	modes.
Requirements, Co	induct day IFR or	erations in an icino	enviro	ment to enco	mnace n	ormal operation

<u>Requirements</u>. Conduct day IFR operations in an icing environment to encompass normal operations, emergency procedures, and inadvertent IMC procedures.

#### **Discuss**

İ

Icing System Components (NFM-000 2.16) IPS Modes and Menus (NFM-000 2.16.2) Icing System Failures/Degraded Modes (NFM-000 Figure 2-134) Icing System Limitations (NFM-000 Figure 4-17) Built-In-Test System (BITs) (NFM-000 2.25.1) IIMC Procedures & CRM [NATOPS+ASTACSOP] (MDG Table C-11) IIMC Procedures (Bodo Breakup)

#### Introduce

Bodo Breakup

#### <u>Review</u>

NATOPS and ASTACSOP IIMC Fan Break Emergency Procedures, including but not limited to IPS EPs

#### Performance Standards

Execute EPs in accordance with NATOPS Test and operate IPS system in an icing environment Pilots should perform all three IIMC procedures and associated CRM drills, but SHALL perform NATOPS and Bodo Breakup procedures

Instructor: NI/ANI/WTI/NSI Pre-requisites: None

Simulator Setup and Supporting Files

<u>Narrative:</u> First 1 hour of simulator can be accomplished as a single by conducting startup in cold environment, followed by operation of icing systems, planned IMC penetration, and review of EPs and icing faults. Second hour of sim is dedicated to conducting IIMC procedures as a section. If unable to network sims, use of a moving model is adequate provided instructor conduct CRM calls as wingman.

<u>Applicable T&R Codes:</u> 2031, 2130, 2730, 6033 <u>Position Set:</u> Bridgeport (7CL4) (West Coast Database) <u>JMPS Files:</u> None

MAT/LAT Sim	2.0	<u>D</u>	S	2	FFS/FTD
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Goal: Review conduct of CALs and LAT (conversion and airplane) in a mountainous environment.

<u>Requirements</u>. Conduct performance calculations for operations at high DA landing environment. Landings conducted where mountainous terrain is a significant factor including pinnacles, bowls, valleys, and canyons. Conduct LAT (conversion and airplane) with consideration given to mountainous area effects.

**Discuss** 

LAT/MAT hidden hazards (NTTP 3-22.3 4.3.4.5) Orographic turbulence (NTTP 3-22.3 4.2.1.5) Consideration for LZ selection and evaluation (NTTP 3-22.3 3.2) High/low reconnaissance pass checklists (NTTP 3-22.3 Table 3-1) Go/no go point (NTTP 3-22.3 3.1.3.4) IIMC Procedures (Bodo Breakup) Energy Management (NTRP 3-22.4 Chapter 6) **no reference material included* Contour versus low level flight (NTTP 3-22.3 4.3.7) Low power margin waveoff considerations (NATOPS 11.3.8.2) Mountain area departures (NTTP 3-22.3 3.5.5)

#### Practice 1 4 1

Bodo Breakup CALs in a MAT environment, including pinnacles, slopes, bowls, valleys, and crosswind landings

#### <u>Review</u>

NATOPS and ASTACSOP IIMC Fan Break Emergency Procedures in the LAT environment Section LAT Maneuvers Conversion mode maneuvering

#### Performance Standards

Execute EPs in accordance with NATOPS Test and operate IPS system in an icing environment Pilots should perform all three IIMC procedures and associated CRM drills, but SHALL perform NATOPS and Bodo Breakup procedures

Instructor: NI/ANI/LATI Pre-requisites: Icing/EP Sim

#### Simulator Setup and Supporting Files

<u>Narrative:</u> Utilize JMPS computer to brief LAT route execution. Section event beginning and ending at Bridgeport. Network sims, depart to conduct VIRGINIA ROUTE to hit L-Hr in to LZ SWALLOW. Utilize remaining sim time to conduct MAT CALs, EPs, and practice Bodo Breakup. Navigation after LAT route at discretion of IP (zones of opportunity).

Applicable T&R Codes: 2630, 2730, 6033

Position Set: Bridgeport (7CL4) (West Coast Database)

<u>Environment</u>: Winds 010/10, Ceilings 13,000 (this should result in a IIMC/ Breakup situation during route); if no IIMC required, CAVU. RVL settings at discretion of IP.

JMPS Files: CR22 PTP Files including VIRIGNIA ROUTE overlays.

<u>RVL Sim 2.0</u>	<u>(NS)</u>	S	1	FFS/FTD
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Goal: Review RVL procedures in a mountainous area, white-out environment.

<u>Requirements</u>. Conduct performance calculations for operations at high DA landing environment. Landings conducted where mountainous terrain is a significant factor including pinnacles, bowls, valleys, and canyons. Conduct all approach types that utilize coupled automation. Land within NTTP standards for RVL conditions.

<u>Discuss</u>

NATOPS RVL limitations (NFM-000 4.14.6)
 Vertical (RADALT/VS) and horizontal (POSN/GNDSPD) submodes of automation (NTRP Ch 13)
 Consideration for LZ selection and evaluation (NTTP 3-22.3 3.2) *See MAT/LAT sim section for reference discussion material
 Wave-off criteria for RVLs (MDG 5.5.6.1)
 RVL CRM cadence (MDG Table C-24 and C-25)
 Go/no go point (NTTP 3-22.3 3.1.3.4) *See MAT/LAT sim section for reference discussion material

Go Around Function (NTRP pg. 13-118)

#### Practice

Takeoffs and departures with various levels of obscuration CALs in a MAT environment, including pinnacles, slopes, bowls, valleys, and crosswind landings

#### <u>Review</u>

Emergency Procedures during RVLs RVL procedures with and without the use of automation RVL Departures and waveoffs

#### Performance Standards

Conduct MAT RVLs within standards per T&R manual Ch. 2.

#### Instructor: NI/ANI/RVLI Pre-requisites: MAT/LAT Sim

#### Simulator Setup and Supporting Files

Narrative: Single or section event utilizing zones from MAT sim. Set device to override, 200% whiteout (snow). Conduct day RVLs for 1 hour or until comfortable and reset environmentals to night. <u>Applicable T&R Codes:</u> 2270, 2271, 2730, 2731, 6033 <u>Position Set:</u> Bridgeport (7CL4) (West Coast Database) <u>JMPS Files:</u> CR22 PTP Files



UNITED STATES MARINE CORPS MARINE MEDIUM TILTROTOR SQUADRON 2-1 MARINE AIRCRAFT GROUP 26 2D MARINE AIRCRAFT WING EME POSTAL SERVICE CENTER BOX 21-16 JACKSONVILLE NC 29545 1016

> DF PEPLI PEPIP T 3710 DSSN 25 Jan 22

- From: Standardization Officer, Marine Medium Tiltrotor Squadron 261
- To: Commanding Officer, Marine Medium Tiltrotor Squadron 261

Subj: STANDARDIZATION BOARD MINUTES FOR JANUARY 2022

- Ref: (a) CNAF M-3710.7
  - (b) MCO 5100.29C
  - (c) VMM-261 Safety Management System
  - (d) VMM-261 Flight Operations SOP
  - (e) ASO 3710.7Y
- Encl: (1) Qualification and Designation Matrix (2) Bodo Reversal

1. The Marine Medium Tiltrotor Squadron 261 (VMM-261) Standardization Board convened on 25 January 2022 in accordance with the references.

2. The following members were present:

	Aviation Maintenance Officer
	Operations Officer
	Executive Officer
	Director of Safety and Standardization
(b)(3), (b)(6), (b)(7)c	Aviation Safety Officer
	Assistant Operations Officer
	Pilot Training Officer
	Enlisted Aircrew Training Manager

#### 3. Old Business.

#### a. Bodo Reversal Corrections

(1) After rehearsals and thorough review, the Bodo Reversal has been finalized. All aircrew participating in Cold Response 22 shall be familiar with this procedure, incorporate it into flight briefs, and practice it in CR22 PTP sims.

4. New Business

#### Subj: STANDARDIZATION BOARD MINUTES FOR DECEMBER 2021

a. Icing Procedures in Norway.

(1) Start plane with IPS selected OFF. Manually turn on what is required in accordance with your flight profile. If icing penetration is expected, IPS PFBIT shall be run prior to departure.

CO's Comments:

<u>CIRCUIT BREAKER DISCIPLINE is key here. Pilots need to review the ADB for proper</u> IPS configuration and ensure the aircraft matches. Initiate and update MAFs as required so subsequent crews have the most accurate information.

- 5. Instrument Flight Board. None.
- 6. Aviation Safety Counsel. None.
- 7. Proposals

a.		Reduced Visibility Landing Instructor
b.	(b)(3), (b)(6), (b)(7)c	- Functional Check Pilot
c.		- Flight Lead, Air Mission Commander,
Wear	oons Tactics Ir	structor
d.		- Section Lead
е.	(b)(2)Low, (b)(6), (b)(7)c	Low Altitude Tactics Instructor (LATI)
£.		Assistant NATOPS Instructor (ANI), Crew
Resc	ource Manager F	acilitator (CRMF)
g.	(h)(2) (h)(C) (h)(7)	ANI, CRMF
h.	(b)(3), (b)(6), (b)(7)c	LATI

CO's Comments:

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

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261 MAY 23D ALDODOW DESIGNATION AND OUAL SIGATION MATDIX . ......

LEGEND

JANUARY

X = QUALIFIED / DESIGNATED P/XX = PROPOSED/MONTH P/XX* = PROPOSED/MONTH - YEAR OLD R = REFRESHER AWP = AWAITING PAPERWORK Z = ROUTING

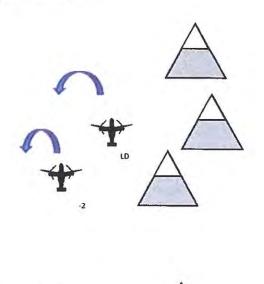
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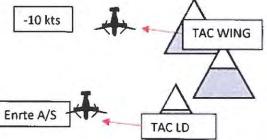
#### **BODO REVERSAL**

This is a VISUAL FLIGHT RULES maneuver that is intended to be executed PRIOR to going in to IMC conditions. However, it can be executed utilizing instruments if an aircraft goes IIMC. DTED is required to execute this maneuver while IMC. -If terrain is especially canalizing, consider use of trail formation.

-During low altitude flight, each aircraft spins heading bug to the "escape heading" based on terrain and DIGMAP study. This "escape heading" is updated throughout every route turn and verbalized to the crew.

- Lead flies closest to the he fjord, following "rules of the road". This puts lead closest to the ground visual reference of the ridgeline wall and remaining aircraft fly echelon left
- "Elvis Flight, execute Bodo Reversal" is called when either aircraft is able to fly VFR but experiences one or more of the following:
  - a. Has less than 3 visual references contrasting the winter landscape, OR
  - b. Subsequent aircraft anticipates losing their visual interval, OR
  - Aircrew scanning the 6 o'clock begin to lose terrain references first (to ensure an unobstructed reversal).
- "Elvis 11 POPEYE, execute Bodo Reversal" is called when any aircraft goes IIMC and determines the best way to regain VMC is by reversing course. There is no difference in procedures when executed VMC or IMC.
- At the command of execution, -2 executes a left turn utilizing 30 degrees AOB and announces "in the turn" once 30° AOB is established.
  - a. "In the turn" is the command for LD aircraft to initiate their 30° AOB turn.
  - b. -2 assumes the TAC LEAD on the reversal, doubtless of which aircraft commands the maneuver. As TAC LEAD, they are responsible for transmitting the escape heading on intraflight by verbalizing "Out ____" (Ex.: "out 180").
  - Altitude changes are not prescribed but shall be verbalized to wingman on intraflight.
- Rolling out, TAC LEAD retains enroute airspeed. TAC WING aircraft reduces speed by 10 knots until desired A/A TACAN separation is achieved.





#### NOTES

- TAC lead change is implicit once maneuver is called.
- >30° AOB may be used if required by terrain; exceptions to 30° AOB shall be communicated to wingman.
- Altitude changes are at discretion of PIC and based on altitude, terrain, and anticipated icing conditions. Communicate altitude deviations to wingman.
- Expect heavy reliance on DIGMAP, DTED, and trend dots if executed in IMC conditions.



UNITED STATES MARINE CORPS MARINE MEDIUM TILTROTOR SQUADRON 261 MARINE AIRCRAFT GROUP 26 2D MARINE AIRCRAFT WING, PMF POSTAL SERVICE CENTER BOX 21016 JACKSONVILLE NC 28545 1016

> IN REPLY REFER TO 3710 DSSN 27 Feb 22

- From: Standardization Officer, Marine Medium Tiltrotor Squadron 261
- To: Commanding Officer, Marine Medium Tiltrotor Squadron 261

Subj: STANDARDIZATION BOARD MINUTES FOR FEBRUARY 2022

- Ref: (a) CNAF M-3710.7
  - (b) MCO 5100.29C
  - (c) VMM-261 Safety Management System
  - (d) VMM-261 Flight Operations SOP
  - (e) ASO 3710.7Y

Encl: (1) Qualification and Designation Matrix

1. The Marine Medium Tiltrotor Squadron 261 (VMM-261) Standardization Board convened on 25 and 27 February 2022 in accordance with the references.

2. The following members were present:

	Aviation Maintenance Officer
	Operations Officer
	Executive Officer
	Director of Safety and Standardization
(b)(3), (b)(6), (b)(7)c	Aviation Safety Officer
	Assistant Operations Officer
	Pilot Training Officer
	NATOPS Officer
	Enlisted Aircrew Training Manager

#### 3. Old Business.

a. Icing Procedures in Norway.

(1) Start plane with IPS selected OFF. Manually turn on what is required in accordance with your flight profile. Pilots need to review the ADB for proper IPS configuration, and ensure the aircraft capabilities match the mission requirements. Initiate and update MAFs as required so subsequent crews have the most accurate information.

#### Subj: STANDARDIZATION BOARD MINUTES FOR FEBRUARY 2022

#### 4. New Business.

#### a. RVLS Training Plan

(1) With the RVLS software installation in progress in RBE, we have come up with a basic training plan that essentially echoes HX-21's recommendations: All pilots will receive an RVLS brief from an RVLI, and should have an RVLS fam sim completed before flying an RVLS aircraft. All pilots SHALL have an RVLS fam sim completed before executing RVLs in an RVLS aircraft. Operations will be responsible for tracking this training.

CO's Comments: Concur.

#### b. Cold Response Specific

(1) A digital Read and Initial Binder with SOPs for Norway specific procedures has been created and shall be reviewed by all Cold Response aircrew. It is located on the share drive at  $Z:\setminus(14)$  <u>E-Pubs\10.</u> Cold Response 2022 Read and Initial.

(2) Nacelle modulation is mandatory at ENBO if loitering at the hold short or on the runway due to runway epoxy coating heat considerations.

(3) Aircraft returning to be hangared in Hangars 504 and 505 shall be shut down in front of Hangar 503, stowed, and then towed into their respective hangars. Aircraft departing from Hangars 504 and 505 will be towed in front of Hangar 503, then unstowed and unfolded prior to man time.

<u>CO's Comments</u>: Concur.

Concur.

#### 5. Instrument Flight Board.

#### a. Unpredictable Norwegian Weather

(1) All pilots shall become familiar with the different instrument approaches at nearby airfields due to the complexity as well as the different layout that these approaches contain.

#### Subj: STANDARDIZATION BOARD MINUTES FOR FEBRUARY 2022

6. Aviation Safety Council. None.

#### 7. Proposals.

a. (b)(3), (b)(6), (b)(7)c- Tiltrotor Aircraft Commander (TAC) b. TAC (b)(3), (b)(6), (b)(7)c - TAC с. d. (b)(3), (b)(6), (b)(7)c - Functional Check Pilot (FCP), Basic Instructor Pilot (BIP) e. Capt Tomkiewicz - BIP £. Defensive Combat Maneuver Instructor (DCMI) g. (b)(3), (b)(6), (b)(7)c Low Altitude Tactics Instructor (LATI) h. LATI i. Basic Instructor Crew Chief (BICC) (b)(3), (b)(6), (b)(7)c j. BICC

CO's Comments:

Approved.			
•	(b)(3), (b)(6), (b)(7)c		***************************************
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		(b)(3), (b)(6), (b)(7)c	



VMM-261 MV-22B PILOT DESIGNATION AND QUALIFICATION MATRIX

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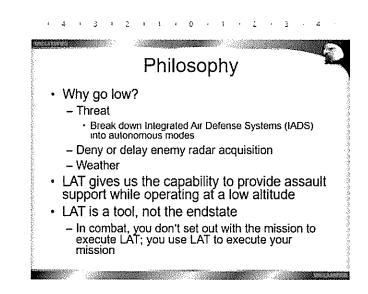
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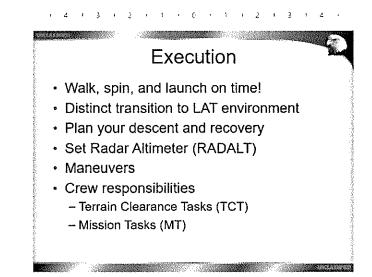
#### VMM-261 MV-22B AIRCREW DESIGNATION AND QUALIFICATION MATRIX

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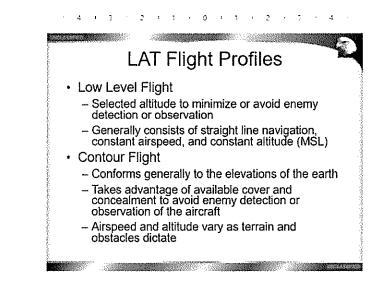
So, if we have three choices of altitudes, why would we choose to go low? Obviously the threat can drive us low. By flying low we may be able to force his Integrated Air Defense Systems (IADS) into autonomous modes. Additionally, we may attempt to gain the element of surprise as a result of flying low in order to deny or delay radar acquisition. This can also be done through direct or indirect terrain masking. Something we don't often consider, however is that we may be driven low by the weather. If you have spent the last year or so in a desert environment, you could be in for a rude wakening should your squadron deploy to Europe or Korea.

The goal of the LAT program is to provide us with the capability to conduct our mission successfully at low altitude. However, LAT should not be looked at as the endstate of training. Instead, it should be looked at as a stepping stone to learning Ground Threat Reaction (GTR) and later Defensive Combat Maneuvering (DCM). Safe, repeatable control of the aircraft in vertical maneuvers and the LAT environment will enable you to react to threats and reach the objective area to complete your mission in a combat environment.



- Make your transition to LAT distinct. Announce it to the crew, ensure your FENCE checks are complete (including resetting your RADALT to 10% below your minimum altitude), and then commence your descent. A lazy, unplanned descent may introduce hazards that the crew is not prepared for. Plan your descent and make sure that it is briefed to the flight. Also, brief the planned recovery. If the conditions are not met to use the dive recovery rules then have a plan to recover e.g. tactical descent until 2000' AGL, break descent to 2000 FPM until 1000' AGL, break descent and use the small descent rule to your briefed altitude.
- Remember LAT is not just low level navigation, it includes the basic and advanced maneuvers. Ensure everyone in your aircraft and
  flight know when you are going to commence those maneuvers so they are prepared. Also, ensure that you don't "beat up" your
  aircrew with too many maneuvers. If their stomachs aren't up to the task they are going to call a KIO anyways. So, do some
  maneuvers, fly some straight and level, and then do some more maneuvers.
- Remember to focus on the correct tasks during LAT. The PF should be doing almost solely TCT while the rest of the crew is doing MT.

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For MV-22s there are two flight profiles that can be flown during LAT. The first is low level flight which consists of generally straight line navigation at a constant altitude and constant airspeed. The second is contour flight which generally conforms to the elevations of the earth with varying airspeed and altitude as obstacles and terrain dictate. Low level flight might be used for times when avoiding the weather is the reason for flying low, whereas contour flight might be used to prevent enemy acquisition through the use of terrain masking.

#### M-SHARP Schedule Validation Report for 3/18/2022 - VMM-261 Validated: 03/17/2022 : 1434 (W. Europe Standard Time)

#### 30-1 MV-22B TBD - TBD

#### (b)(3), (b)(6), (b)(7)cMV-22B Crew Chief

- Not proficient in the following NATOPS qualifications:
  - · NATOPS AUDIT · APR AUDIT
- 31-1 MV-22B 1230 1800

#### Moore, Jacob Michael Cpl - MV-22B Crew Chief

- Not proficient in the following NATOPS qualifications:
  - · NATOPS AUDIT
  - · APR AUDIT

#### Speedy, James William GySgt - MV-22B Aerial Observer/Gunner

- Not proficient in the following NATOPS qualifications: (He has not had a NATOPS
  - check yet due to his location in the syllabus. KAH)
  - · NATOPS, MV-22B (E
  - · NATOPS Closed, MV-22B
  - NATOPS Open, MV-22B
  - · CRM Flight
  - · Emergency Egress
  - Aeromedical Brief (Completed 11FEB22 and now logged in MSHARP. KAH.)
  - · NATOPS AUDIT
  - · APR AUDIT

#### Tomkiewicz, Matthew James Capt - MV-22B Pilot

- Not proficient in the following NATOPS qualifications:
  - · APR AUDIT

#### MAG-26 Risk Assessment Worksheet EXECUTION



	1		Aircrew		
	TOMKIEWICZ	REYNOLDS	MOORE	SPEEDY	
	(	Operations Data		1	
Days Since Last Flight	6	7	1	134	
Last 30 (Day / Night)	15.3/0	6.3/2.3	28.5/5.6	0/0	
Mission Specific					-
Mission Specific					
	Aicre	w Self-Assessmen	ť		
Any congestion or illness? If so, any medication (AFRIN, asprin, etc.)	N	N	N	N	
Personal / Work concerns that may effect your ability to focus or accomplish mission?	N	N	N	Ň	
Are you free from the affects of alcohol?	Y	Y	Y	Y	
Have you had sufficient crew rest with quality sleep?	Y	Y	Y	Y	
Are you flying through chow? Have you had sufficient food to get you through the flight?	Y/Y	Y/Y	Y/Y	Y/Y	
. FLIGHT SCHEDULING		YES	NO	UNK	APPROVED
Schedule change		New RAW	L		
ircrew Change		New RAW	L		
lission change irfield Status interferes with mission		New RAW	L		1
irfield Status interferes with mission		RAC	L		
&I Current		L	NO-GO		1
Nonthly EP Test / Sim Complete		L	NO-GO		
WEATHER/ENVIRONMENTAL FACTO	0.00				
ROUTINE OPERATING AREAS	JK5	> 1000/3	500/1 - 1000/3	< 500/1	
CONTRACT OF LIVETING PILLING	Day VFR	> 1000/3	500/1 - 1000/3 L	NO-GO	-
	IFR	-	L	NO-GO	-
	Unaided	L	-	-	-
	NVG VFR	Ē P	м	NO-GO	-
ON-STANDARD OPERATING AREAS		Over Water	Desert	Mountain	Snow
	NVG HLL	L	L	L	L
	NVG LLL	M	M	M	L
	Unaided	M	M	M	M
	Day	L	L	Ľ	L
AIRCRAFT STATUS		YES	NO	1.1	
ircraft PMC & affects mission		M	L		
	mission	L	M		
oad Comp checked and sufficient for current CS INOP with OAT > 27 C		M			

	)(3), (b)(6), (b)(7)	c
1	ODO Signature	

DATE: 18 March 2022	EVENT: 3-1			
TAC: TOMKIEWICZ	COPILOT:	REYNOLDS		
AIRCREW: MOORE	AO	SPEEDY		
4.BASH	LOW	MOD	SEVERE	APPROVAL
Airfield	L	L	NO-GO	-
LAT	L	M*	NO-GO	

М

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OVERALL PLANNING RAC:

To your knowledge	has this mission been assigned and resourced IAW standard risk controls? Is everything within
io your knowledge	CNAF 3710, NATOPS, T&R, and SOPs?
	CNAP 3/10. NATOPS. Tak. and SOPS?
	YES
Have you identified	any hazards that require additional risk controls? If yes, what are they? What controls will you implement to lower the risk?
	NO
Will the pl	an require anyone to operate near a crew performance, aircraft or environmental limit?
	NO
Are you clear on th	e plan and mission objectives, does it correlate well with what you think the CO intended when
	signing the flight schedule?
and the second second	YES
What	is the riskiest thing you will do on this mission and how will you mitigate that risk?
LIGHT IN MOUNTA	NIOUS TERRAIN IN POOR WX. WX TRIGGERS TO NOT CONDUCT THAT FLIGHT PROFILE
LIGHT BRIEF OVE	RALL RISK (Aircraft Commander)
The second second	
MKIEWICZ, MATTH	
ght Brief - TAC Sig	nature
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Version 2 (rev. 20210623)

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#### MAG-26 Risk Assessment Worksheet

PLANNING

#### DIRECTIONS FOR USE

1 ONE RAW PER AIRCRAFT

2. CIRCLE OR HIGHLIGHT THE APPLICABLE RISK LEVEL IN EACH SECTION THAT APPLIES

3. OVERALL RISK IS THE HIGHEST RISK FACTOR IN EACH SUBMATRIX.

4 ADDRESS MITIGATIONS FOR M, H, EH. IDENTIFY AT LEAST (1) RISK/HAZARD AND ITS CONTROL MEASURE

5 CARRY THE FINAL OVERALL RISK LEVEL ONTO THE FLIP SIDE FOR ODO AND CREWS TO FILL OUT.

All Aircrew Current with NATOPS requirements       L       NO-GO         Aircrew / Instructor Qualified       L       NO-GO         NS TAC >15 days       GO       NO-GO         Check / Certification Event       M       L         AIRCREW FATIGUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Crew Rest < 10 hrs       NO-GO       L         Exposure Suit Required (See CNAF 3710)       M       L         Over Water Ops/No suitable divert       H       L         Crew member >15 hours in past 5 days       M       L         Scheduled land time > 3 hours past normal show time       M       L         Scheduled land time > 3 hours past normal end of workday       M       L         CAL       YES       NO       Gold drosses pop         CAL       YES       NO       SHIPBOARD CI         CAL site in populated area       M       L       Hord Han 2 doi In days         Reduced Visibility Landing (RVL)       YES       NO         Reduced Visibility Landing (RVL)       YES       NO         Revision within 30 days       M*       H**	Ordnance Procedures     L       es/airspace established     L       scheme of maneuver known     L       Yes     Yes       ture     M       L     Yes       more than a section     M       nducted in person     L       N     L       ury brief not conducted     Yes       ViactLP     Yes       an uncontrolled pattern     M       M     M       Ut classes     Yes       Used (RMU/PEBBLE)     L	L NO-GO L NO-GO L M L M NO-GO ES NO M L M L M L M ES NO M L M* L M* ES NO M L ES NO M L ES NO M L ES NO M L ES NO M L ES NO M L ES NO	CURRENCY REQUIREMENTS: NIGHT CURRENCY FOR PAX: 1 0 NVG. (2 BOAT LANDINGS), 30 DAYS NIGHT TAC SIGN: FLOWN MV-22B IN LAST 15 DAYS CREW DAY: 12 HRS OR IAW LAND TIME CREW REST: 10 HOURS OR IAW LAND TIME RISK ASSESSMENT Operations Mitigation Comments: DSSN Mitigation Comments:
All Aircrew Current with NATOPS requirements       L       NO-GO         Aircrew / Instructor Qualified       L       NO-GO         NIS TAC 315 days       GO       NO-GO         Check / Certification Event       M       L         AIRCREW FATIGUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration >6 firs (Non-CCX)       M       L         Planned Flight Duration >6 firs (Non-CCX)       M       L         Crew Rest < 10 hrs	ment and restriction established/received UL Cordnance Procedures LL Srairspace established LL scheme of maneuver known LL YES ture MM LL more than a section M Inducted in person LL on the	L NO-GO L M L NO-GO L NO-GO ES NO M L M L M L M ES NO M L ES NO	NIGHT TAC SIGN: FLOWIN MV-ZEB IN LAST 15 DAYS CREW DAY: 12 HRS OR IAW LAND TIME CREW REST: 10 HOURS OR IAW LAND TIME RISK ASSESSMENT Operations Mitigation Comments:
Aircrew / Instructor Qualified       L       NO-GO         NS TAC >15 days       GO       NO-GO         Check / Certification Event       M       L         Aircrew FATISUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration > 6 hrs (Non-CCX)       M       L         Planned Flight Duration > 10 hrs (CCX)       M       L         Crew Rest > 10 hrs       NO-GO       L         Exposure Suit Required (See CNAF 3710)       M       L         Over Water Ops/No suitable divert       H       L         Crew mest > 15 hours past 5 days       M       L         Crew mest > 15 hours past 5 days       M       L         Crew mest > 16 hours prior to normal show time       M       L         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         CAL       YES       NO         CAL site DoD       L       M*         CAL site DoD       L       M*         RVL6900 within 30 days       M*         RVL6900 s0 days, but < 90 days	Image: Constraint of the sector of the se	L M L NO-GO L NO-GO ES NO M L M L M L M ES NO L M M L M ES NO M L M ES NO M L ES NO M L ES NO M L M ES NO M L ES NO M L M ES NO M L M ES NO M L M ES NO M L M M ES NO M L M ES NO M L M ES NO M L M ES NO M L M ES NO M L M ES NO M L M M ES NO M L M M ES NO M L M M ES NO M L M M ES NO L M M ES NO M ES NO ES NO M ES NO ES NO	CREW DAY: 12 HRS OR IAW LAND TIME CREW REST: 10 HOURS OR IAW LAND TIME RISK ASSESSMENT Operations Mitigation Comments:
NS TAC >15 days       GO       NO-GO         Check / Certification Event       M       L         AIRCREW FATIGUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Crew Rest < 10 hrs	Ordnance Procedures     L       es/airspace established     L       scheme of maneuver known     L       Yes     Yes       ture     M       L     Yes       more than a section     M       nducted in person     L       N     L       ury brief not conducted     Yes       ViactLP     Yes       an uncontrolled pattern     M       M     M       Ut classes     Yes       Used (RMU/PEBBLE)     L	L         M           L         NO-GO           L         NO-GO           ES         NO           M         L           M         L           L         M           L         M           L         M           ES         NO           L         M           L         M*           L         M           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO	CREW REST: 10 HOURS OR IAW LAND TIME RISK ASSESSMENT Operations Mitigation Comments:
Check / Certification Event     M     L       AIRCREW FATIGUE / ENVIRONMENTAL     YES     NO       Planned Flight Duration >6 hrs (Non-CCX)     M     L       Planned Flight Duration >6 hrs (Non-CCX)     M     L       Exposure Suit Required (See CNAF 3710)     M     L       Over Water Ops/No suitable divert     H     L       Crew nest < 10 hrs	srairspace established L scheme of maneuver known L VE VE Uure M M L more than a section M Inducted in person L M Inducted in person L M Inducted in person L M M M CLP YES an uncontrolled pattern M M M d loaded (RMU/PEBBLE) L	L NO-GO L NO-GO ES NO M L L M L M L M L M L M L M L M L M L M	RISK ASSESSMENT Operations Mitigation Comments:
AIRCREW FATIGUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Planned Flight Duration >10 hrs (CCX)       M       L         Crew Rest >10 hrs       NO-GO       L         Exposure Suit Required (See CNAF 3710)       M       L         Over Water Ops/No suitable divert       H       L         Crew mest >15 hours in past 5 days       M       L         Crew mest >3 hours prior to normal show time       M       L         Scheduled land time > 3 hours past normal end of workday       M       L         FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         CAL       YES       NO         CAL site in populated area       M       L         PL Fiste survey conducted by squadron WTI/ASO prior to conducting fraining       MA*         RVL6900 > 30 days, but < 90 days	scheme of maneuver known L YES ture M YES more than a section M nducted in person L y brief not conducted VES ilated area M VFCLP YES an uncontrolled pattern M u uncontrolled pattern M il M d loaded (RMU/PEBBLE) L	L NO-GO ES NO M L M L M L M ES NO L M M L M ES NO M L ES NO M L ES NO M L ES NO M L ES NO M L M ES NO M ES NO ES NO	Operations Mitigation Comments:
AIRCREW FATIGUE / ENVIRONMENTAL       YES       NO         Planned Flight Duration >6 hrs (Non-CCX)       M       L         Planned Flight Duration >10 hrs (CCX)       M       L         Crew Rest < 10 hrs	ture M M M L Protection M I Interference M M M M M M M M M M M M M M M M M M M	ES         NO           M         L           M         L           L         M           L         M           L         M           L         M           L         M           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO	Operations Mitigation Comments:
Planned Flight Duration >6 hrs (Non-CCX)       M       L         Planned Flight Duration > 10 hrs (CCX)       M       L         Planned Flight Duration > 10 hrs (CCX)       M       L         Exposure Suit Required (See CNAF 3710)       M       L         Over Water Ops/No suitable divert       H       L         Crew mest > 15 hours prior to normal show time       M       L         Scheduled land time > 3 hours past ormal end of workday       M       L         FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         CAL       YES       NO         CAL site lo DD       L       M*         RVL6900 × 30 days, but < 90 days	ture M M M L rmore than a section M nducted in person L N Introducted in person L Introducted VES N N M CLP YES an uncontrolled pattern M M d loaded (RMU/PEBBLE) L	M         L           M         L           M         L           M         M           L         M           L         M           ES         NO           M         L           M*         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO	Operations Mitigation Comments:
Planned Flight Duration > 10 hrs (CCX)       M       L         Crew Rest < 10 hrs	ture M M M L rmore than a section M nducted in person L N Introducted in person L Introducted VES N N M CLP YES an uncontrolled pattern M M d loaded (RMU/PEBBLE) L	M         L           M         L           M         L           M         M           L         M           L         M           ES         NO           M         L           M*         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO           M         L           ES         NO	
Grew Rest = 10 hrs     NO-GO     L       Exposure Suit Required (See CNAF 3710)     M     L       Dowr Water Ops/No suitable divert     H     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Dissimilar / Joint / Combined A/C     M     L       Different Unit / Mixed Unit Crew     M*     L       CAL     YES     NO       CAL site DOD     L     M*       CAL site in populated area     M     L       PK0E900> 90 days     M*     M*       PK0E900> 90 days     M*     M*       Tur Torking Flight and TAC has flown RVL (2282) within 30 days     M*       IACTICS     YES     NO       Dissimilar / Joint / Combined A/C     M       Dissimilar / Joint / Combined A/C     M       LA     CERN In Aircraft       IL TAC has flown RVL6900 to planned zone within 7 days       **M if Training Flight and TAC has flown RVL (2282) within 30 days       ILAT Scheduled within 1 hour of sunrise/sunset     M	M L YES more than a section nducted in person L ury brief not conducted VIES Lated area M VFCLP YES an uncontrolled pattern M d loaded (RMU/PEBBLE) L	M L L M ES NO L M M L L M ES NO M L ES NO M L ES NO M L ES NO M L ES NO	DSSN Mitigation Comments:
Exposure Suit Required (See CNAF 3710)     M     L       Over Water Ops/No suitable divert     H     L       Over Water Ops/No suitable divert     H     L       Crew member >15 hours in past 5 days     M     L       Crew show >3 hours prior to normal show time     M     L       Scheduled land time > 3 hours past normal end of workday     M     L       FORMATION     YES     NO       Dissimilar / Joint / Combined A/C     M     L       EXA site DOD     L     M*       CAL     YES     NO       CAL site in populated area     M     L       FVESIO0> 30 days, but < 90 days	IL     VES     more than a section     L     M     duded in person     L     ry brief not conducted      ves     ves     diated area     M     Ves     an uncontrolled pattern     M     M     d loaded (RMU/PEBBLE)     L	L M ES NO L M L M L M ES NO M L ES NO M L L M M L M M L ES NO	DSSN Mitigation Comments:
Over Water Ops/No suitable divert     H     L       Crew show >3 hours pirot normal show time     M     L       Scheduled land time > 3 hours past normal end of workday     M     L       Bay     YES     NO       Dissimilar / Joint / Combined A/C     M     L       Different Unit / Mixed Unit Crew     M*     L       CAL     YES     NO       CAL site DOD     L     M*       CAL site DOD     L     M*       CAL site DOD     L     M*       CAL site bOD     L     M*       CAL site survey conducted by squadron WTI/ASO prior to conducting training     SHIPBOARD CI       Reduced Visibility Landing (RVL)     YES       RVL6900> 90 days     M*       TI Tachas hown RVL6900 to planned zone within 7 days     H**       ''M If Training Flight and TAC has nown RVL (2282) within 30 days     M       IACTICS     YES     NO       Dissimilar / Joint / Combined A/C     M     L       AMC/EFLAFLAFL briefs conducted     L     No-Co       LAT scheduled within 1 hour of sunnise/sunset     M     L	receive than a section     L     L     L     L     L     L     L     L     L     L     L     L     M     M     L     S     L     S     L     S     L     S     L     S     L     S     L     S     S     L     S     S     L     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S     S	ES         NO           L         M           L         M*           L         M           ES         NO           M         L	DSSN Mitigation Comments:
Crew member >15 hours in past 5 days     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours prior to normal show time     M     L       Crew show >3 hours past normal end of workday     M     L       Crew show >3 hours past normal end of workday     M     L       Command time > 3 hours past normal end of workday     M     L       PORMATION     YES     NO       Disternet Unit / Mixed Unit Crew     M*     L       CAL     M*     L       CAL     YES     NO       CAL site DOD     L     M*       CAL site DOD     L     M*       Reduced Visibility Landing (RVL)     YES       RVL6900 within 30 days     M*       RVL6900 within 30 days     M*       RVL6900 within 30 days     M*       TACTICS     YES       Dissimilar / Joint / Combined A/C     M       AMC/EFLAFLAFL briefs conducted     L       LAT     Scheduled within 1 hour of sunnise/sunset	more than a section M M M M M M M M M M M M M M M M M M M	L M M L M* L M* ES NO M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
Crew show >3 hours prior to normal show time     M     L       Scheduled land time > 3 hours past normal end of workday     M     L       FORMATION     YES     NO       Dissimilar / Joint / Combined A/C     M     L       Different Unit / Mixed Unit Crew     M     L       Low if Hight brief conducted with all aircrew     M*     L       CAL     YES     NO       CAL site DOD     L     M*       CAL site in populated area     L     M*       TL T site survey conducted by squadron WTI/ASO prior to conducting training     M     L       RVL6900 > 30 days, but < 90 days	more than a section M M M M M M M M M M M M M M M M M M M	L M M L M* L M* ES NO M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
Scheduled land time > 3 hours past normal end of workday       M       L         Scheduled land time > 3 hours past normal end of workday       M       L         FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M       L         *Low if hight brief conducted with all aircrew       M*       L         CAL       YES       NO         CAL site DOD       L       M*         CAL site in populated area       M       L         Reduced Visibility Landing (RVL)       YES         RVL6900 within 30 days       M*         RVL6900 > 30 days, but < 90 days	ducted in person L provided L provided L lated area M DFCLP YES an uncontrolled pattern M L d loaded (RMU/PEBBLE) L YES	M L M* K M* K M*	DSSN Mitigation Comments:
Scheduled land time > 3 hours past normal end of workday       M       L         Scheduled land time > 3 hours past normal end of workday       M       L         FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         Low if hight bref conducted with all aircrew       M*       L         CAL       YES       NO         CAL site DOD       L       M*         CAL site in populated area       M       L         Reduced Visibility Landing (RVL)       YES         RVL6900 within 30 days       M*         RVL6900 > 30 days, but < 90 days	ducted in person L provided L provided L lated area M DFCLP YES an uncontrolled pattern M L d loaded (RMU/PEBBLE) L YES	L M* L M ES NO M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         "Low if flight brief conducted with all aircrew       M*       L         CAL       YES       NO         CAL site DOD       L       M*         CAL site in populated area       L       M*         L if site survey conducted by squadron WTI/ASO prior to conducting fraining       M       L         Reduced Visibility Landing (RVL)       YES       NO         RVL6900 > 00 days       M*       M         "Lif Trachas flown RVL6900 to planned zone within 7 days       H**         "Lif Traching Flight and TAC has flown RVL (2282) within 30 days       M         Inclight mission       YES         MC/EFL/AFL briefs conducted       L       NO         LAT       YES       NO         LAT scheduled within 1 hour of sunrise/sunset       M       L	I L ITY brief not conducted International In	L M ES NO M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
FORMATION       YES       NO         Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         "Low if flight brief conducted with all aircrew       M*       L         CAL       YES       NO         CAL site DOD       L       M*         CAL site in populated area       L       M*         L if site survey conducted by squadron WTI/ASO prior to conducting fraining       M       L         Reduced Visibility Landing (RVL)       YES       NO         RVL6900 > 00 days       M*       M         "Lif Trachas flown RVL6900 to planned zone within 7 days       H**         "Lif Traching Flight and TAC has flown RVL (2282) within 30 days       M         Inclight mission       YES         MC/EFL/AFL briefs conducted       L       NO         LAT       YES       NO         LAT scheduled within 1 hour of sunrise/sunset       M       L	I L ITY brief not conducted International In	ES NO M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
Dissimilar / Joint / Combined A/C       M       L         Different Unit / Mixed Unit Crew       M*       L         Different Unit / Mixed Unit Crew       M*       L         Cox if Hight brief conducted with all aircrew       M*       L         CAL       YES       NO         CAL site DOD       L       M*         CAL site DOD       L       M*         CAL site in populated area       M       L         TL if site survey conducted by squadron WTI/ASO prior to conducting training       SHIPBOARD Cl         Reduced Visibility Landing (RVL)       YES         RVL6900 > 30 days, but < 90 days	In brief not conducted International Interna	M L ES NO M L L M M L ES NO	DSSN Mitigation Comments:
Different Unit / Mixed Unit Crew     M*     L       *Low if hight brief conducted with all aircrew     ***     EXTERNALS       CAL     YES     NO       CAL site DOD     L     M*       CAL site populated area     M     L       *** If site survey conducted by squadron WTI/ASO prior to conducting fraining     M       Reduced Visibility Landing (RVL)     YES       RVL6900 > 30 days, but < 90 days	Ilated area M UFCLP YES an uncontrolled pattern M L M d loaded (RMU/PEBBLE) L YES	M L ES NO M L L M M L ES NO	
*Low if flight brief conducted with all aircrew       EXTERNALS         CAL       YES       NO         CAL site DOD       L       M*         CAL site in populated area       M       L         T. If site survey conducted by squadron WTI/ASO prior to conducting training       SHIPBOARD CI         Reduced Visibility Landing (RVL)       YES         RVL6900 > 30 days       M*         "Lif Training Flight and TAC has flown RVL (282) within 30 days       H**         "Lif Training Flight and TAC has flown RVL (282) within 30 days       H**         TACTICS       YES         Dissimilar / Joint / Combined A/C       M         AMC/EFLAFL briefs conducted       L         LAT scheduled within 1 hour of sunrise/sunset       M	Idated area M  UFCLP YES an uncontrolled pattern L U M M d loaded (RMU/PEBBLE) L YES	M L ES NO M L L M M L ES NO	
CAL       YES       NO         CAL site DOD       L       M*         CAL site DOD       L       M*         CAL site in populated area       M       L         Tell site survey conducted by squadron WTI/ASO prior to conducting training       M       L         Reduced Visibility Landing (RVL)       YES       M         RVL6900 within 30 days       M*       M*         RVL6900 visibility Landing (RVL)       YES       MA*         RVL6900 visibility Landing (RVL)       YES       M*         RVL6900 visibility Landing (RVL)       YES       M*         RVL6900 visibility Landing (RVL)       YES       M*         TX1 FAC has flown RVL6900 to planned zone within 7 days       H**       I'' S VIP SUPPORT         ''M if Training Flight and TAC has flown RVL (2282) within 30 days       I'' non-NATOPS of       I'' non-NATOPS of         Dissimilar / Joint / Combined A/C       M       L       CBRN       CBRN In Aircraft         LAT       YES       NO       CBRN In Aircraft       CBRN In Aircraft	Idated area M  UFCLP YES an uncontrolled pattern L U M M d loaded (RMU/PEBBLE) L YES	M L ES NO M L L M M L ES NO	
CAL     YES     NO       CAL site DOD     L     M*       CAL site in populated area     M     L       "E If site survey conducted by squadron WTI/ASO prior to conducting training     More than 2 a/c in LHD/LHA       Reduced Visibility Landing (RVL)     YES       RVL6900 × 30 days, but < 90 days	AFCLP YES an uncontrolled pattern M. L M id loaded (RMU/PEBBLE) L YES	ES NO M L L M M L ES NO	
CAL site DOD     L     M*       CAL site in populated area     M     L       *L fisite survey conducted by squadron WTI/ASO prior to conducting training     M     L       Reduced Visibility Landing (RVL)     YES     Ware than 2 a/c in Unick	an uncontrolled pattern M L L M d loaded (RMU/PEBBLE) L YES	M L L M M L ES NO	
CAL site in populated area     M     L       TL if site survey conducted by squadron WTI/ASO prior to conducting training     More than 2 a/c in LHD/LHA       Reduced Visibility Landing (RVL)     YES       RVL6900 > 30 days, but < 90 days	an uncontrolled pattern M L L M d loaded (RMU/PEBBLE) L YES	M L L M M L ES NO	
**L if site survey conducted by squadron WTI/ASO prior to conducting training       LHD/LHA         Reduced Visibility Landing (RVL)       YES         RVL6900 within 30 days       M*         RVL6900 > 30 days, but < 90 days	d loaded (RMU/PEBBLE)	L M M L ES NO	
Unaided Night       Unaided Night       Reduced Visibility Landing (RVL)     YES       RVL5900 within 30 days     M*       RVL5900 > 30 days, but < 90 days	d loaded (RMU/PE8BLE) L	M L ES NO	1
Reduced Visibility Landing (RVL)     YES       RVL5900 within 30 days     M*       RVL5900 > 30 days, but < 90 days	d loaded (RMU/PEBBLE) L	ES NO	
RVL6900 within 30 days     M*     MA1       RVL6900 > 30 days, but < 90 days	d loaded (RMU/PEBBLE) L		
RVL6900 > 30 days, but < 90 days	d loaded (RMU/PEBBLE) L		
RVL6900> 90 days     H**       **M if Training Flight and TAC has flown RVL (2282) within 30 days     Is VIP SUPPORT       IACTICS     YES       Dissimilar / Joint / Combined A/C     M       AMC/EFL/AFL briefs conducted     L       IAT     YES       LAT     YES       LAT scheduled within 1 hour of sunrise/sunset     M	YES	L M	CO Mitigation Comments:
**M if Training Flight and TAC has flown RVL (2282) within 30 days     VIP SUPPORT       **M if Training Flight and TAC has flown RVL (2282) within 30 days     Is VIP at controls       IACTICS     YES     NO       Dissimilar / Joint / Combined A/C     M     L       AMC/EFUAFL briefs conducted     L     NO-GO       LAT     YES     NO       LAT scheduled within 1 hour of sunrise/sunset     M     L			
It Training Flight and TAC has flown RVL (2282) within 30 days     IS VIP at controls       TAC TICS     YES     NO       Dissimilar / Joint / Combined A/C     M     L       AMC/EFL/AFL briefs conducted     L     NO-GO       LAT     YES     NO       LAT scheduled within 1 hour of sunrise/sunset     M     L		2	
It Training Flight and TAC has flown RVL (2282) within 30 days     IS VIP at controls       TAC TICS     YES     NO       Dissimilar / Joint / Combined A/C     M     L       AMC/EFL/AFL briefs conducted     L     NO-GO       LAT     YES     NO       LAT scheduled within 1 hour of sunrise/sunset     M     L	* I M	ES NO	1
TAC TICS     YES     NO       Dissimilar / Joint / Combined A/C     M     L       AMC/EFL/AFL briefs conducted     L     NO-GO       LA1     YES     NO       LAT scheduled within 1 hour of sunrise/sunset     M     L	101	ML	1
TACTICS         YES         NO           Dissimilar / Joint / Combined A/C         M         L           AMC/EFL/AFL briefs conducted         L         NO-GO           LAT         YES         NO           LAT scheduled within 1 hour of sunrise/sunset         M         L	change possible M	M L	1
Dissimilar / Joint / Combined A/C         M         L           AMC/EFL/AFL briefs conducted         L         NO-GO         CBRN           LAT         YES         NO           LAT scheduled within 1 hour of sunrise/sunset         M         L	ual'ed VIP, TAC shall be NI or ANI		a l
AMC/EFL/AFL briefs conducted         L         NO-GO         CBRN           LA1         YES         NO         CBRN in Aircraft           LAT scheduled within 1 hour of sunrise/sunset         M         L         L			
LAT LAT Scheduled within 1 hour of sunrise/sunset LAT scheduled within 1 hour of sunrise/sunset M L	YES	ES	al
LAT VES NO LAT scheduled within 1 hour of sunrise/sunset M L	H		1
LAT scheduled within 1 hour of sunrise/sunset M L			
			RISK ASSESSMENT CODE (RAC) MATRIX
			PROBABILITY
128			LIKELY PROBABLY MAY UNLIKELY
AAR			
Multiple Tankers in AOR / Track M L			CRITICAL EN EN M
Multiple receivers (Dissimilar A/C) M L			SERIOUS EN H M L
Tanker NVG compatible L M			SERIOUS EH H M L
AAR required for RTB without suitable divert (Must Plug) EH L			
			WGO 3500.23 FURTHER DEFINE SEVERITY / PROBABLITY CATERGORIES
			EH - EXTREMLY HIGH - MAW CG APPROVAL APPROPRIATE APPROVAL REQUIRED IF FINAL RISK
	d		H - HIGH - MAG/MEU/SPMAGTF CO APPROVAL
Most Dangerous Hazards / RAC RAC Level Control Measure(s) / Mitiga	lion Nev	ew RAC Level	M - MEDIUM - "SQUADRON CO APPROVAL
			L - LOW - NO ELEVATED APPROVAL REQUIRED * OR BYDIR
LMH	L	LMH	
LMH	L	LMH	Signature: /s/
			24 HOUR RISK - OPS
LMH		LMH	
<u> </u>			Signature: /s/
LMH	L	LMH	24 HOUR RISK - Safety L M H
		10.00	
LMH	L	LMH	Signature: /s/
	-		Interior Diore and
LMH		2	24 HOUR RISK - CO
		LMH	
		LMH	
LMH	L	LMH	24 HOUR RISK - CO L M H Signature: 24 HR - MAG/MEU CO/MAW CG Signature (High/Extremely High)

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# VMM-261 ODO BRIEF



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

# 18 Mar 2022 0900

Viim-261

# **FLIGHT SCHEDULE**



<u>B/U:</u>	ODO	DATE: 18 Mar 2022	TEMP	PA	DA	FREEZING LEVEL
	(b)(3), (b)(6), (b)(7)2900-LPOD)	Day:	+5	-160	-1416	+XK

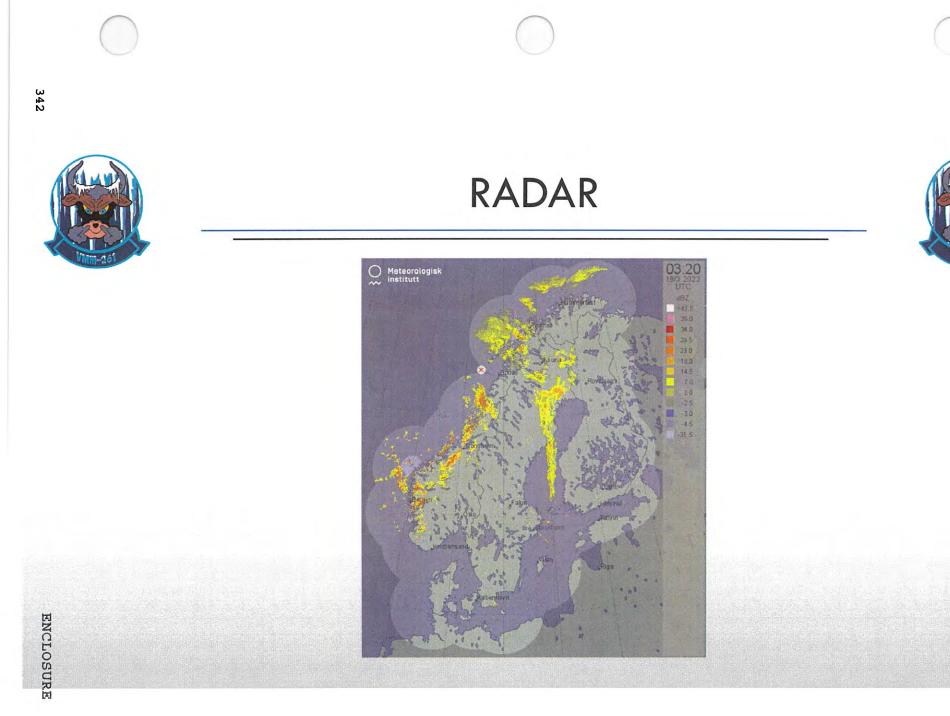
ENBO	FIELD H	IOURS:			BMN	/ SR: 0412 / 0611 SS / EENT:	1812 / 2013	MR / MS: 1815 / 0703	ILLUM: 100%	LLL: HLL:	NONE 2013-040	
EVEN	TIMR	BRF	ETD	ETR	HRS	AIRCREW		TRAINING CODES		MISSION	NOTES	CONFIG
GHOST 3-0 MV-22E	2K2	0900	TBD	TBD	TBD	(b)(3), (b)(6), (b)(7)c				FCF		
GHOST 3-1	1A1	0900	1100	1800	6.6	CAPT TOMKIEWICZ, M. CAPT REYNOLDS, R.		2240, 3040 2240, 3040		ALS /	1	
MV-22E						CPL MOORE, J. GYSGT SPEEDY, J.		2240, 3040 2240P, 3040P		MARLOG		

@ 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.

### FCF: E CARD A/C 16 GT A/C 13

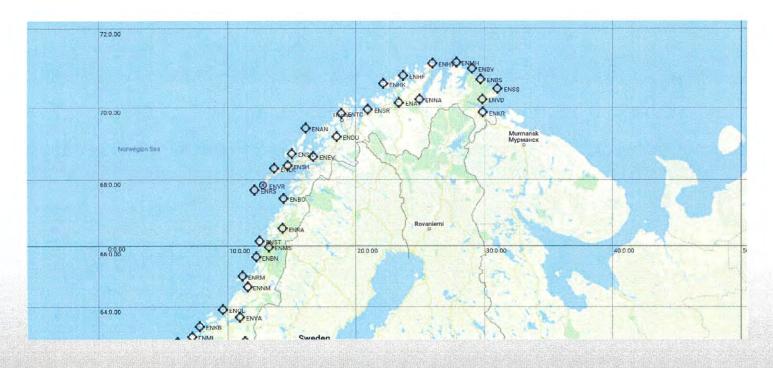


(23)



# SIGMETs/AIRMETs





343

# METARs / TAFs



Data at: 0735 UTC 18 Mar 2022 ENBO 180720Z 23025KT 9999 SCT025TCU 06/01 Q1017

TAF ENBO 1806/1906 20012KT 9999 BKN040 TEMPO 1806/1808 RA BKN014 TEMPO 1806/1824 23025G35KT 4000 SHRAGS BKN012CB PROB30 TEMPO 1812/1818 TS TEMPO 1900/1906 4000 RA BKN008

ENDU 180720Z VRB02KT 9999 FEW030 BKN040 05/M01 Q1011 BECMG 23012KT RMK WIND 1100FT 19013KT WIND 2200FT 21029KT

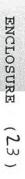
TAF ENDU 1806/1906 VRB03KT 9999 -SHRA FEW030 BKN040 BECMG 1808/1810 23012KT TEMPO 1808/1824 24015G25KT 4000 SHRASN SCT020CB BECMG 1900/1902 RA TEMPO 1903/1906 24018G30KT

ENTC 180720Z 19016KT 9999 BKN040 05/M01 Q1010 NOSIG RMK WIND 2600FT 18028KT

TAF ENTC 1806/1906 18015KT 9999 FEW025 BKN040
TEMP0 1806/1812 RA
TEMP0 1812/1824 22022G32KT 4000 SHRASNGS BKN014CB
PR0B30
TEMP0 1818/1821 TS
TEMP0 1900/1906 4000 RA BKN008

ENHF 180720Z 21009KT 9999 FEW038 BKN120 03/M02 Q1008 RMK WIND 1254FT 22015KT

TAF ENHF 180500Z 1806/1815 24009KT 9999 FEW040 BKN070 TEMP0 1806/1812 17015G25KT BECMG 1811/1813 24025KT TEMP0 1812/1815 25025G35KT



# METARs / TAFs



Data at: 0736 UTC 18 Mar 2022

ENST 180720Z 25023G37KT 9999 SHRASNGS SCT012CB BKN020 03/01 Q1022 RMK WIND 300FT 27027G44KT No TAF found for ENST

ENBN 180720Z 24016KT 220V280 9999 VCSH FEW015CB SCT030 BKN040 05/01 Q1024

TAF ENBN 180500Z 1806/1815 22015KT 9999 -SHRA FEW006 BKN020 TEMPO 1806/1815 23020G30KT 4000 SHRAGS BKN012CB PROB30 TEMPO 1812/1815 TS

ENMS 180720Z 23010KT 170V270 9999 VCSH FEW020 SCT035 05/M01 Q1022 RMK WIND 412FT 20014G251KT No TAF found for ENMS

ENRA 180720Z VRB02KT 9999 VCSH FEW012 FEW025TCU SCT035 04/01 Q1020

TAF ENRA 180500Z 1806/1815 20007KT 9999 - SHRA FEW040 BKN080 TEMPO 1806/1815 SHRA SCT015CB

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## WEATHER OUTLOOK

 	 	_

		Mo	del-Ba	sed out	llook fo	or BOD	O usin	g the G	ALWE	M for th	ie perio	od: 18/0	0 <mark>0Z -</mark> 20	/00Z i			
Time	18/00Z	18/03Z	18/06Z	18/09Z	18/12Z	18/15Z	18/18Z	18/21Z	19/00Z	19/03Z	19/06Z	19/09Z	19/12Z	19/15Z	19/18Z	19/21Z	20/00Z
Clouds	OVC019	OVC012	BKN027	OVC014	BKN029	SCT030	BKN016 BKN050	OVC009	OVC004	OVC003	OVC002	OVC003	OVC004	OVC005	OVC005	BKN017 BKN060	OVC006
Vis (sm)	16	15	15	16	17	16	15	15	13	14	13	12	11	12	11	12	13
Wx			TSTMS	тятмя			TSTMS VCNTY	RA	RA	RA	RA	RA	RA	RA	RA	RA	RA
Wind Dir	130	200	220	250	250	220	230	230	220	220	220	240	230	230	230	230	230
Wind Spd(kt)	8	12	26	23	19	20	23	23	24	31	33	31	29	29	28	27	24
Gusts(kt)		18	43	39	31	33	38	38	39	53	57	52	49	49	46	45	40
Temp(C)	5	5	5	4	5	5	5	5	5	5	6	7	7	7	7	6	6
RH(%)	66	72	76	66	51	60	75	75	87	83	85	90	91	91	91	90	86
PA(ft)	50	68	1	-160	-259	-294	-298	-308	-231	-136	-73	-143	-250	-327	-401	-475	-503
DA(ft)	-1086	-1058	-1081	-1416	-1487	-1511	-1522	-1502	-1377	-1232	-1015	-1023	-1168	-1271	-1392	-1513	-1555
ALSTG	29.90	29.88	29.96	30.13	30.23	30.27	30.28	30.29	30.21	30.10	30.04	30.11	30.23	30.31	30.39	30.47	30.50



	BASH	
LIGHT	MODERATE	SEVERE
Transport Aircraft (Prop & Jet) & Tiltrotor (as appropriate)	At the MAG CO's discretion, the following sorties are authorized to be flown in LAT; a T&R sortie where one of the flight members is flying the event for an initial X, or for a refresh (R coded) event. Sorties that do not meet these criteria will maintain a min altitude of 1,000 feet AGL.	Not authorized
Helicopter & Tiltrotor (as appropriate)	The lookout aircraft or "high bird" will advise the TERF aircraft of bird activity. Adjust route accordingly.	All aircraft will adjust flight path, altitude, and airspeed to avoid bird concentrations.

SURE (23)

## NOTAMS



#### Data Current as of: Fri 18 Mar 2022 06 56 00 GMT

#### ENBO BODO

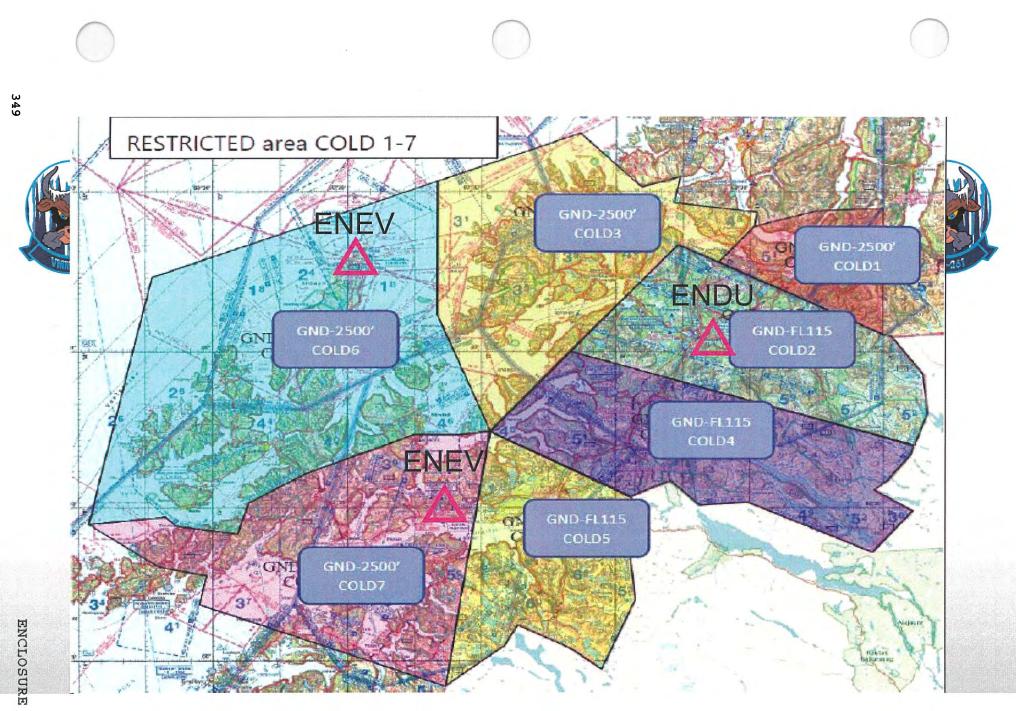
- Check All ENBO UnCheck All ENBO
- □ A1451/22 GP 07 PERIODICALLY OUT OF SERVICE. GP AV8L ON REQUEST WHEN NEEDED DUE TO WEATHER. 10 MAR 07:05 2022 UNITL 04 APR 10:00 2022. CREATED: 10 MAR 07:05 2022
- A1275/22 PAR EQUIPMENT ESTABLISHED CLOSE TO MANOUEVRING AREA. POSITION 185 M SOUTH OF RWY, 208 M FAST OF TWY H, 35 M NORTH OF TWY Y. HEIGHT 5.5 M, WIDTH 2.5 M MARKED WITH RED OBSTACLE LIGHT, 22 MAR 13:08 2022
- UNTIL 06 APR 13:00 2022 ESTIMATED. CREATED: 02 MAR 13:09 2022 A0806/22 - MOBILE CRANE ERECTED 1430 METER NORTHWEST OF THRESHOLD RWY 25,
- 204FT AMSL. 14 FEB 07:00 2022 UNTIL 15 MAY 23:00 2022 ESTIMATED. CREATED: 10 FEB 09:36 2022

#### ENDU BARDUFOSS

Check All ENDU UnCheck All ENDU

- A1721/22 OBST LGT AT POWERSPAN SULHEIM OVERHEAD 9ARDU RIVER OUT OF SERVICE. 17 MAR 15:67 2022 UNTIL 30 MAR 15:60 2022. CREATED: 17 MAR 15:07 2022
- □ A1561/22 IN SUPPORT OF EXERCISE COLD RESPONSE U.S MILITARY PROVIDING PRECISION APPROACH RADAR SERVICES TO RMY 28 VIA GROUND CONTROLLED APPROACH. 12 MAR 14:20 2022 UNTIL 31 MAR 22:00 2022 ESTIMATED. CREATED: 12 MAR 14:20 2022
- A1560/22 IN SUPPORT OF EXERCISE COLD RESPONSE U.S MILITARY UTILIZING ENDU TACAN CH 81X. 12 MAR 14:12 2822 UNTIL 31 MAR 22:00 2022 ESTIMATED. CREATED: 12 MAR 14:12 202
- ▲ A1481/22 TRIGGER NOTAM AIP AIRAC AMDT 04/22 WEF 21 APR 2022. AD 2.8 STAND 1-4, 10-25, P3 AND P4 ADDED, STAND P2 ND. AD 2.12 RNY AND STRIP DNN CHANGED, RNY CENTRELINE POINTS RE-SURVEYED. AD 2.13 DECLARED DISTANCES CHANGED AND ADDED. AD 2.14 EDGE LET RNY 10 CHANGED. AD 2.15 ANEMOMETER CHANGED. AD 2.19 DME BDF RE-SURVEYED. ADC NEW CHART LAYOUI. ACC-A MAG VAR. 21 APR 00:00 2022 UNIIL 04 MAY 23:59 2022. CREATED: 10 MAR 13:18 2022
- □ A1366/22 TACAN BAR CH81X UNAVAILABLE. 07 NAR 08:30 2022 UNTIL 05 APR 23:59 2022 ESTIMATED. CREATED: 07 MAR 08:20 2022
- □ A1361/22 TWR HR OF SER 14 0530-2359 15-30 0000-2359 31 0000-2200. 14 MAR 05:30 2022 UNTIL 31 MAR 22:00 2022 ESTIMATED. CREATED: 07 MAR 07:35 2022
- A1300/22 LITTED OPERATIONAL EQUIPMENT(GCA) POSISIONED MID FIELD, 110 M SOUTH OF SENTERLINE RWY 10/23, HEIGHT 5,5 METRES. 03 MAR 17:22 2022 UNTIL 03 APR 23:59 2022. CREATED: 03 MAR 17:23 2022
- A1210/22 LIT CRANE ERECTED AT ANDSLIMOEN (LIANS CARAVAN), APPROX 4,5 NM MORTH OF AD HGT 150FT, 28 FEB 05:25 2022 UNTIL 31 MAR 23:59 2022. CREATED: 28 FEB 05:26 2022
- ▲ A0018/22 AERODROME CESTACLE CHARTS ICAO TYPE A RWY 10/28 EFF 07 MAR 2013 SUSPENDED DUE OUTDATED DATA, REF AIP NORMAY AD 2 ENDU. 03 JAN 07:54 2022 UNITL 31 DEC 12:00 2022. CREATE: 03 JAN 07:54 2022
- □ A4586/21 AD HR OF SER: MON-FRI 0530-2200, SAT 0530-1440, SUN 0850-2230. 04 NOV 09:05 2021 UNTEL 27 MAR 01:00 2022. CREATED: 04 NOV 09:05 2021





~ 23)

# ASAP Rules of the Road





 One submission required per flight element (Not each individual aircraft i.e MC, FL, DL, SL, TAC responsibility) If flight breaks up during event, each TAC submits report.

https://asap-usmc.com/usmc/

- <u>User Name</u>: VMM261 <u>Password</u>: Marines
- Reports can be used to address any problem. For example, if you are tired of working in a building that has a leaking roof, you can ASAP that. Alternatively, if you don't have the proper equipment to do your job you can ASAP that as well. If you almost have a mid-air collision during a flight, you can ASAP that.
- One submission per day of cross country flights. (Minimum)
- Any aircrew or maintainer may submit a report at any time if hazards are identified.
- <u>ALL SUBMISSIONS ARE ANONYMOUS</u>. Cannot be traced to individuals.
- <u>Please contact</u> (b)(3), (b)(6), (b)(7)c (VMM-261 ASO) with any questions

# SG Tower Interference If you notice RAD ALT interferences: Create wypt Notify nearest airfield tower (ATC agency)

• Please contact

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

(VMM-261 ASO) with any questions

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# **REMEMBER:**



- AIRCREW WILL MAKE SURE ALL R&I'S ARE GREEN BEFORE WALKING TO AIRCRAFT
- TURN IN YOUR LOAD COMPS AND RAWS BEFORE WALKING TO THE AIRCRAFT.
- CALL THE ODO OUTBOUND AND EACH PASS THROUGH THE PITS, REPORT OPS NORMAL AND FUEL STATE EVERY 30 MINUTES WHEN ABLE.
- THERE IS NO MISSION IN TRAINING WORTH COMPROMISING THE SAFETY OF OUR MARINES.

# **REMEMBER:**

- Call "Lion Ops" on 138.95 before Takeoff and after Landing.
- Contact Tower to go into and out of the Hot Pits. Monitor Tower while in the fuel pit.
- Submit a Norwegian Safety Report if anything unsafe occurs on your flight (near mid air, BASH, etc.). Its non-punitive, they just want to know.
- CSAR/SPINS...





# QUESTIONS?



